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CHAPTER ONE: BACKGROUND TO THE PROBLEM, FORMULATION OF THE AIMS AND THE RESEARCH STRATEGY

1.1 INTRODUCTION TO THE PROBLEM

1.1.1 Dissatisfaction with the current system of educational provision

The problem to be investigated in this study will be the relevance of current educational provision in KwaZulu-Natal (KZN). Vocationally orientated alternatives at school-level are currently undeveloped and fragmented. The province finds itself in a situation of transition as an embryonic system emerges. Despite the emergence of the further education and training band, the matriculation examination continues to dominate the secondary schools of the province. School-leaving certificates are academic, and usually modelled along the lines of the curriculum for the Grade 12 university entrance examination. The majority of school-leavers do not aspire to a university or a technikon education after leaving school. This bias towards a general academic school-leaving curriculum appears therefore to be somewhat anomalous. It is to this lack of preparation for the world of work during the final years at school that this study is focused.

The national media gives much publicity to the poor performance of the matriculants when the provincial education departments release their results. The quality of educational provision is scrutinised and criticised in the press for its alleged shortcomings. The commitment of educators to their profession comes in for harsh criticism.

Information supplied by the Education Foundation (*EduSource Data News* 1997:6; 1998:2 & 2000:2) indicate that since the 1996 matriculation examinations the national pass rate has been consistently low: 1996 → 62%; 1997 → 47%; 1998 → 49%; 1999 → 49%. Statistics for KZN indicate a downward trend: 1996 → 62%; 1997 → 53%; 1998 → 50%; 1999 → 51%. The % increase in the 1999 results is insignificant.

Newspaper editors, journalists and politicians have probed the causes of the annual matriculation fiasco. Causative factors cited in the press have been varied and multi-faceted. Roger Burrows, Chairman of the KZN Parliamentary Portfolio Committee (Education and Culture), writing for *The Mercury* (5 January 1998) identified four problem areas:

“... attitude and ability of the learners; dedication and skills of teachers; [no] imposition of authority by principals and under-provision of human and material resources by national and provincial departments of education”.

The editorial opinion of *The Mercury* (5 January 1998) echoed the views of many other stakeholders in education by citing, *inter alia*, the lack of resources, poor morale of teachers, low parental involvement and lack of discipline in some schools as contributory factors, and calling for a thorough inquiry, followed by tough action.

A spokesman for the South African Democratic Teachers Union, Ndaba Gcwabaza, cited in *The Mercury* (5 January 1998) said that the lack of resources at schools was a major contributory factor, and predicted that the pass rate would continue to decline if this issue was not addressed, but he was further reported to have said in the same article that the entire matriculation examination itself needed a total overhaul.

The results of the 1999 matriculation examination showed no improvement on the 1998 examination. The plethora of scathing newspaper reports which appeared during the period immediately after the release of the 1999 results reflected the feelings of a South African (and KZN) community that was deeply concerned about a system that was quite clearly not providing a qualitative education that was relevant to the majority of the population.

The Daily News (29 December 1999) reported on the provincial education department's tough action against schools with a poor record, while on the same day the editorial column of the same newspaper called for an investigation into the reasons why 47 490 KZN pupils failed their

examinations. *Die Beeld* (30 December 1999) described the matriculation results as “Asmal se uitslae-nagmerrie”, and stated in the same article that the teacher unions were expecting an explanation from the Minister of Education. In a report in the same newspaper a heading stated “Noorde-slaag-syfer van 37,5% ‘goed’: LUR bly oor verbetering op vorige jaar”. *The Mercury* (31 December 1999) announced that the economic outlook for the matriculants was bleak, “job prospects for the class of ’99 matriculants are grim and even bleaker for the thousands of failures”. Ten days into the new year President Mbeki was reported to have said that he was very dissatisfied with the performance of many schools, “we can never ever be a modern country if we persist to produce the sort of results produced in the schools”, (*The Mercury* 10 January 2000). If the press reports accurately reflect the concerns of the community then “the matric problem” is an on-going problem that needs to be addressed very urgently. The condemnation of the current system of educational provision continues annually, yet logical alternative solutions do not emerge in public statements and press reports. One report that appeared in the ‘matric off-season’ made reference to educational irrelevance in South Africa. Writing for *The Sunday Tribune* (28 May 2000) in the aftermath of the University of Durban-Westville’s student unrest, Alex Hamilton MP (IFP), stated that ‘for reasons which I fail to understand, South Africans have an illogical prejudice against technical education ... if our tertiary institutions are not providing graduates with qualifications required to drive this economy, we will be forced to import our needs’.

This final comment highlights the critical link between relevance in educational provision and economic goals.

1.1.2 Educational provision and economic goals

The link between educational relevance and the economy is frequently the subject of press reports. *The Saturday Paper* (10 January 1998) printed the following sub-heading:

“Few options for employment to matric pupils, whether they passed the year or not”.

John Bryce (*The Mercury* 5 January 1998) a spokesperson for the KZN Chamber of Commerce and Industry, is reported to have pointed out that more technical skills were needed in the economy, he added:

“This is the age of being competent. One has to have a level of education to compete internationally. It also means that not only do South Africans need to produce goods which compete in price but they must also compete in quality”.

Possibly the most incisive comment emanating from the 1997 period of post-matriculation journalistic probing came from the editorial opinion of *The Sunday Tribune* (4 January 1998):

“The government needs to accept that as long as there are no jobs – even for matriculants – there will be precious little incentive for pupils to study”.

This observation links quite unequivocally the incentives required for purposeful study to economic goals. It also draws attention to the irrelevance of the current provision of a general educational school-leaving curriculum for ALL learners and the problems being experienced by school-leavers in finding employment.

1.1.3 Rationale

It is the view of this researcher that the annual post-matriculation press reports, political and other public statements have failed to link a major cause of the matriculation crisis with the problems experienced by school-leavers when endeavouring to find employment; this omission is encapsulated in the following questions:

- Are the chances of employability, and vocational success in the labour market dependent **only** on the possession of a general academic school-leaving certificate?

- Can we realistically expect over-aged learners who are still in the primary and lower secondary school to benefit meaningfully from a general academic schooling beyond the basics?
- Can our economy absorb the matriculants being channelled into the labour market annually?
- Is the academic orientation of the education system not fuelling the growing problem of youth unemployment rather than aiding learners to become employable *vis-à-vis* skills-based learning programmes?

In a nutshell therefore, the problem in practice focuses on the relevance of educational provision for the majority of our learners. This research study postulates that for the majority of learners relevance can be equated with work. Relevance for the secondary school-learner is not contained in the general academic curricula of the final years of their schooling, nor in post-school education and/or training, but in a job. The matriculation certificate becomes irrelevant.

South Africa (and KZN) is experiencing an economy that shows little growth. The average annual growth from 1985 to 1995 was recorded by the World Bank (1997:215) as being -1,1%. The general low skill profile of the national workforce has been cited as a major factor inhibiting economic growth, especially when related to the level of schooling of the workers (Standing, Sender & Weeks 1996:119). Problems experienced by the formal education sector in the provision of basic education are a critical factor that cannot be ignored. The Department of Labour's (DOL) Green Paper stated that South Africa was ranked last out of 46 developing countries in terms of its human resources development performance (DOL 1998:7).

This made South Africa one of the most uncompetitive nations in the world in 1996. If South Africa wants to compete internationally in the global world markets the quality of our workforce will need to be addressed urgently. The dual focus of the research problem is therefore, viz the poor general education base, and the low-skill development of our labour force. Vocationally orientated education has been viewed as an option to be explored and advocated at secondary level as an alternative to a general academic

education in most high-income and low-mid-income economies of the world. In South Africa (and KZN) this critical area of education remains undeveloped both conceptually and practically.

1.2 STATEMENT OF PROBLEM

From the preceding paragraphs it can be concluded that the problem of the KZN economic community is essentially in respect of the development of a skilled labour force, while the problems of the school-leaving population (with or without a matriculation pass) is adequate preparation for work. With the international labour market as the inevitable backdrop to local planning and policy-making four key problem areas common to the economic and educational sectors of KZN can be defined, viz the **relevance in educational provision, work, the general education base, and skills development and work**. The problem statements have been formulated in order to embrace these key areas:

- What are the international trends in respect of the provision of education?
- What are the current trends in the transformation of the provision of education in South Africa in general, and how do our KZN initiatives compare with international trends?
- How relevant are these current trends in education to the socio-economic circumstances of KZN?
- How should education in KZN be restructured in order to satisfy local and international demands?

1.3 AIMS OF THE STUDY

From the problem statements, the aims of this research study have been formulated as follows:

- to make a thorough study of the problem of relevance in educational provision in the following countries: Germany, Japan, the former Soviet Union and Russia, Scotland and the Palestinian-Israeli region; this aim will focus on trends, critical issues, reforms and possible future developments in the provision of general and vocational education and the relevance of

the respective educational systems to the socio-economic needs of each country or region;

- to explore the problem of relevance in educational provision in KZN in comparative context; this aim will focus on the trends, critical issues, reforms and possible future developments in the KZN educational system in respect of general and vocational education and the responsiveness of the current system to the socio-economic needs of the region;
- to draw conclusions and to make recommendations for the restructuring of educational provision in KZN in order to enhance the relevance of education in the province.

1.4 CONCEPTUAL / THEORETICAL FRAMEWORK

1.4.1 Introduction

Educational terminology has become very complex. complex than in the ambit Concepts, theoretical terms and acronyms convey different meanings in different national contexts. Subtle differences of meaning can easily confuse the inexperienced reader of comparative education texts. This paragraph will provide the semantic framework for the key concepts of this study.

1.4.2 Education

In South Africa education is a concept that has become integrated with the term "... and training". This integration was first suggested by the National Training Board (NTB) (1994:8;131-146; 210) report on a National Training Strategy Initiative, and adopted in the Department of Education's (DOE) White Paper on Education and Training (DOE 1995:15-16). This study will use the term "education" in this wider sense of the word as it embraces all the elements of human resource development. This is the view of education as developed by the National Qualifications Framework (NQF), and implies the shared responsibility for education *and training* by many providers. The aims of this study focus on school and college based education, however, cognisance will be taken of other providers in the field as the concept "education" is not "the property of the Ministry of Education alone, but ... part

of the emerging consensus on the importance of life-long learning as the organising principle of a national human resource development strategy” (DOE 1995:15).

1.4.3 Relevance

Relevance is a principle that underpins the NQF in respect of its mission of quality assurance in South Africa (South African Qualifications Framework (SAQA) 1999a: 5). The term “relevance” is used in conjunction with the more general term “responsive”, as in “to remain responsive to national development needs” (SAQA 1999a: 5). Based on the National Training Board (1994:8) definition, **relevance** in education and training refers to the means whereby other ends are achieved. Education and training is not an end in itself, it becomes a means whereby the national needs for human resource development are achieved (cf Olivier 1998:6). This key concept will be explored in greater depth in Chapter Two.

1.4.4 Providers

A provider, as defined by SAQA (1999b: 12) is “a body which delivers learning programmes which culminate in specified NQF standards or qualifications”. An education and training body, i.e. a provider, is not limited to an institution, or an organisation” (SAQA 1999b:12). Providers can include senior secondary schools, technical colleges, NGOs, regional training centres, private providers and private colleges, private training centres, private companies, industry training centres, community colleges (Olivier 1998:8). SAQA (1999b:12) includes consultancies in the list of providers, and the Department of Education includes labour market schemes in its Green Paper on further education and training (DOE 1998a:4).

1.4.5 Provision (of education)

The manner of educational provision can vary quite considerably. The content can be primarily general education, or primarily vocational education, or a mixture of the two curriculum types; the curriculum content may determine the

nature of the contact with the provider: full-time, distance, self-directed and on-the-job, "sit-by-Nellie", or multi-media (SAQA 1999b:12). All forms of provision will be considered in this study.

1.4.6 General education

General education is understood in this study to mean academic studies that are not *normally* job-orientated, e.g. a curriculum that includes subjects such as languages, mathematics, history, geography, etc. In South Africa "general education" is situated on Level 1 of the NQF (that is equivalent to Levels 1-4 of Adult Basic Education and Training(ABET)). The General Education and Training (GET) Band in South Africa includes the pre-school phase, foundation phase, intermediate phase, and the senior phase (DOE 1998a: 4; Olivier 1998:7 & 8).

1.4.7 Further Education and Training

The Further Education and Training (FET) Band is situated in South Africa, on NQF Levels 2-4. This is a non-compulsory band, and the levels are equivalent to Grades 10-12 in the school system and N1 to N3 in the technical colleges (Olivier 1998:8; DOE 1995:6). The Department of Education's White Paper states that a significant feature of FET is that it has no age restriction, the goal of the South African FET system is to promote lifelong learning and education to "a diverse range of learners, including school-going people, out-of-school youth, young adults and the larger adult population" (DOE 1995:6). The study will therefore also focus on the learning that takes place in the post-compulsory education age-group in whatever learning or training environment they may enter after leaving the formal school situation and until they have been formally integrated into the world of work. The term "vocational education" is more frequently used in comparative literature, and will therefore be the term used in this study, except where a particular national context has adopted a different term, e.g. Further Education (FE) in Scotland.

1.4.8 Vocational education

The term vocational education as used in this study does not refer to vocational guidance or career education. These are classroom subjects that prepare learners for making career decisions.

Vocational Education has frequently been coupled with the terms "... and technical", "... training", hence e.g. "vocational and technical education" or "vocational training". Occasionally the terms have been swapped around, e.g. "technical and vocational education". Other documents tend to de-emphasise the vocational aspect and refer only to "technical education" or "technology education". In this study the term "vocational education" will be used in the general sense of the word as a special type of curriculum that prepares learners more specifically for the world of work. It will be used as an alternative curriculum to the general curriculum. The alternative terms, as referred to above will only be used in the context of specific sources or national systems. In the South African context, the term vocational education will also be used historically, to refer to the vocational curriculum during the pre-SAQA years (i.e. prior to 1995).

1.4.9 Skills

The three-level conception of skills as used in this study will follow the definition as described by Ashton, Maguire and Sung (1991, in Ryan (ed) 1991:223-224).

1.4.9.1 Low-level skills

Low-level skills training involves a small number of elementary tasks at which workers can become proficient. These tasks are routinised, they are frequently found in labour-intensive and mass production industries. Low-level skills, as a distinct category of training, and as opposed to unskilled workers, includes workers with some general educational background, possessing skills of manual dexterity or practised ability of a routinised nature (Ashton *et al* 1991:223-224).

1.4.9.2 Intermediate-level skills

Intermediate-level skills (also referred to as mid-level skills) rely on manual dexterity but their application is dependent on the internalisation of a body of theoretical knowledge and their application in variable contexts. Intermediate-level skills are therefore transferable across a range of jobs. These skills evolve from developments in theoretical understanding of a particular expertise, and thus a much higher level of general education is required (Ashton *et al* 1991:224).

1.4.9.3 High-level skills

High-level skills are concerned with resolving problems at a conceptual level. They are problem-solving skills which focus on the manipulation of abstract symbols, marshalling of evidence, and finding solutions as presented by new situations and combinations of events. Clearly high-level skills require post-school education at FET colleges and/or other institutions of higher education (Ashton *et al* 1991:224).

1.4.10 Learnership (apprenticeship)

The Departments of Education and Labour have a joint responsibility for developing more effective linkages between training and work. Learnerships will be introduced into the learning programmes of FET institutions. This was stated in the Department of Education's White Paper (DOE 1995:8). Learnership is defined in the Department of Labour's Green Paper as "a mechanism to facilitate the linkages between structured learning and work experience in order to obtain a registered qualification" (DOL 1997:25). This definition will be adopted for the study on hand (cf DOE 1995:42). Theoretically learnerships can be introduced into secondary schools that have been declared FET institutions, however, practical obstacles will have to be overcome.

1.5 RESEARCH STRATEGY

An overview of the research strategies used in this study is presented here. Two major sources were used in the data gathering process, viz written and human sources. In general the written sources provided the factual foundation for the critical analyses that were further informed by the data gathered from the human sources. The field research that was conducted used a variety of strategies. Data was gathered from the researcher's interaction with key stakeholders in the field. Burgess (1982:163) describes the advantages of multiple strategies in field research. The data yield in this study was undoubtedly enriched by the application of a variety of strategies in the data gathering process.

Field research was conducted by means of interviews, attendance at conferences, seminars and presentations, and by means of two empirical surveys. Three types of interviews were conducted, viz exploratory, focused and directed. The exploratory interviews probed the unfamiliar while the focused interviews were structured to probe specific issues. The directed interviews were conducted by means of questionnaires. Most interviews were tape-recorded and transcribed into raw data.

The material yielded by the interview transcripts was utilised variously. In Chapters 3 and 4 the transcribed data were integrated into the critical analyses. As a result of the greater sensitivity of the KZN material selections from the interview data of Chapter 5 were included in the text as illustrative of the main line of argument, and the conclusion reached. The remaining transcripts were employed in a supportive capacity. The reader was thus exposed to the entire process of data reduction, analysis, and emergence of new meaning and conclusion. The sense of the whole was thus enhanced for the reader. The issue of the sensitivity of the KZN data had to be considered. The advantages for the research product of retaining actual identities of the respondents as opposed to anonymity had to be considered. It was considered that the employment of numerical coding for the illustrative boxes in Chapter 5 was impractical and would detract from the endeavour to retain a sense of wholeness and transparency in the study. The realities of the field were thus

retained and integrated into the chapters. Confidentiality considerations were covered in a confidentiality undertaking offered to all respondents prior to the interview.

Similar considerations were employed in the decision to include the empirical surveys into the main body of Chapter 5. The material yielded by these surveys probed the very critical areas that had emerged from the preceding data yields, and as such the original data yielded by the two empirical surveys were considered to be *the* most critical issues of the KZN data, and therefore justified inclusion. The problems of sensitivity and identity did not present themselves in this component of Chapter 5.

The process of data reduction in the study was therefore cyclical and on-going. Cyclical, in the sense that comparative data was repeatedly analysed using the same analytical format through-out and on-going in the sense of providing the reader with on-going conclusions in the data reduction process. The preferred method of analysis through-out the study was continuously determined by the enhancement of meaning *vis-à-vis* a logical flow of argument and emergence of new meaning.

The Internet was used in the process of data gathering. Various Websites were consulted in order to acquire up-to-date data. Data was also downloaded via e-mail from university, educational institutions and foreign embassies. This was a vital source of data gathering as overseas travel proved to be expensive and prohibitive.

Some quantitative data was included in the study; however, the study was primarily a qualitative study, in a comparative context. The intention of the study was to explore and describe a variety of international educational systems in order to enhance the researcher's understanding of the problem of relevance in the South African and KZN context. The use of the multiple research strategies was suited to the aims of the study and enhanced the validity of the research findings.

1.6 DEFINITIONS AND DEPARTURES FROM LITERARY PRACTICE

The following departures from usual literary practice are noted.

1.6.1 Paragraph: abbreviation

In order to simplify the cross-referencing technique only one notation has been used to denote both singular and plural forms of the word paragraph: *viz para*, the alternative abbreviation for paragraph as noted in *Everyman's Dictionary of Abbreviations* (cf Paxton 1974:275).

1.6.2 Sequencing: trends, critical issues, reforms (future developments)

The general pattern for these sections in the text is as follows: trends followed by critical issues and reforms (or future developments). However, where the logic of a particular country experience determined another sequence the dictates of logic was adhered to. The final conclusions and comparative perspectives of each chapter returned to the original sequence.

1.6.3 Definition: learning programme and specific learning programme

In order to systematise language usage in the context of the study the terms 'learning programme' was adopted to refer to any broad curriculum in universities, colleges and schools. The term 'specific learning programme' was adopted for more specific subjects, such as History or Computer Science offered at any level.

1.6.4 Spelling, punctuation, and language practice

The conventions and practice of United Kingdom English has been adhered to through-out the study. However, the variations in spelling, punctuation and language style of the different national contexts has been respected and retained, e.g. the hyphenation of "life-long" as in "life-long education" has been adopted for the South African context. The Japanese sources however, prefer the un-hyphenated alternative, hence "lifelong education".

1.6.5 Use of World Bank classification of national economies

The three-fold classification of national economies by GNP per capita as recommended by the World Bank (1997:265) was used in this study:

- low-income economies (less than 765 dollars);
- middle-income economies (766 – 9 385 dollars);
- high-income economies (greater than 9 386 dollars).

1.7 CHAPTER DIVISIONS

Chapter One introduces the problem to be examined and provides the reader with an overview of the aims, problem statements, and research strategy of the study. Chapter Two gives a theoretical overview of the problem of relevance in education. The literature examined focuses on the role of education in endeavouring to improve the quality of human life.

Chapter Three examines the problems of relevance in educational provision in three high-income economies. The chapter commences with an examination of the problems of relevance in educational provision in Germany, followed by Japan and Scotland.

Chapter Four examines the problems of relevance in educational provision in three middle-to-low income economies. The chapter commences with an examination of the problems of relevance in educational provision in the former Soviet Union and Russia followed by a similar study of the Palestinian-Israeli region. The conclusions reached prepare the reader for the comparisons to be made with South Africa and KZN in Chapter Five.

Chapter Five examines the problems of relevance in educational provision in South Africa, with special reference to the province of KZN. This chapter also analyses the findings of two questionnaires administered in respect of educational relevance in KZN. Chapter Six provides a summary of the conclusions of the study as well as the recommendations for future developments in KZN.

1.8 CONCLUSION

This chapter commenced with the formulation of the problem *vis-à-vis* newspaper reports that reflect the intolerance of public opinion in respect of the poor performance of the matriculation candidates at the end of each academic year. It was postulated that poor economic prospects were one of the causes of poor performance in the matriculation examination, but in another sense of the word the poor matriculation results made it more difficult for economic growth to take place. The rationale and problem formulation of the study established the key focus points of the study, viz the problem of relevance in educational provision in KZN. Relevance was defined in an economic context, and hence, in keeping with current trends educational provision in this study is linked to economic goals. The conceptual framework focused on key concepts of the study. The language used in modern educational systems has become complex and virtually inaccessible to the average professional, and hence the conceptual framework provided fairly precise parameters for the study in respect of the semantics of the key concepts. The research strategy was briefly discussed, and the chapter divisions outlined. Chapter One prepared the reader for the theoretical discussion of relevance in education that follows in Chapter 2.

CHAPTER 2: THE PROBLEM OF RELEVANCE IN EDUCATION

2.1 INTRODUCTION

Chapter Two is a theoretical discussion of the problems of relevance in educational provision. The chapter will focus on the theoretical issues of the first aim of the study and examine socio-economic perspectives in respect of educational relevance. These perspectives will be examined in the context of high and low-income economies. Relevance in respect of the ideals of liberal education will be examined in respect of the renewed interest in relevant education in different parts of the globe today. The problems of relevance in the South African system will be explored briefly. The final paragraph will summarise the conclusions of this chapter that will provide the theoretical framework for the remainder of this study.

2.2 THE PROBLEM OF RELEVANCE AND WORK ORIENTATION

For the purposes of this discussion “goals” will mean broad “thrusts” or “perspectives” in education. Somewhat narrower “objectives” or “ends” may be perceived within the scope of the broader educational goals.

Hoppers (1996:20) identifies three objectives that influence the development of learning programmes for work orientation in basic education:

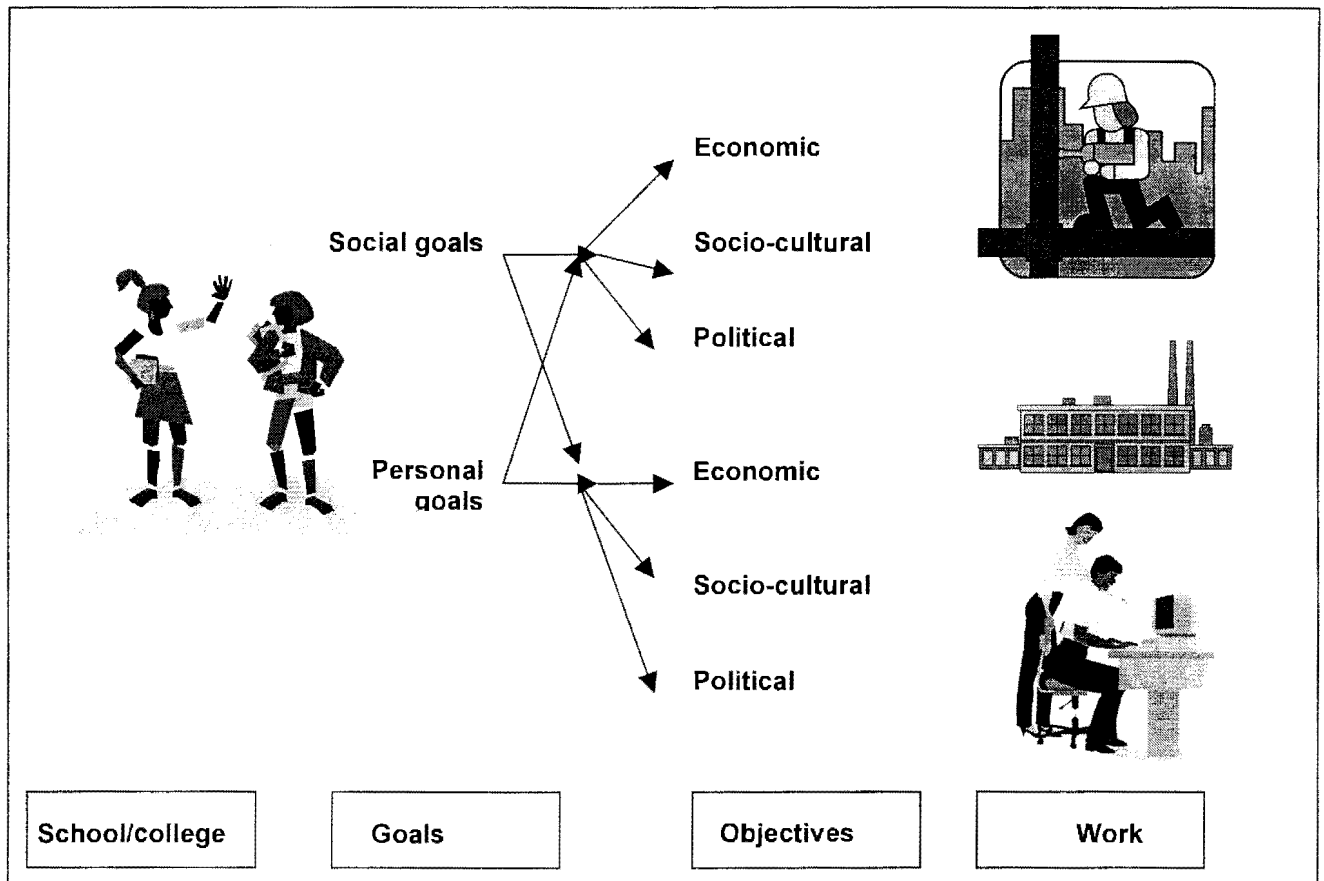
- economic objectives: to develop employable skills; to ease entry into the labour market; to improve understanding of the world of work; to generate revenue for the institution;
- socio-cultural objectives: to develop social skills ... and attitudes ..., to reduce the gap between school and community and between intellectual and manual work, to appreciate the cultural heritage and processes of change, to accept indigenous approaches to education;
- political objectives: to promote awareness about national development; to promote a national ideology of labour; to help create a ‘new man’ (*sic*) and through a new approach to education help transform society.

These objectives are subsumed within issues much broader than educational objectives. They centre on the relationship between human beings and society, and the role of education in mediating the relationship. According to Bruner (1971:114) the word “relevance” may be understood in two ways in educational practice:

- *social relevance*, i.e. when what is taught has a bearing on the problems of the world, the solutions to which may affect the survival of humans;
- *personal relevance*, i.e. when what is taught is perceived to be personally rewarding by means of some form of existential criterion, the reality of learning becomes a personal experience.

The problem of relevance becomes a question of skill and understanding. The issue of relevance, in either of its senses is the issue of goals in education. If we have a clear sense of where we are trying to get to, the route to be followed towards achieving the goal becomes clearer. Few would argue that global issues relating to the quality of human life would not constitute critical goals for all educational systems. The problems of improving the quality of human life in all countries throughout the world require learners to enter twenty-first century society with an education with a single focus: a healthy fusion of the goals of skill and understanding. Knowledge and conviction must be brought together as we approach the goals that we care about (Bruner 1971:115). It follows then that the two goals (or foci) of educational relevance may share the same objectives. The dual foci of relevance education and their shared objectives may be represented as follows:

Figure 2.1
The dual foci of educational relevance



(Based on Bruner 1971:115; figure design by Edwards & Lagerwall 2000)

Two fairly recent educational theories add further theoretical support to the adoption of social and personal goals as the dual foci of relevance education.

2.3 THE ROLE OF EDUCATION AS AN AGENT OF CHANGE: THE HUMAN CAPITAL PERSPECTIVE

Education as an agent of change has been debated quite extensively. The human capital theory provides a useful perspective for a theoretical discussion of relevant education as an agent of change. Economists such as Schultz (1961), Denison (1962) and Becker (1964) have viewed education as a crucial agent for economic growth. The human capital theory as developed by Schultz and others holds that investment in the education of a nation is equivalent to investment in human productivity. The human capital theory dominated the thinking of international organisations such as the World Bank,

UNESCO and OECD until fairly recently.

These socio-economic notions for human development were described in the Declaration of Cocoyoc in 1974, that resulted from a symposium sponsored by the United Nations Environmental Programme and the United Nations Conference on Trade and Development. The following significant declaration was issued:

“Our first concern is to redefine the whole purpose of development. This should not be to develop things but to develop man (*sic*). Human beings have basic needs: food, shelter, clothing, and education. Any process of growth that does not lead to their fulfilment – or even worse disrupts them – is a travesty of the ideas of development”.

(Ghai 1978, in Ghai, Khan, Lee & Altham 1978:6)

The emphasis shifts to basic human needs, and education becomes subsumed as one of the basic human needs, along with food, shelter and clothing. When viewed together with food, shelter and clothing education becomes a basic need for qualitative living.

Can education act as the *brocanteur honête*, in respect of human development? In his discussion of the economic role of education Trotter (1990:242) states that there is evidence to suggest that education leads to higher earnings. Education can play a positive role in the productive processes of the economy. The author warns that a direct causal relationship between more education and a higher growth rate is unclear.

“It is just as possible that higher growth leads to more education. Moreover, it is difficult to pinpoint the contribution of education on its own. Many would argue today that greater expenditure on the wrong kinds of education simply raises aspirations in a way which could frustrate the labour force and reduce the growth rates or that it might do little more than redistribute incomes to those fortunate enough to have access to the education”.

(Trotter 1990:243)

At the heart of this discussion is the human capital theory. This theory has come in for harsh criticism, and so too vocational education. Foster (1965:142) in *The Vocational School Fallacy in Development Planning* questioned the desirability of providing technical, vocational and agricultural instruction in schools in less-developed countries. His arguments were based on the controversial relationship between the provision of formal education and economic growth. Benavot (1983:73) examined the provision of vocational education in a broad, historical and cross-national perspective in several regions of the world. The same author concluded that "throughout the world, the vocational share of secondary education has contracted, or so it seems, according to the beat of the same drummer". Psacharopoulos (1987:187; 201-208) also questioned the provision of vocational education from the point of view of its cost in relation to the benefits accrued from this curriculum option. He raised the question of providing more efficient alternatives to purely vocational institutions. Employment-based training is offered as a valid alternative. The World Bank in its policy shift away from vocational education recommended that primary and secondary education be strengthened and private-sector training be encouraged (cf World Bank 1991:7). In his criticism of attempts to make the curriculum responsive to economic conditions Jansen (1997a:3) says that

" ... there is not a shred of evidence in almost 80 years of curriculum change literature to suggest that altering the curriculum of schools leads to, or is associated with, changes in national economies. The most optimistic studies ... suggest that there is simply no evidence from experimental research that curriculum diversification ... has significant social or private benefits this is particularly the case in developing countries where economic problems have little to do with what happens inside schools and much more to do with the economics and politics of the Third World State, e.g. sustained high unemployment".

Economic realities cannot be ignored. This applies particularly to the low-income economies, where issues of quality of life are critical. In his Nobel Lecture of 1979 Schultz (1980: 647) stressed the importance of education as

an agent of change. The link between the quality of life in a society and their economic prospects was stated quite unequivocally, he said, "education accounts for much of the improvements in population quality". According to Fägerlind and Saha (1989:56-57) much of the scepticism relating to the human capital theory arose as a result of the two major recessions of the 1970s and 1980s. The unemployment levels in high-income economies and low-income economies rose rapidly during these years. Youth unemployment rates were several times higher than the national average in many countries. Education was able to produce a workforce with the needed skills; however, it was realised that schools were not the only way to acquire skills. It was also realised that much of the cynicism that emerged about the role of education in economic development was due to the perceived breakdown in the relationship between schools and the workplace (Fägerlind & Saha 1989:57).

According to the human theorists (and others) relevance in education is perceived in the pursuit of economic goals. This is, however, a partial view of the purpose of education. The Concise Oxford Dictionary definitions for "economic" or "economy" implies a specific case of organisation within society (cf Oxford 1964:386). The community orientation of a social thrust within a learning programme has an outward, or utilitarian focus. A more inward looking or personal goal, for education will be examined in the next paragraph.

2.4 THE ROLE OF EDUCATION AS AN AGENT OF CHANGE: THE MODERNISATION PERSPECTIVE

Fägerlind and Saha (1989:49) state that higher productivity can be promoted by adherence to individual human needs such as appropriate attitudes, motivation and personal characteristics. Relevance is perceived in social and personal qualities.

The modernisation theory developed during the 1950s as an intellectual reaction to World War I and World War 2. This theory took an optimistic view of human life. McClelland (1961) maintained that individual values held by the majority of the population played an important role in societal development. The achievement motive acquired through socialisation enabled societies to

advance in economic and technological fields (cf Delacroix & Ragin 1978: 124-126). Inkeles and Smith (1974) developed McClelland's achievement notion. During the 1960s and 1970s a modernity scale was used to determine to what extent societies were considered to hold modern values. Relevance in education is achieved *vis-à-vis* acquiring modern values. The personal development of the individual enables the quality and standard of education to be acquired, thus the social and economic development of communities.

The modernisation theory was applied by sociologists and social psychologists to effect change. Agents for change include the school, the family, the media and the working environment. The school is placed in a prime position as an agent for the transmission of modern attitudes. Holsinger (1974:44) found in his study of 3rd, 4th and 5th grades in Brazil that a direct relationship existed between education and modernity, he stated that "in the light of this evidence and corroborating researchers we conclude that for any child in Brasilia, the longer he (*sic*) is exposed to formal schooling the higher will be his (*sic*) modernity score".

These studies also draw attention to the nature of the schooling provided. Armer and Youtz (1971:604) address the same question. They found that there was a direct relationship between exposure to Westernised schooling and individual modernity. In their study of 591 Nigerian 17-year-olds the researchers used a modernity measure to measure six value dimensions. Their study found that a strong link existed between schooling and modernity, and moreover that the relationship between schooling was linear, i.e. an increase in modernity with schooling was a direct increase of primary and secondary level of schooling. Their research included Koranic schools, they concluded further that the schooling had to be of a particular (Western) kind.

The emphasis on Westernisation in modernity is problematic to the modernisation theory. The Armer and Youtz (1971) study is illustrative of this criticism. In fact the relationship between education, modernity and economic development remains problematic to the researchers. Modernisation has however clearly indicated that social and economic goals alone do not constitute relevance. Personal goals are equally relevant. A paradigm shift

during the 1970s re-enforced this view. Human psycho-socio needs became the goal of modernisation. Also expressed as the basic human needs notion the approach was not a new approach *per se*, but a shift in emphasis.

“Economic growth is not rejected as a viable strategy for development, but rather the satisfaction of human needs is considered an equally important component for bringing about the social and economic development of society”.

(Fägerlind & Saha 1989: 115)

The 1974 United Nations General Assembly resolution on the “New International Economic Order” effectively shifted the emphasis of development from economic growth to an emphasis on the material and psychological needs of humans. The Declaration of Cocoyoc summed up the new relationship between development and basic human needs:

“Development should not be limited to the satisfaction of basic needs. There are other needs, other goals and other values. Development includes freedom of expression and impression, the right to give and to receive ideas and stimulus. There is a deep social need to participate in shaping the basis of one’s own existence and to make some contribution to the fashioning of the world’s future. Above all, development includes the right to work, by which we mean not simply having a job but finding self-realisation in work, the right not to be alienated through production processes that use human beings simply as tools”.

(Ghai 1978 : 6)

What seems to emerge from the Declaration of Cocoyoc is that a job is not sufficient. Qualitative living is more than basic work, “self-realisation in work, the right not to be alienated through production processes” indicates that the curriculum will be more than the provider of modern values, or the means whereby a job is found.

2.5 THE PROBLEMS OF RELEVANCE IN EDUCATION IN THE HIGH-INCOME ECONOMIES

Education practitioners in the high-income economies have implemented on-going initiatives at ensuring relevance in educational provision. The following paragraphs will examine the problems and initiatives of the practitioners in these countries. Relevance in specific learning programmes will be examined, followed by a further examination of other theoretical concerns prevalent in the high-income countries.

Hurd (1997:408) and Holbrook (1998:13) seek educational relevance in *scientific and technological* literacy. Hurd (1997:414) makes reference to 350-years of attempting to close the gap between academic science and the science of productive citizens. Holbrook (1998:13) holds that although school science tries to develop conceptual understanding in secondary school learners its relevance to society is suspect. The author states that this lack of relevance for functionality in our lives impacts on the home, the environment, future employment and future developments within society. He calls for an approach that goes beyond acquiring knowledge and conceptual understanding. Education for scientific and technological literacy, Holbrook (1998:14) holds, will take science and technology beyond the textbook.

In an examination of *industrial arts*' continued strength, relevance and value Volk (1996:27) compares the subject to technology education and concludes that historically industrial arts has demonstrated its value as a relevant school subject in its own right. For Bierma and Krishnau (1997:11) partnerships between employers of *environmental health* graduates and educational institutions can ensure the continued relevance of skills and knowledge developed by the employers. Weintraub (1995:362) makes a similar point when he perceives relevance in environmental education in the context of an urban community. A community-based approach to environmental education enables learners to constantly evaluate and re-assess the relationship between the community and the earth. Biehler-Baudisch (1994:10) holds that environmental education is a cross-sectional task, which is relevant in all occupational fields, and as such she advocates an inter-disciplinary approach

to enhance the relevance of this subject. As with Holbrook (1998:13), Biehler-Baudisch objects to an approach that only imparts knowledge. Relevance is awareness of environmental problems, the development of ethical environmental standards and the ability to think, evaluate and act in a way that does justice to the environment. This relevance can be achieved *vis-à-vis* the integration of environmental learning programmes into the vocational training curricula at all levels of school and vocational education.

Raffo, O'Connor and Lovatt (1996:19 & 31) also emphasise everyday realities in their examination of the continued relevance of *business education*. The authors recommend that a more thoughtful and reflective approach to the subject be adopted. Relevance is reflected in the everyday interaction and informal transaction networks which practitioners have with their markets.

Rural areas face unique problems. Solutions proposed focus on the relevance of educational programmes. Rojewski (1993:9) points out that people living in rural areas are twice as likely to live in poverty than urban communities. Learners with *special education* needs in the rural areas are therefore at great risk. The relevance of vocational special education programmes becomes more critical. Rojewski (1993:13) holds that it is easier to move information than to move people. Exemplary programmes that can successfully address the challenges of the rural regions include mobile facilities units, greater use of technology, school/business partnerships as applied to rural communities, and capacity building entrepreneurship programmes. These programmes may be applied to mainstream learners, but are eminently suitable for special needs learners. Special needs educators are required to work closely with community leaders. Relevance, according to the author is inevitable as "vocational education has the potential to make significant contributions to the revitalization of the rural America not only through training and re-training efforts for established business/industry, but also through the creation of new jobs and enterprises" (Rojewski 1993:12-15). Conclusions such as that of Rojewski (1993) are contrasted by the research findings of Baker (1989:507-518) who, on the basis of empirical research holds that the failure of rural relevance education programmes has emerged because parents prefer their children to experience the same kind of general education as urban children.

The learning programmes that remained relevant to farming and practical trades were, according to Baker (1989:507), rejected by the parents because they valued traditional education for its own sake.

King and Kotlik (1995:26-32) studied the relevance of the *general education* core curriculum to the career aspirations of agricultural college students. The authors concluded that students did perceive relevance in a general core curriculum and recommended that such programmes remain in place. Brady (1996:249) considered the cost of irrelevant education to human experience. He accuses traditional education of being not only irrelevant but also an active creator of problems. Learners deserve a basic education that portrays the oneness of reality. Unity of knowledge is only possible in a programme of general education. According to Brady (1996:254-255) only an education that teaches the connectedness of all things will help learners to make sense of life. He calls for a re-emphasis of what he calls “five kinds of information”: who, what (and its companion, how) when, where, and why. We are able to make sense of whatever we want to understand by fixing our problems in time and space and applying these five approaches (Brady 1996:253).

Seeking relevance in specific learning programmes has not been the only approach adopted in the high-income economies. The “vocational quest” has included numerous national programmes designed to meet the economic needs of the high-income economies (cf Skilbeck, Connell, Lowe & Tait 1994:iii). The German *dual system* is a social partnership between education and employers designed to generate relevant work-related qualifications. The problem addressed by the dual system is the problematic school-to-work transition. The problem subsumes the related problem of the acquisition of relevant qualifications for the work-place. A German-styled *apprenticeship* system has frequently been advocated for the United States and Britain (cf Bowman 1990: 288 –291), the 700 year system does not translate well in another national context, the British *Youth Training Scheme* (YTS) of the 1980s was a British approach to apprenticeship and preparation for work (Cappelli 1996:679 – 680). Similarly, the *Technical and Vocational Education Initiative* (TVEI), was a typically British school-to-work initiative that lasted for more than a decade. The most important lesson learnt from the TVEI-

experience, according to Gleeson and McLean (1994:238) being the impetus it gave to institution/industry collaboration (cf Powell 1986:150; Bridgwood 1987:169).

The question that is frequently asked is whose *job is it to ensure that a smooth transition takes place from school to work?* Is it the problem of the private sector, the school or a partnership between school and industry? Ryan (1991, in Ryan (ed) 1991:4 –7) examined the problem of vocational education and training for intermediate level skills from the point of view of the private sector. The author's comparative research study provided useful insights from the point of view of international labour markets. The issue of work-related relevant qualifications comes into the discussion, as well as the question of when to commence with preparation for work. The Japanese system emphasises a *comprehensive education* that is equal for all learners to the age of 15, followed by an upper secondary education for almost 95% of the secondary school-population. The Japanese and American systems follow very similar patterns in respect of the strong emphasis on the value of a *general academic education* as a preparation for work (Prais 1986:128 & 129). By way of contrast, Stone (1991:46) debated the issue of business in education. The author raised the question "does business have any business in education?" She challenged the assumptions that the solution to problematic schools is business and the other extreme that school and work has nothing to do with each other. In the same reference the author states that changes in the global economy have made both of these assumptions obsolete. Both, business and education ought to be preparing school-leavers for a new industrial economy.

The issue of *when* has also been debated, the Japanese late selection-model (cf Fisher 1993:77) delays specific vocational preparation, while English and European initiatives tend to apply an early-selection-model. The English pre-vocational programmes came in for much criticism (Atkins 1986: 45 – 53). Essentially, the *Certificate in Pre-vocational Education* (CPVE) was a framework for 16 – 19 year olds that included ten vocational fields organised on a modular basis. Pre-vocational certificates were designed to ease the school-to-work transition, ensuring exposure to fairly broad vocational fields (cf

Bleiman 1988:9 – 16). The issues of vocational qualifications is not static, the English system demonstrating growth in the field of relevant education in the implementation of the *General National Vocational Qualifications* (1995), with provision made for revision every two years (McNeill 1994:381). Bridgwood (1987: 163 –171) in a slightly older paper raised the question of relevance in technical and vocational education for the 14 – 18 year old age group. The author addressed, *inter alia*, the problem of poor attitude to vocational education initiatives in four countries (Denmark, France, Sweden and West Germany). Attitudes towards vocational education are addressed with students as well as with employers, the streaming of students being a contributing factor to the low-status problem. Vocational education for students of all ability levels was offered as another possible solution to low-status problem. Critics of vocationalism bewail the sacrifice of liberal ideals on the grounds that vocational and general education programmes do not enjoy parity of esteem (Smith & Tizard 1995:89).

The school-to -work debate in the high-income economies cannot be divorced from *economics* (Jallade 1989:124-125). Secondary schools in particular stand the risk of becoming self-contained and self-absorbed if they continue to exist in isolation. Employers in the United States, according to Stone (1991:58 & 60), were beginning to make the connection between good grades and productive employees. The problem of 'early leavers' from education and training receiving attention from labour and educational ministries in Ireland, the Netherlands and the United Kingdom (Hannna, Hövels, Van den Berg & White 1995:325). Seeking educational relevance in major economic challenges in high-income economies have turned education and training institutions into instruments of social and economic reform. The goals include restructuring and re-energising of vocational institutions driven by initiatives to establish closer relationships between educational institutions and the working world (Hyland 1991:77;Skilbeck *et al* 1994:22 – 23). Jonathan describes the impact of the so-called "new vocationalism" as being controversial and socially divisive, but acknowledges nevertheless that the "new vocationalism" is economic in nature.

The New Vocationalism assumes society to be primarily an economic collective in which the welfare of each can be unproblematically aggregated to yield the welfare of all, such that it is in each individual's interest to maximise - by educational as well as other means - the wealth-producing capacity of society.

(Jonathan 1990:187)

The search for relevance in the high-income economies has continued unabated (Jallade 1989:103). The issues have been issues of policy, followed by issues of planning and implementation. The outcomes of these policy and planning debates have varied in the country experiences of the high-income economies. The country experiences of the middle-and-low economies have been considerably different to those of the high-income economies. The following paragraph will examine the problem of relevance in the low-income economies.

2.6 THE PROBLEM OF RELEVANCE IN THE LOW-INCOME ECONOMIES

These paragraphs will explore the attempts to transpose Western or high-income economy notions of relevance to the low-income economies. Psacharopoulos (1987: 202) states that the intuitive appeal of vocationalisation, or relevance argument, is so strong that in spite of its failures keeps being regenerated from its ashes. This is particularly true of the low-income economies. The specific case of Africa will demonstrate how the economic expectations of vocationalisation resulted in an upsurge of negative sentiments in respect of investment in vocational projects in the low-income economies. The intense "vocational fallacy" debate probably prepared the way for the publication of the influential World Bank Policy Paper (1991) and its implications for the provision of vocational education in the low-income economies.

During the 19th and early 20th century two trends in secondary vocational education were perceived to be relevant in England and Europe:

- schools that provided a traditional education in subjects such as Latin and the classics;
- those schools that provided modern work-related subjects such as mathematics and science.

(Benavot 1983:64; Adams, Middleton & Ziderman 1992:128).

This distinction expanded as a result of industrialisation. The growth of the secondary modern schools resulted in non-elite schools for working-class children being established. Previously work-relevant training took place at the conclusion of primary schooling and in the work-place. Training in the artisanal and industrial trades was usually by means of an apprenticeship. However, the trend towards the training of youth in new skills to supplement knowledge in general subjects continued. The technical-vocational school movement received much support from private factories and industries as well as from national governments. The role of the industrial schools in developing Germany's economy during the second half of the 19th century did persuade other European nations to adopt similar programmes. Relevance in education became linked to productivity (Benavot 1983:65 – 67; Adams *et al* 1992:128).

During the post-war era secondary education expanded in the low-income economies. There was an urgency to produce skilled labour. According to Okwuanaso (1984:16) this urgency was translated into an increased emphasis on skills-orientated subjects in the primary, secondary and post-secondary schools. Vocational education was expected to reduce unemployment, increase productivity and improve the quality of rural life (cf Lillis & Hogan 1983:89). When those programmes were implemented in the newly independent nations only a limited degree of success was experienced. Despite unusually high levels of funding by international development agencies and World Bank loans the historical record for the first half of the 20th century showed that there was only a meagre increase in the number of vocational schools and secondary vocational students (Benavot 1983:65). The relevance of the provision of vocational education in the low-income economies came in for scrutiny during the second half of the 20th century (Foster 1965; Blaug 1973; Benavot 1983; Psacharopoulos & Loxley 1985).

For all practical reasons the 1960s may be viewed as the turning point in the policy of international agencies and organisations in respect of funding for the low-income economies. Foster's (1965) document *The Vocational School Fallacy in Development Planning* sparked off a debate that spanned almost thirty years. Foster's (1965:144-148) research was African-based; his study was conducted in the agricultural environments of Ghana; his findings in respect of the ruralised curriculum, "the lowest level of vocationalism" (Psacharopoulos 1997:388), provided a solid platform for other researchers in the same field (Psacharopoulos 1987; Samoff 1987; Lauglo 1992; Watson 1994; Bennell 1996).

The African experience in vocational education may be linked to the negative stigma it had acquired during the colonial era, the orientation frequently being associated with agriculture and handicrafts which the colonial powers had viewed as being appropriate to the needs of the Africans (Benavot 1983:69). Foster (1965) took issue with the Western development economists, suggesting three fundamental misconceptions regarding the assumed relevance of vocational schooling. The low-income economies were influenced by centralised non-market-orientated planning models and thus:

- a misunderstanding of what constituted vocational relevance emerged; the curriculum was associated with content, i.e. industrial, agricultural, or commercial, as opposed to specific outcomes, either general or vocational;
- a misunderstanding of market trends; the assumed relationship between vocationally narrow types of skill training and expected job placement did not exist;
- a misunderstanding of the notion of perceived benefits of centralised economic planning; the abolition of centralised models and to replace these with strategies that would enhance local markets.

(Foster 1965:153-159; 1992:150-152; cf Middleton 1991:82 – 91)

Foster (1965:158) argued for the extension of general education and the provision of vocational training by the emergent private sector. He called for an emphasis on on-the-job training. He argued for increased emphasis on literacy and numeracy in education in agricultural development in place of

agricultural vocational training. Market-orientated agricultural strategies would result in development and not school-based agricultural instruction. Vocational education was not able to induce rural youth to take up farming, even if it was possible to prove that such instruction did increase agricultural production (Foster 1965:152).

The World Bank policy document of 1991 was a watershed event. It was the culmination of 4 years research with the inclusion of 53 low-and-middle-income economies in the review of a policy that resulted in a paradigm shift in the Bank's approach to funding VET, in Africa, and elsewhere.

The World Bank's (1991) policies in respect of vocational education and training are well known:

- strengthening primary and secondary education;
- encouraging private sector training;
- improving effectiveness and efficiency in public training;
- training as a complement to equity strategies.

(World Bank 1991:30-58; cf Middleton 1991:90 – 98; Bennell 1991:1 & 2)

The authors of the Bank's policy paper comment as follows about the Bank's policy change:

“sound economic management of the economy is important to the success of VET; economic policies providing incentives for investment and employment creation are central to providing jobs for graduates of schools and training centres; adopting the right objectives for VET is important; VET works best when focused on existing or anticipated employment and skill needs; demand-driven VET is responsive to market needs; it is less effective when addressing supply-driven objectives; where specific occupations or jobs is involved, the evidence favours enterprise-based training; and by its nature tends to be cost-effective”.

(Adams *et al* 1992:129-130)

The paradigm shift resulted in a shift in the focus of relevance (Foster 1992:149-155). Vocational relevance was perceived in the quality of school-based general education, at primary and secondary level, and enterprise-based vocational training. Hoppers (1996:27) states quite categorically that *limited available evidence* shows, that in the short run at least, vocationalised systems do not produce graduates who are more likely to succeed in the labour market or in self-employment. He states, in the same reference, that the conclusion was reached that investments into such education were probably misplaced (cf Psacharopoulos & Woodhall 1985:88 – 90; 94 – 95; 157 – 159; 320; cf Lauglo & Närman 1988, in Lauglo & Lillis 1988:254 – 255; World Bank 1991:23 – 29; Lauglo 1992:234).

Psacharopoulos' (1987:202) comments that vocationalism is constantly being regenerated from the ashes appear to be valid. Abrokwa (1995:129) in an article entitled *Vocational Education in the Third World: revisiting the debate* the author argues that the Ghana of the 1960s studied by Foster (1965) is quite different from the Ghana of the 1990s. He calls for a redefinition of the goals of vocational education in the current socio-economic context of the low-income economies, the goals of the 1960s have been achieved, and the proposal is that the concept of vocational education be re-defined to focus on the creation of regional or district based post-primary projects. The author holds that the expansion of primary education does not necessarily imply an increase in the quality of educational provision, many primary school graduates are unable to write their own names. Primary school graduates are unable to read a book with understanding. The reality of the quality of human life in the low-income countries prompted the author to call for a return to the vocational education debate. Vocational education programmes could possibly be more relevant than purely academic education (Abrokwa 1995:138 – 139; cf Cornford 1998:169-170).

2.7 THE PROBLEM OF RELEVANCE AND THE LIBERAL IDEAL

The problem of relevance in education is essentially a philosophical debate. The roots of this debate lie deep in the past. These debates on relevance contrast the issues of liberal academic education and vocational education

(Sanderson 1993:189). The inherited system in South Africa has its roots in English liberalism; however, the very fragmented provision and control of education in South Africa established patterns that ultimately eroded the ideals of South African liberalism (Webber 1992, in Heese & Badenhorst 1992:21). The relevance debate of this study will nevertheless be enriched by a brief examination of some of the salient issues of liberalism as related to relevance in education.

Katz (1995:25) holds that it is much easier to identify the educational goals of vocationalism than those of liberal education. There appears to be growing public intolerance of the supposed irrelevant learning programmes offered at school and post-secondary institutions. The following statement underlines this contention:

“If I’m going to be an accountant, what do I care what someone did back in ancient Egypt?”

(Hersh 1997:28 & 29)

Statements of this kind are common, and tend to emphasise the polarisation of two points of view, the liberal and the vocational. This paragraph will examine some of the issues.

Liberal education is the particular philosophical position as developed by, inter alia, John Stuart Mill (1859) (1863), Hirst (1965), Peters (1966) and Phenix (1964). Pring (1995:184 - 186) characterises the liberal ideal in five summarising statements:

A liberal education

- aims to develop the intellect, in respect of the individual’s capacity to think, reason and appreciate;
- depends on the nature of knowledge; intellectual excellence knows how to grasp basic concepts, gains mastery over essential skills, acquires techniques of enquiry and develops moral habits;

- intellectual discipline is for its own intrinsic value, and may be socially useful for the purposes of the improvement of society;
- the learning experience cannot take place incidentally, it requires withdrawal from the world; schools and universities should be like monasteries, rather than market places;
- the task of teaching these ideals lies in the hands of scholars and teachers, not government, industry or the community.

(cf Sanderson 1993: 190)

Swenson (1998:36) argues that a profound social transformation has accompanied the global shift from manufacturing society to information society. Educational institutions ought to adapt and evolve along with societal change. The skills required by the modern workforce are in many ways quite different from their predecessors. The author points out that the cultural and economic milieu of the 18th and 19th centuries was very different from that of the present time. The liberal ideals still prevalent in English and American universities and colleges were established during this period. In the same reference the author points out that the focus of education today is no longer genteel elites; the social mandate is to educate a significant portion of the population, not only for life, but also to make a living.

The liberal/vocational debate gained momentum during the late 1970s in Britain. The impetus came as a result of the British economic crisis. The turning point in Britain is often attributed to Labour Party Prime Minister James Callaghan's Ruskin College speech in 1976 (Kraak 1991:408; Finlay 1998, in Finlay, Niven & Young (eds) 1998:5). During the 1970s and 1980s the language of business and the market gradually permeated education. Market-based reforms were introduced into educational provision. It may be concluded that liberal ideals were under attack in countries such as Britain, the United States and New Zealand, traditionally bastions of liberalism.

Liberal education programmes focus on qualitative issues of a general nature, are not easily measurable in terms of production, but they are of intrinsic value to the whole general education of learners (cf Nasr 1994:2f). Literacy and numeracy are one of the essential functions of all general education

programmes. Hawes and Stephens (1990:1) observed that “nine out of ten of the world’s children attend primary school. For well over half of those it represents all the formal schooling they will receive ... we wish them to become effectively literate and numerate, to acquire the knowledge and skills they need for secondary school and the knowledge and skills to make a living if they don’t get there”. In this respect the primary school grades of general education are of even greater significance to the development of future learning programmes.

The World Bank (1991:30) formulated its policy in support of “strengthening general education at the primary and secondary levels” as being priority for the improvement in the productivity and flexibility of the work force. The Bank stressed the importance of primary education as the foundation upon which further education and training was able to build. Training in specific skills was found to be more effective when trainees had strong literacy, numeracy, and problem-solving skills. Primary and lower secondary education provided the foundation for many traditional crafts and trades.

There appears to be little dispute about the importance of a basic primary education. The liberal issue becomes more problematic when learners enter the secondary school and vocationalisation creates a dual focus. Davies (1992:156) writes of the balance between general academic and vocational education, while Pring (1995:183) describes the divide between education and training as a “dualism”.

Liberal theorists fear that education will move away from its purely academic emphasis towards a vocationally-orientated approach. Davies (1992:162) states that “education is neither the handmaiden of the economic system, nor under its control. The primary concentration within education remains the needs of the learner in the widest social senses”. Davies (1992:163) describes a relevant curriculum as “one, which equips the pupil to achieve to the best of his (*sic.*) ability by being able to adapt to whatever circumstances he (*sic.*) finds himself. The hallmark of successful schooling is, therefore, the creation of portable skills and efficiency in future learning”. The concern of the author is that a learning programme that is relevant only to the world of work

runs the risk of depriving pupils of general education, thereby ultimately denying them their chances of social mobility and personal fulfilment. An education system can never be geared merely to providing labour units for the economy. It must also turn out schooled, educated and informed citizens, (Davies 1992:173-174; Atkinson, Swenson & Reardon 1998:29-31).

The problem with arguments that endeavour to cling to the exclusively academic character of the curriculum is that the unitary nature of general and vocational learning programmes is overlooked. It is in this sense that Pring (1995:183) argues for the abandonment of dualistic thinking in liberal and vocational preparation. For Pring these dualisms exist in concepts such as "education and training", "thinking and doing", "theory and practice", "intrinsically worthwhile and useful". These dualisms he holds "bedevils our deliberations on education" (Pring 1995:183). He argues for the focus to fall on what it means to become fully a person, to respect the learner and the cultural resources upon which that learning must draw. In this sense there appears to be no reason why the liberal should not be conceived as something vocationally useful and why the vocationally useful should not be taught in an educationally liberating way". The socio-economic goals must be complemented by personal goals of human development (cf Nasr 1994:83-88).

Levi (1991, in New Encyclopaedia Britannica 1991:758) refers to John Stuart Mill as the great apostle of political liberalism while Karl Marx represented the radical approach to social theory of 19th century. The liberal and radical ideas of the 19th century continued to dominate social theory in the 20th century (Levi 1991:757). The liberal/vocational philosophical debate becomes a debate between liberalism on the one hand and radicalism on the other (Aronowitz & Giroux 1985:7; 61-63; 134-136).

Marx's social theory is well-known (Giddens 1971:10 – 13; Singer 1980: 45 – 58). The State is a vehicle for the dominant class to reproduce and perpetuate relations of production. The worker is alienated from the enjoyment of the products of his work. Dehumanisation takes place in a selfish, profit-seeking capitalist society. Lenin developed these Marxist ideas in the 20th century (Levi

1991: 756-757). According to Webber (1992:23) liberalism is fundamental to the functioning of democracy and the free market system. Le Roux (1985) demonstrated that liberal components *could* be retained within the vocational curriculum. His study demonstrated clearly that relevance in education within the context of a liberal democratic society was not only possible but of critical importance (Le Roux 1985:25f; 144; 150; 155-156). In what sense then can liberal learning programmes be relevant to the workplace?

Liberal relevance is discerned in the rapidly changing world of international business, technological-driven change requires employee-change (Hersh 1997:30). A narrow vocationalist view of education will not supply employees with the most satisfactory calibre of employee (Jacobs 1998:138). Traditionally, the provision of liberal, or general education, has been the task of institutions of higher education and the traditional secondary schools. There has always been a strong emphasis on the development of personal and inner values (Katz 1995:23; Moulakis 1995:30). The community and social-mindedness of general education graduates (school, college or university) develop from participation in extra-curricular programmes of public forum conferences, performing arts, sporting and cultural events (Romano 1995:18).

The development of skills such as critical thinking / problem solving and adaptability are not only classroom-skills. Strong support exists for their optimum development within the context of a milieu of general academic education. They develop in the liberal environment of full participation in intra-mural and extra-mural programmes of institutions that provide general education learning programmes. The relevance to work of these programmes has been attested repeatedly.

The problems of relevance and the liberal/vocational discourse will probably continue. The South African relevance debate has been particularly complex as a result of Black opposition to liberal ideals in education that were closely associated with the Whites and the Western world. Hence attempts at making the curriculum relevant were also rejected. The influence of radical Marxism in South African educational politics cannot be ignored. The next paragraph

will examine a few theoretical problems of relevance pertaining to the South African situation.

2.8 THE PROBLEM OF RELEVANCE AND THE SOUTH AFRICAN EXPERIENCE

The South African experience in educational provision has been complex. Educational provision, and in particular the issue of relevance, has been rooted in the processes of political and social history (Bellis 1998, in Finlay, Niven, & Young (eds) 1998:156). Education and training in South Africa was subject to dominant political ideology, during the apartheid-era and during the years of British and Dutch rule preceding the 1948 election (National Committee on Further Education (NCFE) 1997:14). The period immediately following the 1994 election was one of intense political, social and economic reconstruction. Educational reconstruction featured prominently during the processes of societal transformation. The issue of relevance was addressed in an socio-economic context. Human resources development featured in the ANC's Reconstruction and Development Programme Africa (ANC 1994: 60).

"A human resources development system in which there is an integrated approach to education and training and which meets the economic and social needs of the country and the development needs of the individual".

(NTB 1994:6)

The National Training Board's *National Training Strategy Initiative* (1994) gave the first indication of how the problem of relevance would be addressed in post-apartheid South Africa. This document identified illiteracy and low-skill development as one of the major obstacles in South African human resources development. Training was cited in the report as being particularly neglected in South Africa, unstructured and under-financed and inadequately linked to education (NTB 1994:1 & 2).

Relevance in South Africa would be *vis-a-vis* the integration of education and training in order to meet the socio-economic needs of the country. The vision would be to

“develop a national training strategy as part of a human resources development system”.

(NTB 1994:6)

Kraak and Hall (1999, in Kraak & Hall (eds) 1999:1) comment that the 1997 - 1998 period in South Africa witnessed a proliferation of policy documents that resulted in the emergence of a distinct policy discourse in FET. The emergence of a new legal framework further stimulated an unprecedented interest in a sector that has been noticeably absent in the past. .

2.9 CONCLUSIONS

2.9.1 The relationship between humans and society

The theoretical discussion indicated that a relationship between human beings and society existed. The role of education was to mediate that relationship in order to achieve pre-determined goals. Broadly speaking these goals included political, economic and socio-cultural objectives. Dual foci for educational relevance were identified, i.e. social and personal relevance. Knowledge of the world is important as well as knowledge that has intrinsic value. The dual foci of educational relevance will be regarded as being foundational to the discourse of this study (cf para 2.2).

2.9.2 Education as an agent of change

Two theories were used to further inform the theoretical discourse of this study on relevance in education. Education as an agent of change was firmly established in the paragraphs on the human capital and the modernisation theories. The human capital theory espoused the view that investment in education was critical for human productivity. The modernisation theory shifted the emphasis from economics to the personal values and characteristics of the individual. Both theories indicated that education was a basic human need,

however, the attainment of qualitative human living was dependent on more than providing skills and jobs. The link between the quality of human life, economic prospects, and education was regarded as an important link. The theories inform this study of the realities of human life. The problems of poverty and hunger in the low-income economies cannot be ignored; neither can the psycho-socio needs of humans across the globe be ignored. There is a need to look much deeper into the theoretical foundations of educational provision. Human beings are more than units of labour. The dual foci approach to relevance in education in this study will ensure that the quality of human life is understood at all levels of human existence (cf para 2.3 & 2.4).

2.9.3 The economic problems

The economic problems of the high and low-income economies are different. They will therefore be treated separately. Attempts in the high-income economies to ensure relevance have been within the context of specific learning programmes as well as national programmes. These initiatives address, *inter alia*, the problems of youth unemployment, the problems associated with school-to-work transition and early school drop-out. In essence the high-income initiatives address the broader problems of the markets. National programmes such as the dual system and the YTS and TVEI programmes addressed the problems of the transition from school-to-work. The question of responsibility for relevance has arisen in recent years; the challenges of enterprise--education partnerships have become a significant factor of relevance in the high-income economies (cf para 2.5).

2.9.4 Economics and education

The national experiences of the high and low-income economies of the world have not been the same. Attempts therefore to transpose Western programmes of relevance into the colonies did not work. The economic profiles of the emerging economies did not match those of the developed north. Solutions to the economic problems of the low-income economies were initially perceived to be in respect of increased investment into vocationally orientated educational programmes. The assumption was made that greater

investment would automatically result in improved productivity. These assumptions were challenged on the basis of, *inter alia*, poor economic management and the problems posed by centrally planned economies. The resultant paradigm shift in funding drew attention to the need to emphasise quality of educational provision at the primary and secondary levels of schooling. Enterprise-based vocational programmes were advocated in preference to school-based programmes. A shift took place from the economics of demand to the economics of supply. It was concluded that the problems of the economy were not the problems of education.

In more recent time the problems of the provision of relevant education in the low-income economies has been revisited. Arguments have focused on the realities of educational provision in the poorer countries of the world. It was argued that the primary schools were not producing the graduates that the policy-makers and planners had anticipated 30 years ago. Global and local circumstances have changed. The Soviet Union has been dismantled and Marxism has retreated. The problems associated with quality education, at the primary and the secondary level of schooling persists. The problems of poor general education and low-skill development are therefore perpetuated (cf para 2.6).

2.9.5 The liberal/vocational debate

A global paradigm shift has taken place in respect of the skills required of a national work-force. There is a need for a more flexible and adaptable work-force, with a strong emphasis on problem-solving and critical thinking skills. We are living in an information-orientated society. In the high-income economies the choice is therefore not between general or vocational education, but general and vocational. The problems of the low-income economies are characterised by the harsh realities of poverty, illiteracy and innumeracy. Recent theorists have questioned the dichotomy between general and vocational in the light of low-income economic realities in very poor countries.

The needs of learners were concluded to be paramount in policy and planning debates, in the widest possible social sense. The theoretical discussion indicated clearly that a basic human needs approach holds merit in respect of all societal needs, and that in high and low-income economies the different socio-economic needs can be addressed in respect of a dual foci to a study of relevant educational provision. It is not possible to measure relevance in education; however, the economic and quality indicators give an indication of the quality of human life in a national context.

The South African situation has been characterised by a particular set of circumstances. The transition to a new South Africa has been completed; a legislative framework has been provided to ensure that a legal environment exists in order to facilitate relevance. The problem exists now in the interpretation and implementation of legislation. The historical legacy of apartheid education continues to pose enormous challenges in South Africa. Using the theoretical insights of this chapter the problem of relevance will be explored in the two comparative chapters, and thereafter applied to the South African and KZN situation in Chapter 5.

2.10 THE ANALYTICAL FORMAT

2.10.1 Analytical format

Comparative data used in the ensuing chapters will be evaluated using a four-fold organisational format:

- historico-legal data;
- socio-economic data
- structure of education data;
- trends, critical issues and reforms (or future developments)

2.10.2 Trends, reforms and critical issues: definitions

2.10.2.1 Trends

The Concise Oxford Dictionary defines a trend as an event or an opinion that has a specified general direction. The same dictionary adds that a trend is a “bend or turn away in [a] specified direction” The word trend will be used in this sense (cf Oxford 1968:1386).

2.10.2.2 Critical issues

Critical issues will be viewed as those issues that have been selected as more imminently directing the future of educational provision, and the bearing that these issues may have on future reform. To distinguish the “critical issues” from the “trends” a bit more precisely, the Concise Oxford Dictionary defines “critical” as “involving risk or suspense ... marking transition from one state etc. to another” (cf Oxford 1968:290). It is in this almost scientific sense that the term will be used, with the emphasis on the imminence of the action.

2.10.2.3 Reforms (or future developments)

The word reform will follow the Concise Oxford Dictionary definition, viz to “become better by [the] removal or abandonment of faults, or errors” (cf Oxford 1968:1041), particularly in the parliamentary sense where reform pertains to either the introduction, abolition, amendment or radical change of legislation. This also applies to a one-party system of government. Reform does not mean innovation; it will refer in this study to structural changes in a society, particularly as a result of legislative changes that have precipitated significant changes in educational provision. Future developments will therefore be used as an alternative to the term reforms in national situations where major reforms are either underway or imminent.

CHAPTER 3: THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN HIGH-INCOME ECONOMIES

3.1 GENERAL INTRODUCTION

Chapter Three will address the first aim of the study:

- to make a thorough study of educational provision in three high-income economies of the world;
- to focus on current trends, critical issues and future developments or reforms in each system of education;
- to evaluate the comparative country data in respect of the relevance of the selected systems of education to the socio-economic needs of each country.

The theoretical insights gained from Chapter 2 will be further investigated in this chapter. The analytical format that emerged in the preceding chapter will be applied to this chapter. The historico-legal, socio-economic and structure of education *formata* will facilitate the emergent factual data. The critical analyses will on the other hand be facilitated by the format: critical issues, trends and reforms.

Three international systems of education were selected from countries in the high-income economic category. The German model was selected as representative of an established European approach to educational provision. The Japanese model was selected as representative of an educational system in the context of a more recent high-income economy. The Japanese study provided a contrast to the German approach to relevance in education. The economies of both countries made a remarkable recovery after World War Two, and the respect earned by these two countries in the international arena make them worthy of inclusion in this study. The Scottish system of education was examined as a unique system of education. The Scottish system is distinct from the English system, it therefore provided the study with the data from the perspective of a young economy that has emerged within the context of a high-income European economy.

3.2 THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN GERMANY

3.2.1 Historico-legal data

3.2.1.1. Introduction

Relevance in Germany was developed over a period of 700 years, and has become entrenched in German society as an integral part of German culture.

3.2.1.2 Historical origins

This historical overview will examine the historical origins of the German emphasis on vocationally orientated education, to be followed by an overview of the current political and legal framework in respect of educational provision.

Deissinger (1994:22) divides the history of vocational training in Germany into five phases:

- the apprenticeship system of the guilds that emerged during the Middle Ages;
- industrialisation and the liberalisation of legislation up to 1869;
- 1897, and the revival of the apprenticeship system;
- the emergence of formalised vocational training in industry during the 1920s and 1930s;
- the passing of the Vocational Training Act in 1969.

The German vocational training system can be traced to the Middle Ages when the guilds played an active role in training and production. The learning process was thus completely integrated into the production process (Brand 1998, in Finlay, Niven & Young (eds) 1998:106). The emergence of the state as a significant role-player eroded the dominant role of the guilds in training. The ultimate responsibility for vocational education and training, and skills development was taken over by the German state (Deissinger 1996:317-332;

Brand 1998:106). The legal tradition is based on the historical developments, which took place in German society over several centuries.

3.2.1.3 The legal framework

(a) Developments during the nineteenth century

Various nineteenth century acts provided the legal framework for developments during the twentieth century. The *Gewerbeordnung* (Trade Act) of 1869 was initially applicable to the North German Federation. It provided a definition of apprenticeship in respect of a contract between the *Meister* and the *Lehrling*. The Act deprived the guilds of their role as agents of vocational training; however, it was the first step towards a legal framework for institutionalised apprenticeship training in German society (Brand 1998:105). Subsequent legislation in 1881 and 1884 provided further legal support for vocational training as a central feature of German society. The *Mittelstandbewegung*, a small business movement, put pressure on the state for political recognition of small-scale entrepreneurs in handicrafts, commerce, retailing and transportation. According to Winkler (1976:2) the 1881 Act gave the craftsmen legal status for their guilds, which included certain privileges in respect of apprenticeship training. The 1884 Act however, placed certain restrictions on the guilds in respect of acquiring apprentices. These legal manoeuvrings were in fact the political drive of the *Keiserreich* to bind together the many small interest groups, such as the *Mittelstand*, into a national system of vocational training (Deissinger 1994:23; 1996:319).

Winkler (1976:2) described the *Handwerkerschutzgesetz* as “the most important imperial handicraft law”. The act made provision for craft chambers as institutions of public law and for a compulsory guild (*fakultative Zwangsinnung*). Deissinger (1994:24) holds that this act turned the historical clock back to the Middle Ages and the days of the “good old workshop”. The craftsman's profession was protected from the rampant destruction of modern industrial life. However, Brand (1998:105) holds that while pre-industrial crafts and trades were in the process of decline, the traditional concept of craftsmanship and training for quality lived on. The re-introduction of a *Befähigungsnachweise* (certificate of achievement of a skill) was to become a

legal requirement before any handicraft trade could be conducted and apprentices trained. The chambers and guilds became more actively involved in training, which included the examination of apprentices and masters. Regional craft chambers and local guilds were installed as major agents of training and German economic society was developed on the basis of skilled craftsmen. Indentures and a three-year training period became general practice in the craft sector (Deissinger 1994:24; Deissinger 1996:319). The 1897 Act further developed the legal framework for the provision of vocational training and the dual system in Germany. The contribution of Kerchensteiner to the German model requires brief comment.

During the late nineteenth century the part-time continuation school emerged in Germany as a second learning venue of the “dual system”. Raggatt (1988:174) holds that it was as a result of persistent socio-economic problems in Germany that the part-time vocational school emerged as a means whereby skilled workers could be trained. Widespread concern about the poor quality of German products prompted a national debate on this German problem. Kerschensteiner, a school superintendent, won the 1901 Erfurt Academy of Science Prize Essay Award for his essay on citizenship training. In his essay he centralised the role of vocational education based on his firm conviction that “education for the ordinary man and woman must be woven into the practical work of life” (Higginson 1990:248). The 1897 Act may be viewed as the key historical event in the development of the dual system in respect of the in-company training component, and the Erfurt Academy Award may be further viewed as the historical event which ultimately resulted in the formal acceptance of the part-time vocational school as an integral part of the dual system (Deissinger 1994:26; Brand 1998:106).

Simons (1966:48-52) states that Kerchensteiner’s continuing school, (which he called *Berufsschule*), linked vocational training to the school system by no longer denying the educative value of practical work. The function of the *Berufsschule* was to complement workshop training. According to Deissinger (1996:320) compulsory attendance at the *Berufsschule*, for 14-year-olds, did not materialise until 1938. The framework for the dual system had, however, become established during the years of Kerchensteiner’s reforms.

The focus on human development *vis-à-vis* the occupational curriculum ensured that vocational education in Germany was more than merely training for a trade, its interpretation included the full development of individuals. Vocationalisation in Germany came to mean education in citizenship, and socialisation into work and the economic life of society, (Raggatt 1988:174).

(b) Developments during the Twentieth Century

After the First World War industrial employers' started to work out *Berufsbilder* (i.e. occupational profiles). These were the precursors to the present day training courses. From the 1930s the Chambers of Industry and Commerce became more active in setting and supervising examinations for skilled workers. Previously these examinations had been the exclusive right of the handicraft guilds and the chambers. All industrial employments and apprenticeships had to be brought into a system. A uniform system based on uniform skill profiles evolved during this period. A clear distinction between skilled, semi-skilled and unskilled occupations would determine the framework for apprenticeships for more than 30 years. The relationship between state, chambers and guilds had however, to be defined more precisely in the provision of education and training in Germany (Deissinger 1994:24 & 25).

Attempts to place training under the auspices of the state during the 1920s and 1940s did not materialise. The position of the chambers and guilds in respect of skills development had strengthened quite considerably during the first half of the twentieth century. The independence enjoyed by firms and companies in the process of training was at stake when at different stages, the state, opposition parties, and trade unions commenced, with legislative processes to off-set this independence with a legal framework to permit state scrutiny of company training. The long process that ensued culminated in the Vocational Training Act of 1969 (*Berufsbildungsgesetz*, 1969), which was not a new training system but an act which consolidated much previous practice (Raggatt 1988:175).

The 1969 Act is a federal law and governs only training in the workplace. It does not affect the provision of education in the vocational schools. The act is therefore a labour law and as such its central focus is the indenture between the apprentice and the training company. The second venue (i.e. the school or college) is referred to in the act in respect of part-time vocational education based on the relationship between the *Land* and *Bund* as defined in the *Grundgesetz* (Basic Law) of 1949. The act covers training in the private as well as public sector and makes provision for a training contract which is registered with a regional chamber (cf Brand 1998:108).

The qualifications of trainers are regulated and controlled by the act as well as the process of training, content, skill and evaluation. Standards of attainment are controlled by ordinance.

The *Berufsbildungsgesetz* of 1969 brought about some major changes in the German system of education and training:

“For the first time, it regulated in a quite consistent way, the framework of vocational training for the vast majority of occupations ... today ... the act serves as a constitution for vocational training by providing the framework for more concrete regulations concerning the organisation of vocational training in businesses ... most of the training takes place within a business. Legislation did not discontinue the tradition of apprenticeship but left businesses with a strong role, especially on the operational level, and strengthened the position of trade unions, albeit under a more detailed framework of public control. For training in business, training-ordinances (*Ausbildungsordnung*) provide binding guidelines; on the basis of the training-ordinances, frame curricula are set up for vocational schools”.

(Brand 1998:107)

The historico-legal framework for German training has been piloted *vis-à-vis* labour legislation, however, the basic structure of the German educational system has been designed to match or complement the training needs of

German society in respect of the provision of a minimum of 9 years full-time compulsory general education.

(c) Conclusion

Historically, the German system has its origins in the guilds of the Middle Ages. A long tradition of training and pride in qualitative craft and handwork exists. This tradition evolved into a fairly complex system during the nineteenth century. Legislation regulated the roles of the various stakeholders. The emergent legislation provided the framework for the dual (or two venue) system of education and training, i.e. work-place and college. The “dual system” is based on labour legislation; the interaction between labour and education in the training process is carefully defined in the Basic Law of 1949. The dual system is not the only vocational training system in Germany, it is however, substantially bigger than any of the other existing systems almost 70% of German youth passing through the system (Brand 1998:105). Full-time vocational training institutions exist. The dual system and the German system of education and training have attracted much interest from other countries. Several official visits from South Africa testify to the relevance which officials from South African education departments perceived in the system for the local South African situation, e.g. Biebuyck 1966 [Natal]; Bradley 1969 [Natal]; Uken 1972 [Natal]; Uken 1980 [Natal]; Reusch 1989 [Natal]; Van Niekerk 1981 [Transvaal].

3.2.1.4 Post-war politico-legal framework

(a) Introduction

Germany was divided into three Western zones and a Soviet controlled Eastern zone at the end of the Second World War. The Western zones were constituted as the Federal Republic of Germany in May 1949, with the promulgation of the *Grundgesetz* (Basic Law) of May 1949. The German Democratic Republic (GDR) was established in October 1949. With the assistance of the Soviet military the GDR distanced itself from the Federal Republic for forty years. In March 1990 with the collapse of the Soviet Union

and Communism in Eastern Europe the GDR was united with the Federal Republic and the first free elections were held in a united Germany in March of 1990. The *Einigungsvertrag* (Unification Treaty) with the former GDR, concluded in August 1990 stated that the Basic Law was binding on the whole German nation. This meant that a comparable and common system of education would be implemented in the whole of Germany (*Kultusministerkonferenz* (KMK) 1997:17-18).

(b) Federalism

Germany is a federal republic. Since 1990 Germany has been made up of 16 *Länder*. Unless the exception is stipulated the Basic Law stipulates that the responsibility for the provision of education is a matter for the individual *Länder*. The *Kultusministerkonferenz* (Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder*) directs co-operation between the *Länder* in the development of German education in the Federal Republic of Germany. The federal principle is very important in German history, the Standing Conference has, however, piloted important developments in the standardisation of education between the *Länder* since its formation in 1948 (KMK 1997:23 & 35).

(c) Federal and *Länder* responsibilities

□ Federal Government

The Federal Ministry of Education, Science, Research and Technology is responsible for the provision of education within the federal government's defined area of supervision. Consultations take place between the Federal Government and the *Länder* in the *Bundesrat*. The Federal Institute for Vocational Training (*Bundesinstitut für Berufsbildung* (BIBB)) was established under the Vocational Training Promotion Act of 1982. This research institute comes under the control of the Federal ministry. It is an important instrument of co-operation between employers, trade unions, the Federation and the *Länder* at the national level. The functions of the BIBB will be discussed in more detail in a subsequent paragraph. The interests of the stakeholders are

represented at national level in more than one representative forum. The principle of consensus is applied in the process of setting policy and making decisions (KMK 1997:47).

□ The *Länder*

The Basic Law determines that the responsibility for the provision of education rests with individual *Länder*. The individual *Länder* may pass legislation, this applies to the school system, higher education and the provision of adult and continuing education. Generally schools are the direct responsibility of local authorities while higher education is directly under the control of the *Länder*. Reference will be made to the administration and management of vocational education at federal and regional level in a subsequent paragraph (KMK 1997:48).

3.2.1.5 *Bundesinstitut für Berufsbildung (BIBB)*

The Institute is usually included as one of the social partners in the German system of vocational education and training. Established in 1970 as a research institute the responsibilities of BIBB were considerably expanded in 1976. According to Raggatt (1988:172) the Institute is primarily responsible for the development of occupational learning programmes. Inskip and Spargo (1997:7) add that BIBB “constitutes a valuable instrument of co-operation between employers, trade unions, the federal government and the provinces”. The key to BIBB’s role in the dual system lies in the fact that this Institute is non-partisan and it is directly responsible to the federal government. Its research role places BIBB in an ideal position to assume responsibility for the training regulations of the 429 skilled occupations in Germany. Apart from vocational research BIBB evaluates company-based training programmes, and prepares the various stake-holders for new training regulations. The relevant Ministries will ultimately publish their own regulations, however, BIBB’s role in “establishing the objectives and content of vocational education and training and adapting vocational education and training to technical, economic and social development ... makes it the central agency in the development of the occupational learning programmes” Raggatt (1988:173). Inskip and Spargo

(1997:7) make a similar point in respect of the unique contribution of BIBB in the German vocational system when they point out that BIBB is intended to act as a convenor of independent vocational education and training expertise and sound scholarship. The authors also point to the importance of retaining the trust of all the parties in a system where a conflict of objectives may be inevitable.

The relevance of BIBB is evidenced by the need for learning programmes, that are constantly being up-dated as a result of the rapid technological and economic change. Changes in the work-place place much pressure on the occupational learning programmes, not only in respect of vocational skills and practices, but also in terms of the level of workers' general education (Brand 1998:111-113; KMK 1998:47 & 48).

3.2.1.6 Conclusion

Relevance in educational provision in Germany is deeply rooted in the cultural traditions of German history. These traditions have been preserved and transmitted *vis-à-vis* the political and legal framework of the modern state. The apprenticeship system is the major training system of Germany. The social partners interact within the established politico-legal framework. The relevance of BIBB in monitoring, regulating and interacting with stakeholder interests in a complex system of VET is attested and concluded from the above. The provision of basic education remains responsive to a system designed to meet the basic needs of all citizens in respect of education and training.

3.2.2 Socio-economic data

3.2.2.1 Introduction

Socio-economic data for Germany will be examined in respect of the population statistics, followed by a sampling of economic indicators.

3.2.2.2 Germany, a high-income economy

The World Bank ranked Germany as one of the world's richest and most highly developed nations in 1995. The Bank ranked Germany 129 out of 133 countries in the World Development Report in 1995, with a GNP of \$27 510 per capita in 1995 (cf World Bank 1997:215).

3.2.2.3 Population

The population movements that took place during and after the Second World War have shaped the structure of the present German population.

“By the end of 1950, around 12 million German exiles and refugees from the former German eastern provinces and Eastern Europe had moved into the Federal Republic of Germany and the GDR ...[between] 1950 and 1995, around 3,5 million repatriates arrived ... by far the majority came from Eastern Europe ... by the time the Berlin Wall was built in 1961 ... 2.7 million refugees and migrants had come from over there; between 1961 and 1988 ... a further 616 000 arrived and in 1991 another 390 000 people left the GDR” (KMK 1997:27 & 28).

Massive population movements of this kind cannot be overlooked as being a major contributing factor to the specific character of an education system. Fisher (1993:95) states that the specificity of the German system to the particular social and economic context of post-war Germany is often overlooked.

3.2.2.4 Population density

According to KMK (1997:28) the united Germany covers an area of 357 000 km², and in 1995 it recorded a population of 81.8 million inhabitants. This works out to be 229 persons per km². Germany is therefore one of the most densely populated countries in Europe (cf World Bank 1997:214).

3.2.2.5 Gross National Product

The KMK authors (1997:30) state that Germany recorded a DM 3 445.6 billion GNP in 1995. The GNP per capita income was DM 36 900, i.e. \$27 510 for 1995. This places Germany among the top six high-income countries of the world (World Bank 1997:214). The lower income from the former Eastern German *Länder* did not have a negative influence on Germany's international ranking (Boehm 1999b:5 – 6).

Brand (1998:104 & 105) is not so optimistic. He pointed out that growth in GDP plummeted from 1992 to 1997. He cites a growth rate of 2.7 per cent for 1998.

Table 3.1

German GDP 1992 – 1997

Year	1992	1993	1994	1995	1996	1997
Growth GDP (%)	2	-1,2	2,7	1,8	1,4	2,5

(Source: Brand 1998: 104 – 105)

Despite the gloomy outlook Brand (1998:104) holds that the German system of VET keeps to its traditional objectives:

- to provide a workforce with long-term employable skills; and
- to help young people develop realistic plans for their lives.

3.2.2.6 Unemployment

In September 1996 3.85 million people were unemployed in Germany, 2.75 million in the former Federal Republic (10.0%) and 1.1 million in the former GDR (15.7%). Persons under the age of 20 years without work in September 1996 were recorded as being 120 411 (KMK 1997:30-31).

3.2.2.7 Conclusion

The high-income classification of the German economy has resulted in unique problems for the German people. The unique system of German VET appears to have aided Germany's post-war economic recovery, and hence relevance is concluded. Relevance can be further concluded in the German GDP and unemployment statistics. The density of the German population must be considered a significant factor in the provision of education in Germany, this will be considered in the following paragraph. The German data has indicated that many tensions exist in the German system of relevant education. The structure of education data will aid the reader in understanding the nature of these tensions.

3.2.3 Structure of education data

3.2.3.1 Introduction

Compulsory full-time education in Germany has always primarily been general education. This continues to be the case up to the age of 15 or 16 years, the earliest possible age for learners to enter vocational education in the upper secondary phase. Compulsory part-time vocational education is a further three years.

The overview of the basic structure of German education that follows is presented in two sections:

- full-time education; and
- part-time education and training.

3.2.3.2 Full-time education

(a) Pre-primary education

In most *Länder* the responsibility for pre-school education lies with the social ministries. From three to six years young children can attend *Kindergärten*.

Churches and welfare associations mainly run these schools. Parents are required to contribute financially despite the allocation of major public subsidies and other forms of funding (Eurydice Website (Socrates Programme) 1999:1).

(b) *Grundschule* (primary education)

The *Grundgesetz* (Basic Law) and the various acts of the individual *Länder* provide the legal framework for all primary education. Primary schools are essentially public-sector schools. In 1995 only 1.47% (i.e. 263 schools) were private institutions (KMK 1998:119).

The *Grundschulen* is the first compulsory school to be attended by all children. Most primary schools include Grades 1 – 4, however, exceptions exist in Berlin and Brandenburg where the primary school years include Grades 5 and 8 (6 – 10 years or 6 – 12 years, respectively). There are different regulations in the individual *Länder* for the transition from primary school to one of secondary schools. Parents, on the basis of an assessment made by the primary school teachers, decide on the type of lower secondary school to be attended. Learners may be required to fulfil certain performance criteria and/or a decision by the education authority will determine placement in an appropriate lower secondary school (Uken 1972:22; Van Niekerk 1981:68; Eurydice Website (Socrates Programme) 1999:2).

(c) Lower Secondary Education

- Introduction

The lower secondary curriculum is designed to prepare pupils for the upper secondary school, that is a pre-requisite for vocational or higher education. The lower secondary curriculum is mainly of a general nature, while more vocational subjects are included in the upper secondary curriculum, with the exception of the *Gymnasien*. These schools are more academic in character. Personal interviews with Professor Dr Hans Bühler, University of CdW Oldenburg (27 February 1999), and Professor Ulrich Boehm, University of Bremen (9 April 1999) have influenced the contents of the structure of

education in Germany from this point, as well as the insights into trends and critical issues in the German system of education.

□ *Hauptschule*

The *Hauptschule* provide a basic general education leading up to the end of compulsory schooling. This is usually from Grade 5 – 9. In some *Länder* Grade 10 is included in the *Hauptschule*. Subjects include German, a foreign language, mathematics, physics/chemistry, biology, geography, history, *Arbeitslehre*, social studies, music, art, sport, religious education. Domestic science and economics feature in the curriculum of some *Länder* at the conclusion of five years a *Hauptschulabschluß* is awarded and further education options include vocational training in the dual system or admission to a *Berufsfachschule* (Van Niekerk 1981:68-72; KMK 1998:134; Eurydice Website 2000:1 & 2).

□ *Realschule*

A more extensive general education is provided at the *Realschulen*. Normally a *Realschule* is for learners from Grade 5 to Grade 10. Provision is also made for learners who may wish to transfer from the *Hauptschule*. The curriculum is basically the same as for the *Hauptschulen*, however, learners are required to take 3 – 6 hours a week of compulsory electives in addition to the compulsory core in their Grade 7 or 8 year. A *Realschulabschluß* leaving certificate qualifies a pupil to enter an institution that provides either vocational or higher education include the *Berufsfachschulen* or *Fachoberschulen* (Van Niekerk 1981:68-72; KMK 1998:134 & 135; Eurydice Website 2000:1 & 2).

□ *Gymnasium*

The *Gymnasien* (i.e. a German-styled *grammar school*, cf Sasse, Horne & Dixon 1966:99) offer an advanced general secondary education for the more able learners. Generally *Gymnasien* admit learners from Grades 5 to 13. Some *Gymnasien* will admit learners on transfer from *Hauptschulen* and *Realschulen*, after the learner has completed Grade 7. The general education subjects taught at this level of a *Gymnasium* are the same as for the

Hauptschule. The subjects are studied in greater depth. The general objective of the *Gymnasien* is to prepare learners for admission to higher education. On completion of Grade 10 learners will proceed to the *Gymnasiale Oberstufe* on condition that their academic progress has been satisfactory (Van Niekerk 1981:68-72; KMK 1998:135; Eurydice Website 2000:1 & 2).

□ *Gesamtschule*

This type of school combines the three school types described above into one unit. Biebuyck (1966:1) studied the West German educational system on a visit in 1966. He commented in his report on the German system of streaming that the “comprehensive school is almost unknown”. Reusch (1989:11) holds that support for the *Gesamtschule* is determined by the political allegiance of individual *Länder*. Van Niekerk (1981:71 & 72) describes these experimental comprehensive schools as follows:

- *Gesamtschule* met geharmoniseerde tradisionele vorms van onderwys; die drie soorte tradisionele skole word behou, maar nou is almal in een gebou gehuisves;
- die geïntegreerde *Gesamtschule*; al die leerlinge word gesamentlik onderrig, die verskille tussen die drie soorte skole is nie aanwesig nie; vakgeoriënteerde kursusse word op verskillende vlakke en in groepe aangebied.

At the conclusion of five or six years learners are awarded the same certificates as the other types of schools. Some learners may proceed to an upper secondary *Gymnasium*, and further educational and career options remain the same as for the traditional schools (Eurydice Website 2000:1 & 2).

□ Discussion

Fisher (1993:77) holds that the practice of early selection in German educational provision has been perceived to be relevant to the long-term occupational goals of German society. Uken (1980:19) states that “the purpose of the curriculum is intimately bound up with the teaching aims and

objects of certification". The lower secondary school prepares learners for the more specific goals of the upper secondary school. Bradley (1969:12) states that "it appears that only 20% of all pupils go to the *Gymnasium* or *Realschule*, which are considered basic education for higher education, as at university. 8% of the pupils go to *Hauptschule* and others, where they get as good a general formative education as possible, leave school at 15 and go to apprenticeships or trades and 're-enter' the vocational training schools".

Education at the lower secondary level is 100% general education (Boehm 1999). No working experience is provided at this level, the basic belief being that general schooling should finish first before vocational education commences. The Germans do not mix the two, the difference lies in the level of general education provided. Boehm, in the same interview, commented that even though the *Gesamtschule* concept is 25 years old, it has to compete with the *Gymnasien*. Parents are keen on the *Gymnasien*, it is not as bureaucratised and prepares the learners for higher-education. Boehm (1999) echoed the same thoughts as Bühler (1999) that the demands of the labour market have changed, and that other competencies are needed that cannot be developed in a practical situation. Longer periods in the classroom are required where organisational and analytical skills can be developed. More abstract thinking is required. The lower secondary level in the German system is destined to remain 100% general education, with a trend towards further general education at the level of upper secondary *Gymnasien*, or *Gesamtschulen*.

(d) Upper Secondary Education

□ Introduction

Education for the 16 – 19-year old age group at this level include full-time and part-time schools that provide general or vocational education.

□ *Gymnasiale Oberstufe*

The upper secondary level of the *Gymnasium* builds on the foundation of the lower secondary level; senior pupils are permitted to specialise, and have a wider range of general education subjects to choose from. They are required to choose their subjects and subject combinations from prescribed areas:

- languages, literature and arts;
- social sciences; and
- mathematics, natural sciences and technology.

(KMK 1998:148; Eurydice Website (Socrates Programme) 1999:3))

The duration of the *Gymnasiale Oberstufe* is three years. On completion, successful learners are awarded the *Zeugnis der Allgemeine Hochschulreife* (i.e. the *Abiturprüfung*), which secures access to all institutions of higher education. Van Niekerk (1981:69) draws attention to two types of *Hochschulenreife*, i.e. the general certificate that secures access to any higher education faculty, and the *Fachsgebundene Hochschulreife* that permits further study only in certain subjects, or groups of subjects. The term generally used for the final school-leaving examination is however, “the Abitur”; this examination is administered at the conclusion of the 13th year and is taken in four subjects. Two of those subjects are “intensified courses”. These subjects are examined in writing and orally, while the fourth subject is examined orally only (Eurydice (Socrates Programme) 1999:3; Eurydice Website 2000:1 & 2).

Reusch (1989:14) states that the “intensified courses” differ from the basic courses with regard to:

- the number of course hours per week;
- the complexity of the subject matter;
- the degree of subtlety and abstraction in the material and concepts;
- the requirement that students be able to work independently.

- *Fachoberschule*

Learners are admitted in Grades 11 and 12 from the *Realschulen*, and learning takes place in general and vocational subjects.

Compulsory general education subjects are supplemented by specialised: theoretical and practical learning. Skills development are offered in some of the following occupational fields:

- technology;
- business and administration;
- nutrition and domestic science;
- agriculture;
- social work; and
- design.

Practical work takes place during the first year, on four days a week. At least eight periods per week during the first year must be spent in class (cf Van Niekerk 1981:75). The *Fachoberschule* is a technical secondary school, which operates on a part-time (1st year) and a full-time (2nd year) basis. After two years the *Fachhochschulreife* (or a *Fachabitur*) is awarded which secures access to *Fachhochschulen*, and possibly other institutions of higher education (Reusch 1989:16; KMK 1998:150; Eurydice Website 2000:1 & 2).

- *Berufsfachschule*

Berufsfachschulen are full-time vocational schools that prepare learners for an occupation (cf Boehm 1999b:3-4). Admission is from the *Hauptschulen* and *Realschulen*. A wide range of learning subjects are offered:

- business occupations;
- occupations that require foreign languages;
- crafts industry occupations;
- home-economics occupations;
- social-work orientated occupations; and

- health sector occupations.

General education learning programmes are also provided. *Berufsfachschulen* training varies from one to three years. The school-leaving certificates awarded will depend on the duration of training received. A basic vocational training certificate is awarded after one year; after two years a state-recognised certificate as a technical assistant is awarded. Successful learners may be admitted to a higher vocational school or a shortened apprenticeship, or gain access to employment (Reusch 1989:16; KMK 1998:150; Eurydice Website 2000:1 & 2).

□ Discussion

Upper-secondary education in Germany prepares learners for higher education and for the work-place. However, neat and water-tight compartmentalisation of education does not take place in education. Boehm (1999) stated that a trend exists for *Gymnasium* graduates to enter the dual system, and thereafter to proceed to university. Apprenticeships are difficult to acquire in Germany without an *Abitur*, hence the trend noted by Uken (1980:18 & 19) in the *Gymnasiale Oberstufe* to include vocational subjects into the learning programmes. The number of *Abitur* graduates has increased. Boehm (1999) comments on the need to restrict admissions to the *Gymnasien*, as there are no longer enough study places for the graduates.

A paradox exists. As indicated above, the demands of modern occupations is for more general education. Learners in Germany are required to attend school for 13 years to obtain a general higher education entrance certificate. Some exceptions will be made for a 12 year school-leaving certificate, but in general, the 13th year is preferred as candidates are “so carefully selected that the failure rate is very low” (Biebuyck 1966:1). The same author observed that the 13th year had a marked effect on the maturity of the university candidates. The problem appears to be a modern labour market demanding more general education, but a highly selective system that screens candidates for higher education very carefully.

3.2.3.3 Part-time education

(a) Introduction

The dual system refers to the German system of vocational education and training that makes provision for two learning venues, i.e. the workplace and the *Berufsschule* (vocational school) (Brand 1998:108). The two learning venues work together as equal partners to prepare pupils to make the transition from school to work by providing occupationally relevant training. The dual system is not the only form of vocational education and training in Germany, it is, however, the core of the major vehicle for channelling young school leavers into the workplace (Boehm 1999a:1). The Table 3.2 below illustrates this fact:

Table 3.2
Pupils at vocational schools as per 1995

Type of school	
<i>Berufsschulen</i> (part-time)	1 625 038
of which: <i>Berufsschulen</i> in dual system	1 619 642
of which: <i>Berufsvorbereitungsjahr</i>	5 396
<i>Berufsschulen</i> (full-time)	88 040
of which: <i>Berufsvorbereitungsjahr</i>	50 116
of which: <i>Berufsgrundbildungsjahr</i>	37 924
<i>Berufsfachschulen</i>	311 189
<i>Fachoberschulen</i>	78 376
<i>Fachgymnasien</i>	87 395
<i>Fachschulen</i>	152 631
Other	97 427
Total	2 440 096

(Source: KMK 1998:166)

The *Berufsschulen* trains the majority of pupils in Germany for their future careers, 66% of learners who have elected a compulsory vocational learning programme are trained in the dual system. The dual system is a complex

system; the success of the system depends on the capacity of the system to ensure that the interests of all the stakeholders are satisfied.

(b) The social partners

The term “social partners” is used to describe the stakeholders in the provision of German vocational education (cf Raggatt 1988:176). Brand (1998:111) defines four “benches” or constituencies of stakeholders that are represented in equal numbers in the German system of vocational education and training (VET):

- employers’ federations;
- trade unions;
- the Federal Government;
- the governments of the sixteen *Länder*.

Employers and trade unions work together at the local level, while the chambers and guilds operate at a regional level. The key role of the *meister*, or master craftsman is included as a significant role-player in the system (Cantor 1991:177). Vocational education is the responsibility of the Federal Ministry of Education and Science, however, labour legislation since the Middle Ages has provided Germany with an established tradition for training and a strong labour legal framework to complement the policy formulation functions of the Education Ministry. The Federal Institute for Vocational Education and Training (BIBB) is closely associated with the social partners. The Institute is responsible for the learning programme development, and works with all the stakeholders of federal level. Inskip and Spargo (1997:6) include in their list of social partners the SMMEs (small, medium and micro enterprises) noting that apprenticeships are predominantly in SMMEs rather than in large enterprises.

(c) *Berufsschule*

Part-time attendance at a *Berufsschule* is compulsory for all apprentices. *Berufsschulen* have been organised into occupational areas. They provide learning and training in general as well as vocational subjects, and aim “to provide a broadly based vocational training and impart skills and knowledge

necessary to practise a skilled occupation" (KMK 1998:152). Boehm (1996:59) adds that *Berufsschulen* exist for unskilled workers as well as unemployed youths under the age of 18.

The duration of *Berufsschulen* training is usually three years; trainees attend a *Berufsschule* for up to two days a week (Boehm 1999b:3). Other models also exist, e.g. block release (five or six weeks at a time) or one year full-time, i.e. the *Berufsgrundbildungsjahr*. A degree of flexibility exists in this area, the aim being always to ensure the best possible attendance by the trainees. The one-year full-time option would constitute the first year of training. The training companies assume all costs, including a training allowance to be paid to the trainee. The allowance is in accordance with agreements reached by collective bargaining in the applicable trade sectors (KMK 1998:152).

The Chambers of Commerce examines learners for on-the-job training and certificates of proficiency are awarded, e.g. *Facharbeiterbrief*, *Gesellenbrief*, or the *Gehilfenbrief*. The final examination is important in order to ensure national standardising wages and to provide for access to further training in the future (cf Eurydice (Socrates Programme) 2000:1 & 2).

Training in respect of skills and content to be learnt at the *Berufsschulen* is set out in *Ausbildungsordnung* (training ordinances). The training companies have specified curriculum details as set out in a *Rahmonlehrplan* (i.e. frame-work curriculum). This curriculum covers the requirements of the various occupations. Instruction is received in one of about 460 legally recognised occupations. In the context of the dual system of vocational education the *Berufsschule* is an autonomous place of learning and working together on an equal footing with the companies participating in vocational training (KMK 1998:153).

(d) The *Berufsgrundbildungsjahr*

Other models of providing training in the dual system include the *Berufsgrundbildungsjahr* that is a one-year basic vocational course. The course provides general education and skills required in a variety of

occupational fields, as well as theoretical and practical education in one particular career. The *Berufsgrundbildungsjahr* may be taken in a full-time basis, or alternatively by means of a co-operative arrangement between a company and the school. Successful completion of the basic vocational training year may be accredited to the candidate as the first year in formal training for his/her chosen career (KMK 1998:153).

(e) Discussion

Vocational Education in Germany is compulsory for learners who have not completed their formal education by the age of 18 years (Uken 1972:25). The part-time *Berufsschulen* becomes a final and crucial educational institution for the majority of young people in Germany. The *Berufsschulen* cover all aspects of business and industry. New and updated learning programmes are constantly being designed and incorporated into the existing system to remain relevant to the changes taking place in the labour market. The teachers are recruited from industry. They receive a basic teachers' qualification at a "pedagogique" (Bradley 1969:19). The relevance of recruitment from industry holds much merit according to this author (cf Van Niekerk 1981:78).

Two further observations about German VET must be made, or stressed. Firstly, the critical role of vocational guidance in the German educational system is to be noted. Bradley (1969:19) comments on the "experts" in the Department of Labour who provide counselling during the final year of school. Learners who were incorrectly placed have to be changed. Other avenues of education are considered. Secondly, the observation has been made more than once that VET in Germany is very complex. More than one option is available for learners, and there are many stakeholders in the system. The legal framework regulates the system, and in particular, the apprentice contract determines the conditions of the training (Van Niekerk 1981:77). The role of a national institute such as BIBB becomes essential in a society where relevance is achieved by means of a tightly regulated system of vocational education and training.

3.2.3.4 Higher education

(a) Introduction

The legal framework for higher education in Germany is the *Hochschulrahmengesetz* (Framework Act for Higher Education of 1976). Laws governing the provision of higher education exist in the individual *Länder*.

(b) Higher Education Structure

There are 326 institutions of higher education in Germany. The structures include:

- *Universitäten*
- *Technische Hochschulen; Technische Universitäten; Universitäten-Gesamthochschulen; Pädagogische Hochschulen*
- *Kunsthochschulen; Musikhochschulen*
- *Fachhochschulen; Verwaltungsfachhochschulen*

Traditional universities exist in Germany as well as technical universities. Comprehensive universities exist in some *Länder*. Institutions that offer a limited range of courses are described as *Pädagogische Hochschulen*, the theological colleges and colleges of education have been incorporated into these institutions, or into universities. The *Fachhochschulen* were introduced in 1970 and provide higher education qualifications in vocationally orientated fields that require knowledge and skills. In Germany there are several ways of obtaining vocational qualifications, however, the *Fachhochschulen* provides a vocational qualification at a higher education level. Applicants will undergo certain admission procedures (e.g. an aptitude test, and/or an interview); previous vocational qualifications and experience are taken into account. *Fachhochschulen* restrict the number of students admitted because of the large number of applicants and limited capacity of the courses. The design of *Fachhochschulen* courses is orientated towards the practical needs of professions. *Praxissemester* (practical experience) is an integral feature of all courses. Research and development projects are characteristic of

Fachhochschulen courses. The counselling and guidance services of these institutions work closely with employers. The *Praxissemesters*, compulsory topics of dissertation and the guidance service assist students in establishing contact with employers before graduating and thereby facilitating employment at the time of graduation. The *Verwaltungsfachhochschulen* play a special role in training civil servants in public administration. The various federal and *Land* ministries support these institutions (KMK 1998:180-186; 201-206; Boehm 1999b:4).

(c) Conclusion

Reform of German institutions of higher education has created awareness among providers and students of the critical need for relevance in higher education. Reform initiatives introduced competition as well as performance-orientated approaches. The aims of reform initiatives have been to ensure that higher education institutions remain relevant to the employment sector. Safeguarding the international competitiveness of institutions of higher education remains another issue for on-going reform initiatives. The *Fachhochschulen* has become a highly relevant factor in the higher education sector in ensuring that education remains responsive to the needs of business and industry.

3.2.3.5 Conclusion

The German system of educational provision is characterised by variety of provision, particularly in the upper secondary levels of learning. The provision of variety has been in response to the needs of a very densely populated country. Early selection into vocational or academic streams was concluded as a further feature of the German system. This feature was concluded to be a factor of relevance in the German system. Vocational guidance at a very early stage in the learners' school career becomes a fact of life. The external functions of the vocational guidance counsellors constantly ensured responsiveness to the needs of the economy.

The complexity of the system was concluded at different stages of the German data. Tensions were noted to be inevitable, and the role of BIBB was concluded to be a relevant feature of German society. Equal representation of all stakeholders in the various fora ensured that institutions of education and training remained relevant to the needs and expectations of investors. The active role of the Chambers in educational issues noted and concluded as a factor of relevance.

Academic standards were high among the upper secondary students who were preparing for admission to universities and institutions of higher learning. The institution of the 13th year was noted as a relevant feature of the German system of education. Students who aspired to higher education had to be mature. First year failure rate had to be minimised, this was addressed by ensuring that high standards in the academic senior secondary schools were maintained.

3.2.4 Trends, reforms and critical issues in the German system of educational provision

3.2.4.1 Introduction

Cantor (1991:173 & 174) described the German system as a “corporatist model” because of the close co-operation between federal and regional governments, business, industry and the trade unions. The German system of vocational provision has experienced about 40 years of high-esteem throughout the world, but it has also had to endure criticism. It has been accused of being complex, bureaucratic and rigid. The trend is therefore to question the relevance of the German system. Critical issues as raised by the demands of modern technology pressure on the social partners to reform the system.

3.2.4.2 Trends

(a) Introduction

Brand (1998:103) stated that economic and technological changes in the German economy have made a deep impact on the provision of VET in Germany. He points out that due to international competition, traditional German industrial strongholds in the machine-tool, electro-mechanics and electronics industries have come under heavy pressure and suffered slumps in sales. A trend exists therefore to ask, firstly, “does the dual system still work?” and secondly, “is the education system in Germany relevant to the needs of German society?”

The dual system says Boehm (1999a:1) is like the German Volkswagen Beetle which has “lost its attractiveness in Germany but is still produced in developing countries”. Bühler (1999) also states quite categorically that “the dual system is running out”.

(b) The relevance of educational provision in Germany in respect of training costs and legislative frameworks

□ Introduction

A critical trend is to question the relevance of German VET against the cost of investment in work-related education and training. The volatility of market-trends requires rapid adaptation of production, which in turn requires changes from the VET system. Investment in training must therefore be cost-effective and directly related to productivity (Brand 1998:104). These issues will be examined below.

□ Employers

Hamilton (1987:335) makes it clear that in the dual system the employers are the dominant partners. From the employers’ point of view the German system of vocational education and training is highly relevant. They state quite openly “that they wish to retain control in order to assure that vocational training meets

their needs” (Hamilton 1987:335), and that their investment in human capital will result in greater productivity (cf Cantor 1991:178; Boehm 1999a: 4). The matter of training costs is therefore always an issue, debated quite fiercely in relation to time lost on-site when the trainee has to be released for classroom tuition at the *Berufsschule* (cf Boehm 1999a: 5). A further aspect of the productivity debate is the loss of qualified trainees at the end of the contract period.

□ Investment in training

Franz and Soskice (1994:28) in their conclusion to a quantitative study on the German apprenticeship system state that “it can pay profit – maximising companies to engage in net investments in training in marketable skills under certain assumptions”, the alternative, according to the authors is that the cost of training apprentices in the company specific skills is much lower than the cost of hiring externally trained workers in the same skills. It does not appear that reluctance to invest in vocational training in Germany has been problematic, the state, employers and individual trainees have contributed generously. Feuchthofen (1993:9) points out that “generous investment in vocational training is a key factor in ensuring the economic success of enterprises in Germany”. The same author holds as exemplary the German view that initial and continuing training are crucial elements of economic efficiency, he cites an amount of DM 45 billion as the annual cost of initial vocational training in the dual system, followed by another DM 40 billion per annum for continuing vocational training.

□ The Legislative Framework

The German legal framework has defined the responsibilities of the various role-players in policy formulation, planning, and provision of education in Germany. Co-operation between the Federal Government and the *Länder* is regulated in the fora and structures of the Standing Conference of Ministers of Education and Cultural Affairs (i.e. KMK).

The Federal Government’s responsibilities pertain to the provision of higher education, scientific research, VET outside of the formal school system and

vocational guidance. All other areas of educational provision devolves to the individual *Länder* where some aspects are further devolved to the level of local authority (Reusch 1989:8-10).

The demands of 21st century European society have created new pressures for the German legislature framework. The Standing Conference has had to widen its original field of responsibility to address essential issues related to plan reforms of the entire education sector.

□ International and Local Issues

Essential issues of the public debate include firstly, the quality assurance and the measurement of performance in schools; inter-*Länder* dialogue in respect of reading skills, mathematics and natural science knowledge, and cross-curricular competencies for 15 year-old learners is an essential issue for discussion at federal level because issues of this nature impact on federal educational policy in the wider European context. Secondly, the education forum for initiating national consensus on teaching and learning. Dialogue between the Federal Government and the *Länder* is aimed at re-defining educational objectives and developing new structures in the education system to remain relevant to the changes that are taking place in German society (Eurydice Website (Socrates Programme) 1999:6).

(c) Conclusion

The issues that are on the agenda are in fact global (or European) issues that impact on national systems of education: changes in patterns of employment; gender issues; European unity; ecological issues; radical changes that result from the new information and communication technologies.

The German data indicated that the structures of educational provision may have to change in order to facilitate reform. This may imply amendments to existing laws, or even the drafting of new legislation; if dialogue is not facilitated existing systems of education run the risk of becoming irrelevant.

Local and international issues must be discussed at all levels. Democracy is about dialogue and debate; the German legislative framework that emerged after the Second World War was relevant to post-war Germany. New discussion fora have to be implemented to ensure that national consensus is obtained. These discussion fora include representatives from industry, science and the wider society. Education remains relevant to the socio-economic context of German society inasmuch as the councils, fora and bargaining chambers allow for free debate and consultation. Hence, critical issues in German educational provision are characteristic of the problems of the high-income economies. These critical issues pose challenges for relevance in educational provision in Germany.

3.2.4.3 Critical issues

(a) Introduction

The critical issues considered are the issues that indicate the imminent need for reform or future development. Critical issues imply the possibility of crisis. Technological issues, followed by issues of work-place obsolescence and unemployment require urgent attention and reform. So too do gender issues, and the impact of a united Europe.

(b) Technological changes in the workplace

Bühler (1999) holds that the sophisticated technology of the modern work-place presents the dual system with problems. In particular he cites the theory/practice relationship as an example. Similarly, Brand (1998:104) holds that changes in technology and in the organisation of work causes a high rate of obsolescence. The dual system according to Bühler (1999) can satisfy the occupational needs of the occupations in the craftwork sector, "but much more abstract knowledge and other competencies are needed; organisational and analytical skills are more social and abstract than practical, these skills cannot be developed in a practical situation, longer periods are required in the classroom". Bühler is convinced that in this respect the dual system may have reached its limits. The trend, however, is to accommodate the demands of the

economy, and changes have taken place in the academic calibre of students entering the dual system. Candidates who have been to the *Gymnasium* and are in possession of the *Abitur* (school and certificate) are registering for an apprenticeship, and on completion enter a tertiary or higher education institution. Boehm (1999) states that apprenticeships are in fact very difficult to get without the *Abitur*. The increase, Boehm holds, in the amount of general education received is problematic. Workers begin to dislike blue-collar work. Boehm therefore advocates the restriction of admissions to the *Gymnasium*. He admits however, that the combination of an apprenticeship followed by a *fachhochschule* (technikon) or a university qualification is a good combination.

(c) Equilibrium between education and the work place

Earlier Boehm (1996:58) elaborated on this debate. He argued that despite restricted admission the *Gymnasium* students, (and as a consequence university students) increased steadily from 1980. In that year 972 000 university students and 1 716 000 apprentices were registered in West Germany. In 1990, 1 559 000 university students were registered in relation to 1 500 000 apprentices. Boehm points out that the number of university students exceeded the number of apprentices for the first time in 1990. The employers reacted to this trend by stating publicly that education and employment were out of equilibrium. This initial outcry from the employers may have been an exaggerated reaction to a new trend; the reality of the situation was to prepare students academically for the greater demands of the high-skill occupations. No formal link exists in Germany between general education and vocational education and training. The trend is nevertheless by social and practical demands towards more qualified workers in offices and shops with electronic data processing, in the electrical/electronic industries, metal industries, computer-aided design and computer integrated manufacturing industries (Boehm 1996:59). In contrast to Bühler, Boehm (1996:60), holds that the dual system has adapted flexibly to the new trends in the work-place and that the traditional division between school as a place of theory and the firms as places of practical learning is being questioned more frequently (cf Pritchard 1992:140).

(d) Youth unemployment

Youth unemployment is another critical issue that impedes the role of the dual system in facilitating the transition from school to the labour market. German unemployment rates for youth under the age of 25 has been traditionally low. In 1990 a youth unemployment rate of 4,5% was reported. In 1992 and 1993 youth unemployment in the former West Germany was recorded as being 4,2% and 5,2% for the respective years. These rates would undoubtedly indicate the relevance of the German educational system towards the integration of school-learners into the world of work. Hamilton (1987:336) states that youth unemployment is one of the most pressing issues of national economies, and that it was once tempting to describe apprenticeship as an antidote to youth unemployment. This view no longer applies as Hamilton (1987:336) correctly demonstrates, "unemployment occurs in two waves: the first at the point when school-learners are ready to enter into apprenticeships and the second at its termination, when trained workers are ready to begin full-time employment. Because public policy has been directed primarily at assuring an adequate supply of apprenticeship places ... the group that experiences the highest rate of unemployment includes youth in their early twenties, who have exhausted their educational options but are not needed by the economy ... apprenticeship can be said to postpone unemployment". Zedler (1994: 50) cites 75 200 (i.e. 17,1%) young people in West Germany who remained unemployed immediately after their vocational training, in the dual system in 1993 (this figure excludes drop-outs).

(e) Unemployment and economic downturns

The historico-legal tradition within German society provides a useful framework for dealing with the harsh realities of economic downturns. Labour laws protect most workers from lay-offs and employers offer interim solutions during economically difficult times by trying to keep their apprentices on after their final examinations by offering them limited or part-time term contracts, or if absorption options have been exhausted the referral of their surplus workers to other enterprises. What is of significance is the systematic involvement of several role-players in the economy in dealing with the unemployment

problem. Zedler (1994:52) draws attention to the activities of the social partners, who support the enterprise in their solution-finding endeavours, he says that this support may take the form of “statements, appeals and/or special collective agreements”. Braun (1987:134) points to the possible loss of “working morale” which may result from a long period of unemployment, which will eventually make them unattractive candidates for future employment. The question then persists, to what extent is the dual system responsible for the problems being experienced in the German socio-economic sector, and more pertinently, what reforms (if any) ought the educational sector to consider in order to effect greater relevance in provision.

(f) Tensions

On-going tensions have characterised the dual system. Pritchard (1992:138, 139) writes of the conflicts between *Bund* and the *Länder* over course structures, time-tabling and content. She also points to the conflict between the economic and educational stakeholders, primarily over individual values which each holds in respect of theory and practice. The curriculum comes into sharp focus for criticism and debate, and Pritchard observes that the integration of theory and practice is not easy, either in the classroom, or in the work-place. Furthermore, Pritchard (1992:137) describes the tensions in the dual system as being structurally and ideologically determined.

The vocational school (*Berufsschule*) comes in for much criticism. Boehm (1999a: 5) comments on the poor image of the *Berufsschule*. Legal stipulations make it difficult to change the responsibility of these part-time schools towards the apprentices. Very few changes are possible in a rigid and tightly regulated system. Progressive innovations in the workplace leave the vocational schools’ curricula looking out-of-date and irrelevant. The narrowness of the vocational curriculum has been a source of tension. A broader occupational field had to be introduced to aid students in making career choices before specialisation and the final choice of career. A uniform first year of vocational training was thus introduced with a curriculum that focused on related occupational fields (Braun 1987:135).

(g) Gender

In the late 1980s it was alleged that the dual system did not serve women as equitably in respect of apprenticeships as was the case for men (Pritchard 1987:137; Braun 1987:138-140; Bednaiz-Braun, Grünwald & Schäfer 1990:13-30; Cantor 1991:178). A system is only as good as it is able to deal with the issues of a society, and in general, despite the on-going tensions, the dual system has been sufficiently flexible to societal changes in respect of gender.

(h) Conclusion

This conclusion raises critical questions. The prime question asks whether the German system of VET is able to remain relevant to the needs of Germany's high-income population. Will it be flexible enough and possess the necessary infrastructure to deal with the problems facing Europe and the global markets? Rising youth unemployment, the problems of quality assurance, and the issue of the harmonisation of the vocational training systems of Europe will have to be addressed in the future. European regional issues will impact on the German educational and vocational training system, and ultimately on the German economy. The problems relating to the relevance of a well-established system of educational provision will therefore come in for close scrutiny in Germany.

3.2.4.4 Reform and future developments

The historico-legal tradition will undoubtedly be the foundation upon which the direction of all future reform in German vocational education and training will be determined. Wagner (1995:253) has stated that the German vocational training system itself "is a complex network that is based on voluntary collaboration by the state, business organisations and trade unions". The system says the same author requires a great deal of "fine-tuning", because the collective goal of the many stakeholders is singular, i.e. the national economy. No consensus exists on how to achieve the goal and the structural and ideological determinants may be responsible for the tensions in the

system, but they also provide the incentives that drive the system. Bühler (1999) stated that “one of the pre-requisites of the dual system is that certain virtues must be pre-existent in the candidates, one virtue is an insistence on quality, a typically German quality of being precise in all that you do”. The dual system may not run out, because it is typically German, relevant to the needs of German business and industry, critical of its own shortcomings and adaptable to changing national circumstances.

3.2.5 Conclusions

3.2.5.1 Introduction

Factors of relevance for the German system will be concluded in historico-legal data, socio-economic, structure of education data, and in the material that emerges from the trends, reforms and critical issues of provision of education in the German system of education. Barriers to relevance will also be indicated

3.2.5.2 Historico-legal factors

The history and cultural background of the German system is a factor of relevance. The German socio-economic accomplishments of the second half of the twentieth century may be attributed to the legislation that resulted after World War Two. The modern legal framework is based on a long tradition of work, craftsmanship, guilds and legislation. The role of regional craft chambers and local guilds played a significant role in the process of training in the German tradition. The part-time vocational school emerged in the late nineteenth century as a factor of relevance in the German system of vocational education and training. The dual system emerged as a German institution designed to skilled workers (para 3.2.1.2 ; 3.2.1.3 & 3.2.2.6).

The legal framework of post-war Germany has been built on pre-war legislation. Modern Germany is a Federal republic. The Basic Law of 1949 regulates the relationship between *Bund* and *Land*. The establishment of BIBB (1982) was a significant factor of relevance in the regulation of the relationships between the various stakeholders in education and training (para 3.2.1.5). The aims of the legislation prioritised economic recovery and

curricular relevance. While much of Germany's vocational and education training laws have been legislated by the Ministry of Labour, the relevance of the legal factors lie in the fact that provision has been made for the co-operation of education and labour in the training of workers for the German labour market (para 3.2.1.3 (b)).

The value attributed to vocational training in the German system bears testimony to the tradition of high-status of good workmanship in the German workplace. Changing market trends in Europe and in the global market have prompted amendments and changes to legislation. Legislation remains relevant to global economic trends, and pressures (para 3.2.1.4).

3.2.5.3 Socio-economic factors

Socio-economic factors that indicate relevance lie firstly in the fact that Germany is a high-income economy, highly esteemed in the world-markets (para 3.2.2.2) and secondly in the fact that unemployment (particularly youth unemployment) in Germany is still relatively low. (para 3.2.2.6). Germany is a densely populated country (para 3.2.2.3 & 3.2.2.4). A wider variety of schools are therefore available to learners in the fairly immediate vicinity of their homes.

Finally, the unification of West and East Germany did not effect the performance of the German economy. The conclusion reached is that the legal framework and the German tradition of training facilitated the smooth transition to a unified Germany (cf para 3.2.2.5).

3.2.5.4 Structure of education factors

A further factor of relevance in the German system of education is in respect of the provision that has been made for early vocational selection. Compulsory vocational school attendance and policies for investment in training are included in the German vocational training structures (para 3.2.3.2 (b) (c)). Streaming is a fact of German education. Vocational guidance and counselling at all levels is a priority. Several post-primary lower and upper secondary school options exist. Practical obstacles do not enter into decision-making

processes as villages and communities are close to each other. Legislation also ensures that learners who leave the formal and compulsory general education system at 15 years receive three years compulsory vocational training (para 3.2.3.3 (e)). Employers and the Department of Labour are significant stakeholders in the training aspect at this level. Investment in training is expected to yield returns. Market related dynamics become critical issues in educational provision at this level (para 3.2.3.3).

The German apprenticeship (or dual system) still trains the majority of post-15 year old school-leavers. A significant trend is the demand for more general education by employers as a prerequisite to training in the dual system; the *Abitur* has become a critically important requirement for the procurement of an apprenticeship. Training in the dual system continues to be part-time training (para 3.2.3.3). Full-time and part-time training institutions exist for different routes to vocational training. Both the full-time and the part-time options include a strong practical component to the learning programmes with a wide variety of fields to select specific learning pathways from. Relevant qualifications provide opportunities for employment and further education and training.

Pathways from school to higher education and / or more advanced technical education has been mapped out *vis-à-vis* the German *Abitur* and the 13th Year. Admission to higher education requires academic maturity. The 13th year provides the opportunity for learners to mature and to be clear in their minds about the direction of study (para 3.2.3.2 (d)). Access to higher education is possible *vis-à-vis* the dual system to stringent pre-conditions, e.g. the *Fachhochschulen* (para 3.2.3.4 (b)). Higher education institutions are varied; they remain relevant to industry and developments in the European and global markets (para 3.2.3.4. (c)).

3.2.5.5 Critical issues, trends and reforms as factors of relevance

(a) Trends

The factors of relevance in respect of the trends in the provision of relevant education in Germany include the issue of training costs as related to

productivity (para 3.2.4.2 (b)). There are numerous stakeholders in the German system. Conflicting interests are potential barriers to relevance. Employers and future employers are dominant in the system. The demands of the European and global markets intensify the trends towards training highly-skilled workers. Relevance is achieved in ensuring that the roles of the stakeholders are clearly defined. The roles of the *Länder* and the Federal Government have to be defined as well. Issues of quality assurance are national trends towards assuring relevance in educational provision. The value of a national forum for achieving national consensus on teaching and learning further assures quality in educational provision (para 3.2.4.2 (b)).

(b) Critical issues

Critical issues in the German data are related to the trends in respect of relevance. The demand for sophisticated technology has resulted in more strenuous demands being placed on the German training system. Technological changes require more general education; the *Abitur* becomes more valuable, as the German system seeks to fine-tune the equilibrium between the problems of youth unemployment, the demands of the work-place and educational provision. Rapid changes in the workplace, youth unemployment, deal with the critical problems of work to school transition. (para 3.2.4.3 (a)). Employer versus educator tensions exists. The poor image of the vocational schools was concluded to be problematic, and have resulted in barriers to relevance in the past. However, the dual system was concluded to be a German institution, much maligned in Germany, but a system that continued to meet the demand relevance in education and training in Germany (para 3.2.4.3 (f)).

(c) Future developments

The historico-legal framework ensures that dialogue and debate takes place in society. The rigidity of the German system has been criticised. Authoritarianism in streaming and compulsory training has been cited as being undemocratic. The structures provided by the German legislative framework creates opportunities for employers, trade unions, and chambers to voice

demands. Democracy implies dialogue and continues to be the most critical factor of relevance in educational provision in Germany. (para 3.2.4.3 (f) (h); 3.2.4.4).

3.3 THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN JAPAN

3.3.1 Historico-legal data

3.3.1.1 Early Japanese education to the end of the Meiji period (1912)

(a) Introduction

Japanese respect for education has its roots in East Asian civilisation. According to Dillon (1983:39), the importance of literacy, formal learning and moral insights were stressed from the beginning of Japanese history. Two modern transformations dominated the development of educational provision, the first, the so-called Meiji Restoration, and the second, the post-war reforms which followed the Occupation. The common factor in the two transformations, was “that education should play a key society-building role” (Schoppa 1991:22). This section will briefly explore the foundations of Japanese educational provision up to the end of the Meiji Period (1912).

(b) Early Japanese Education

Chinese culture and philosophy influenced Japanese education. Chinese characters (*kanji*) were adapted to become assimilated with the Japanese (*kana*), writing. Confucianism and Buddhism influenced Japanese society during the pre-Tokugawa years, with many temples becoming centres for learning (Kobayashi 1988:676; International Society for Educational Informational (ISEI) 1996:5). The Taiho Code became the basic law of Japan in 710 A.D. The educational stipulations of this all-embracing legal code made provision for a system of provincial schools. Pretorius (1996, in Dekker & Van Schalkwyk 1996:325) points out that while admission to these schools “was limited to the sons of government officials and influential people in the

provinces” at this point in their history the character of their educational system had already been established:

- state dominated education;
- schooling for social success;
- schools facilitate contact with foreign civilisations (Pretorius 1996:325; cf Mason & Caiger 1972:27-28).

(c) The Tokugawan Period (1603 – 1868)

The Tokugawan period, is usually considered to be the era when the foundations for a highly literate and mass education-orientated society were established (Mason & Caiger 1972:165; Kobayashi 1988:696). Educational institutions such as the *hanko* (fief schools) were established. These schools provided education for the *samurai* (warrior) class. Based on Chinese scholarship, the *hanko* instructed their scholars in cultural as well as military arts (Shirato 1988, in Encyclopedia Americana 1988:720). The Confucian values and ethics permeated the teachings of the *hanko*, and *samurai* learners were all obliged to become familiar with the requirements of the *bushido*, the Japanese warrior’s knightly code. By the end of the Tokugawan era the *hanko* had developed schools (*gokō*) which focused on literacy and the preparation of *samurai* for the world of a literate Confucian bureaucracy (Schoppa 1991:24).

Other schools of the Tokugawan era, such as the *terakoya* focused on the children of ordinary citizens. Reading, writing and arithmetic were taught. Kobayashi (1988:697) holds that by the end of the era about 15 000 *terakoya* were understood to have been operating (Ishizaka 1991:7). Local schools (*gogaku*) which based their teachings more firmly on the ethics of Confucianism admitted children from commoners as well as the *samurai*. *Gogaku* standards of education were purportedly higher than that of the other schools (ISEI 1995:21 - 22). The Japanese placed much emphasis on literacy and formal education. Mason and Caiger (1972:206-207) hold that the quality of Tokugawan education was as a result of the contribution made to education by the various private academies (*juku*). These academies admitted *samurai* as well as commoners. *Juku* learning was characterised by vigour and

diversity, as well as the initiative and capacity for hard-work of their founders and scholars. Dillon (1983:39) however, draws attention to another aspect of Japanese learning. She points out that in ancient Japan the most basic form of occupational training was apprenticeship. Young boys worked in a master-servant relationship, learning the trade, and earning "room and board" but no salary until they became competent to practice independently of the master. This form of training continued until the late nineteenth century. The Tokugawan Legacy provided the foundations for literacy at all levels of Japanese society. This era, of almost 250 years left behind the tradition that education had the ability to preserve order in society, and contributed substantially to the nation's future greatness (Mason & Caiger 1972:207; Schoppa 1991:23 - 24).

Similar sentiments were expressed by Garratty and Gay (1972:640-641), in their remarks on the broadening of educational provision under the Tokugawans. The writers state that the *samurai* class progressed from rough, spartan soldiery to a cultural elite, as a result of the influence of the academies. But during this era education also trickled down to the ordinary classes. Towards the end of the Tokugawan Era, Japan may have been ranked as high as any of the Western European countries in respect of literacy.

(d) The Meiji Period (1868 – 1912)

The Emperor Meiji abolished the feudal system in Japan, and adopted a pro-western policy towards educational provision in Japan, (ISEI 1996:10 & 11). The new dynasty discerned a need for a centralised system of administration modelled on Western systems. Confucian scholarship was marginalised in favour of foreign learning which was imported from German, British, American and French institutions of learning. Scholars from Western Europe and the United States arrived in Japan to assist with the restructuring of Japanese education (ISEI 1995:26). Fernández-Armesto (1995:686) states that the catch phrase of the early Meiji reformers was "Japanese spirit and western knowledge"; the same author holds that the absorption of western technical skills did not compromise the traditional values of the Japanese.

The Fundamental Education Code (the *Gaku sei*) of 1872 introduced an educational system similar to that of France. While the administrative structure was French, the curriculum documents were primarily American, (Shirato 1988:720). A further Western influence came to Japan as a result of the efforts of the first Minister of Education, Mori Arinori. The Minister was impressed by the highly centralised nature of the Prussian educational system. Kobayashi (1988:697) holds that Mori's fascination with centralisation was because the schools were viewed as instruments of the state, and as such a centralised system afforded opportunities for control and regulation. The so-called liberal victory of the Meiji period did not last long, the conservative agitators won a victory for Confucian values when the 1890 Imperial Rescript on Education was published. This edict on education re-established the traditionalist position with regard to the curriculum, at all levels. Confucian values would henceforth be safeguarded within the framework of a modern state (Shirato 1988:720; Kobayashi 1988:697-998).

The Meiji reforms centralised the provision of education, however, the achievements of the Meiji leaders was a system of education for both sexes all over the country (Mason & Caiger 1972:252-253). Schoppa (1991:25 - 26) points out that by the early 1900s Japan had a system of almost universal primary education, this served as a secure base for further learning at secondary and higher educational levels. A fundamental principle was becoming entrenched in Japanese society, that education and economic growth were integrally linked, and that education had the ability to ensure that job prospects were good at the end of the initial stages of education and training. The belief in the economic value of education and the basic westernised educational structure with its philosophical fundamentals became the basis for the provision of education in Japan until after World War Two, and to the present.

The origins of the Japanese system of vocational education and the origins of the principles of lifelong learning can be traced back to the Meiji period. The general education base on which to build for the future was firmly established in Japan by the Meiji rulers:

“Mori and his successors in the education Ministry provided facilities for further education at the middle school (ages 12 – 17) and high school (ages 18 – 20) levels. Vocational schools and colleges were an important adjunct of the system ... state universities were set up in five centres ... education beyond the primary level was non-compulsory and more specialized, and it catered for far fewer children”.

(Mason & Caiger 1972:253-254).

The Meiji reforms could not however, ensure more learners proceeding from the primary to the middle levels of the schools. This was a problem of low per capita income experienced by many families rather than a problem of Meiji policy. The legacy of the Meiji reforms will however, always be linked to the historical origins of two industry-related areas of education.

(e) Development of life-long learning

The Fundamental Education Code of 1872 emphasised the value of school-based education. The aim of education was always in the critical role it could play in Japanese ambitions to “catch-up” to the United States and the countries of Western Europe. School-based education and society-based education, according to the National Institute for Educational Research (NIER) (1992:52) were historically considered as complementary educational activities. School-based education was regarded as fundamental, with society-based (or social) education occupying a supplementary position in Japanese society. However, social education developed rapidly after the Russo-Japanese War (1905), where this type of education was directed specifically towards young people and adults who had received insufficient school education. Social education developed in earnest during this period and was practised widely throughout Japan by the time of Japan’s entry into the conflict of World War Two.

It must be noted that the term “life-long education” was adopted during the 1960s in accordance with UNESCO advocacy (NIER 1992:52). The term “social education” referring in Japan to “organised educational activities .. for adults and young people, other than those provided in the curriculum of

elementary and secondary schools, or at institutions of higher education” (Ministry of Education (MOE) 1993b:38). “Social education” is thus non-formal education, and part of the life-long learning ideal of Japan.

(f) Development of vocational education

The Meiji rulers wanted to create a rich and powerful nation (ISEI 1995:29), the development of industry held the key to national advancement. The Meiji rulers developed an interest in industrial education. According to the ISEI (1995:29) the trend started towards the end of the 1870s and the beginning of the 1880s. Initially the aim was to train industrial leaders in Western technology. With the industrialisation of Japan during the 1890s the government decided to include mainstream education in the process. The Vocational Supplementary School Regulations were thus introduced in 1893. Schools were required to provide technical training. The Vocational Schools Law was introduced in 1899. This law made it possible for vocational schools to be established and to provide training in a variety of production sectors, e.g. manufacturing, agriculture, commerce, forestry, etc. The ISEI (1995:29) holds that vocational education developed rapidly, particularly after World War One.

(g) Conclusion

The historical origins of Japanese education may be traced to Confucian values. Confucianism placed a high value on literacy in society. Hence Japan has a long history of literacy and formal schooling. Towards the end of the nineteenth century the Meiji rulers commenced with the process of providing a legal framework for the provision of education by the state. The first steps towards a truly democratic legislative framework may be discerned in the form of the 1889 Constitution. The economic value of an all-Japanese system of education had become entrenched in the Japanese way-of-life. Relevance in educational provision became associated with economic issues, e.g. “catching-up” to the United States. This is evidenced in the emergence of life-long learning programmes, and the growth of the vocational school movement in Japan. These developments arose at the same time as the rapid industrialisation of Japan began to place demands on the schools for suitably

trained employees. The private sector became involved in the provision of relevant education in Japan.

3.3.1.2 The Taishō era (1912) to the end of the occupation (1952)

(a) Militarism (1912 – 1945)

The end of the Meiji dynasty in 1912 denoted more than a dynastic change in Japan. Western political ideas and cultural values became a familiar feature of Japanese society. Mass literacy and foreign travel exposed the Japanese to the world of Western technology and science. Other features of the early Taishō era was the prompting of individuation (Mason & Caiger 1972:256) which emerged from the liberal philosophy of the time, but resulted in a movement of social critique. The proponents of change challenged the accepted cultural and social values of the time. The brief upsurge of liberal ideas during the 1912-1938 period influenced Japanese educational policy.

The New Education Movement focused attention on child-centred education. Progressive private schools were established, based on the liberal philosophy of this period. However, a swing towards militarism eclipsed this brief liberal period, and an emperor-centred nationalistic state controlled education and all that was taught in the schools. Primary schools were known as *koumin gakkō* (National People's Schools) (Kobayashi 1988:698). Pretorius (1996:327-328) adds that from 1931 to the end of World War Two, Japan's educational policies were influenced by military objectives.

All aspects of the educational process were influenced by the militarism of the 1930-1945 period. The Japanese government had become highly centralised and nationalistic. Officers brought militaristic attitudes into the classrooms. Textbooks with distorted views of Japanese history and geography were produced. Dissent among students and teachers, was suppressed. The schools became institutions for military preparation (Schoppa 1991:31). The Second World War left scenes of devastation in the Japanese cities. Japanese militarism came to an end with the Occupation, and, at the insistence of the Occupation the reform of education (Mason & Caiger 1972:303).

(b) Reforms of the occupation (1945 – 1952)

□ Reform of post-war Japanese education

Reform of post-war Japanese education was primarily based on American recommendations, and included:

- extension of compulsory education from six to nine years;
- an American styled 6-3-3-4 system;
- replacement of the system multiple-track differentiation by a comprehensive three year upper-secondary school;
- decentralisation of educational administration into local prefectural units;
- the abolition of the Imperial Rescript on Education, and the introduction of more a democratic, American-styled curriculum.

(Kobayashi 1988:698; cf Mason & Caiger 1972:302)

Post-war legal reform shaped the direction of modern Japan. The new constitution, 3 May 1947, established a democratic government based on liberal principles (ISEI 1996:12).

The Occupation (1945 – 1952) influenced the reconstruction of the Japanese educational system. Some of the western features were retained after 1952. Japanese students were encouraged to extend their education beyond the secondary school in the many colleges and universities which emerged during the Occupation.

The new constitution established a democratic government, and made specific references to education in Article 26 as a fundamental right of the people.

Described by Schoppa (1991:34) as the “crowning achievement of the early Occupation Period” the Fundamental Law of Education laid the foundation for the new system of education.



□ The Fundamental Law of Education (1947)

The Fundamental Law of Education (1947) states in its preamble that the goals of a democratic society are dependent on a nation's education system.

Education shall aim at the full development of personality, striving for the rearing of the people, sound in mind and body, who shall love truth and justice, esteem individual value, respect labour and have a deep sense of responsibility, and be imbued with an independent spirit, as builders of a peaceful state and society.

(Kobayashi 1988:699; Pretorius 1996:340)

The Fundamental Law of Education effectively abolished the Imperial Rescript of 1890.

- Other laws from this period designed to aid the implementation of the Fundamental Law (1947):
- School Education Law (1947)
 - Board of Education Law (1948)
 - Ministry of Education Establishment Law (1949)
 - Private School Law (1949)

The education laws established the principles and basic structure for the provision of education for the future (ISEI 1996:90).

(c) Conclusion

The new Japanese constitution of 1947 was based on democratic principles, it included the role of the Emperor of Japan as a constitutional monarch (Article 1), and the complete renunciation of the Japanese people of war as a means of settling international disputes (Article 9). As a practical gesture towards this principle all militarist and ultra-nationalist references were removed from textbooks. Relevance in education was encouraged by the adoption of critical approaches to solving social problems. The role of the individual in the new

Japanese society was stressed. The welfare of the people of Japan was paramount in the national quest for a system of education that would meet the needs of the defeated nation. The aims of education had to be re-appraised, and reforms proposed. A shift in emphasis took place, from nationalism and militarism to democracy and economic development.

3.3.1.3 Reforms since the occupation (1952 to the 1990s)

(a) Introduction

The rapid development of the provision of education in Japan during the post-occupation era was attributed to the traditional emphasis placed by the Japanese on the value of education. Furthermore, on the raised standard of living that resulted from the phenomenal growth of Japan's economy during the period contributed substantially to the development of education. Education was viewed as the driving force behind the economic, social and cultural developments of the nation. These issues will be examined in the paragraphs below.

(b) Vocational training laws

In respect of vocational education Japan produced two vocational training laws. The 1958 Vocational Training Law tried to create a unified vocational training system for Japan. It was also aimed at responding to the labour requirements of industry by integrating vocational education into the mainstream of formal industrial instruction. As with general education the Japanese tradition of centralisation and direct government involvement in policy formulation influenced the provision of vocational education as well. During the post-occupation years the Japanese government increased control of economic goal-setting and industrial development. Cantor (1987:36) comments that the legal framework for industrial training in Japan is complex, but holds that the 1969 Vocational Training Law is the basic legal foundation for the provision of vocational training in Japan. This law set fundamental principles of vocational training and trade testing, and described the roles to be played by practitioners in these activities (Dillon 1983:43).

(c) Post-war economic development and vocational training

Dillon (1983:43) captured the essence of the Japanese post-war economic success at it related to the 1969 Vocational Law:

“The Vocational Training Law emphasised the responsibility of employers to provide training at all stages of a workers’ career. Of course, the major Japanese industries who practice lifetime employment have the advantage of providing a highly motivated labor force that knows that its higher earnings will be tied to higher company sales.

“However, the disadvantage which accompanies this practice is that the pool of skilled labour available for hiring is quite small in Japan. To have a skilled work force, companies must provide advanced training. The Vocational Training Law aims at providing three kinds of fundamental training:

- *Initial training* is designed to impart basic skills and knowledge for entry level employment.
- *Upgrading training* is designed to provide additional skills for higher level employment.
- *Occupational capacity redevelopment training* is designed to assist workers who, plan or are forced to, change jobs due to shifts in demand in the labor market”.

(Dillon 1983:43;cf McCormick 1989:139 -140)

Relevance in education in post-war Japan was in respect of economic recovery. The Vocational Training Laws provided the legal framework for a society where a strong tradition of formal education existed. The Vocational Training Laws combined this tradition with the concept of firm-based training.

Cantor (1987:36) draws attention to the fact that vocational education and training in Japan is the responsibility of industry, and that the state, through the Ministry of Labour, remains an active partner by means of making substantial

grants available in order to encourage smaller firms to provide training. Large companies and corporations have in the past employed about thirty per cent of all Japanese industrial workers and “a myriad of smaller businesses and family firms employ the other seventy per cent” (Cantor 1987:36).

The major reforms in Japanese education have historically been during times of social upheaval (Ishizaka 1991:7), the reforms of the 1990s (sometimes known as the Third Reform) were initiated during times of peace. The following paragraph will review the reforms of the National Council on Educational Reform (1984).

(d) National Council on Educational Reform (NCER)

The reform debate was sparked off by a desire to make education more suited to contemporary society. One of the issues of the debate was the increase in the number of students staying on in the upper secondary school. There was a need to diversify the upper secondary school curriculum as well as a need for an evaluation of a wide-range of educational issues (Ishizaka 1991:25).

The student demonstrations and strikes of 1969 were catalytic in transforming the reform debate into an educational crisis. These events set the agenda for policy-making for the next two decades. School violence and delinquency increased during the early 1980s (Ishizaka 1991:25; ISEI 1996:92). Two schools of thought emerged at this stage:

- school violence was as a result of the neglect of moral education in the schools;
- school violence indicated that there were deeper problems in the system of educational provision that required urgent reform.

Cognisance had to be taken at this stage of the changed economic context. The educational authorities were required to re-define education's role in providing the nation's skilled workers. The economy of the future, “required creative scientists, fluent foreign-language speakers, specialists in extremely

complex technology and workers who could express their views rather than just follow orders” (Schoppa 1991:50; cf MOE 1993b: 56).

A National Council on Educational Reform was established in 1984 as an advisory committee to the Prime Minister. The Prime Minister, Nakasone, wanted to move away from the western influences of post-war political thinking and prepare Japan for the twenty-first century (Fernández-Armesto 1995:687). For Nakasone, relevance in education was to secure a system that was able to cope with on-going change. With this in mind the Council presented the Prime Minister with a three-point educational reform plan:

- the principle of emphasising individuality;
- the organisation of a system of life-long learning;
- the introduction of mechanisms to cope with changes in society, including internationalisation and the spread of information media.

(Ishizaka 1991:24-29; MOE 1993b: 56)

Selected issues of the educational reforms of the 1990s will be discussed in more depth in the paragraph “Trends, Reforms, and Critical Issues” as these relate to the aims of this study. An outline of the structure of education in Japan must however, precede a discussion on the impact of the reforms on the provision of education in Japan.

(f) Conclusion

The spread of education in Japan after World War Two was unprecedented. The relevance of educational provision in Japan cannot be divorced from the equally unprecedented growth of the Japanese economy during the post-war era. Many problems did however, emerge in Japanese schools, and the need for reform in Japanese education became apparent. Transformation in education was essential to ensure the continued relevance of the system to an age of industrial restructuring, technological development and internationalisation.

3.3.2 Socio-economic data

3.3.2.1 Introduction

The Japanese regard themselves as a middle-class society (ISEI 1996:48). Poverty and illiteracy are, therefore, not indicated among the basic indicators for Japan (World Bank 1997:215). The private sector in Japan is very strong. These paragraphs will provide a few basic economic indicators for Japan, to be followed by a brief evaluation of the Japanese economy. The aim of the final paragraph of this section on socio-economic data will be to demonstrate how the resilience of the Japanese economy can be attributed to the relevance of educational factors in educational provision in Japan.

3.3.2.2 Annual growth rate

Japan's GNP per capita (in American dollars) was recorded as being \$39 640 in 1995. An average annual growth rate of 2,9% was recorded for the period 1985 – 1995 (World Bank 1997:215).

The World Bank (1997:237) records a GDP (in millions) of \$5 108 540 for Japan in 1995, which placed her in second position to the United States for that year. A growth rate of 2% was recorded.

Comparative economic data for a fifteen-year period (1980 – 1995) indicated a decline in economic growth. The average annual growth for 1980 – 1990 was 4,0%, while the 1990 – 1995 period recorded an average of 1,0% (World Bank 1997:235).

3.3.2.3 Unemployment

Unemployment increased during the 1980s, reaching 2,8% in 1986, which in absolute terms amounted to 1,71 million people. The economy recovered, and these statistics dropped until 1994 when unemployment rose again and reached 2,9%, and 3,4% in November 1995. Job creation has become one of the priorities of the Japanese economic community. Economic growth is planned *vis-à-vis* "timely macro-economic policies and to promote the

retraining of workers and the formation of skills, especially among women and older persons” (ISEI 1996:49 & 50).

3.3.2.4 Inflation

Japan recorded 1,4% average annual inflation rate for the period 1980 – 1995. This may be compared with 3,2% for the United States, 5,1% for the United Kingdom, 3,4% for Switzerland and 1,7% for the Netherlands. Japan's inflation rate is the lowest when compared to comparable economies (World Bank 1997:217).

3.3.2.5 Economic development and educational relevance

(a) Brief economic review

The rapid post-war economic development was halted in the early 1980s when a global economic recession caused a period of economic instability as a result of a slump in oil consumption. These developments had a beneficial effect on the Japanese economy, with the growth rate climbing to 4,1% in the 1984 – 1985 fiscal year (ISEI 1996:39).

However, these benefits were short-lived. The American dollar was devalued in September 1985; this resulted in a recession in the Japanese economy that continued into 1986. Recovery measures were adopted by the Japanese Government and the Bank of Japan included, “the setting aside of an additional five trillion yen for public works” (ISEI 1996:40), and the Japanese manufacturing sector “adopted policies aimed at boosting domestic demand”.

The results of these measures were:

- the recession bottomed out towards the end of 1986;
- the economy maintained its strength; and
- average annual growth of 5,2% was maintained between 1987 and 1990.

(ISEI 1996:40)

This background describes the procedures adopted by Japan in response to adverse economic trends in the global economy. It must be noted that these measures included swift and positive steps to avoid a sharp rise in unemployment.

These procedures were repeated during the 1990s in response to similar global economic pressures (e.g. Gulf crisis of 1990 and 1991, the Kansai earthquake in January 1995). During the years the growth rate fluctuated, narrowly avoiding a zero growth rate in 1992. Japan maintained its position as the world's second largest economy, leading in the category "per capita GDP" among the 24 OECD member countries in 1994. According to the ISEI (1996:43) Japan has held the position of "the highest per capita GDP among the Group of Seven industrial countries since 1986".

(b) Educational relevance

Certain factors of relevance emerge from the above evaluation of the Japanese economy that can be related to the provision of education. Firstly, it is evident from the Japanese economic experience that no economy is exempt from the vicissitudes of the global economy. The resilience of an economy to global economic trends is dependent on two factors: the structure of the economy and in the people who drive the economy:

- production, manufacturing and trade are people-orientated activities;
- job creation relates directly to national productivity; and
- productivity, job creation, economic growth are dependent on people, and their skills.

The structure of the economy is not an educational problem, however, the education of the people who drive the economy is. This points to the reflexive relationship between the Japanese economy and vocational training. In this respect the Japanese economy depends on the provision of life-long education (Atchoarena 1992, in Atchoarena (ed) 1992:52) which implies formal learning at school, training, and re-training. Much of this initial training has taken place in the private sector. Since 1976 the Special Training Schools (or Colleges)

and the Miscellaneous Schools have made a significant contribution to the preparation of learners for the work-place. Interest in these schools has grown.

Vocationalism in Japan is reportedly low (McCormick 1988:42-51; LeClerq 1989:186-188). The strength of the Japanese economic success undoubtedly lies in the contribution made by the private sector. Cantor (1987:36) states that the responsibility for providing vocational training is primarily a private sector function. The state assists in a variety of ways through the Ministry of Labour.

Muta and Masuda (1996:45) explain the need for private sector vocational training by pointing out that the knowledge and skills required for modern technology change quickly and the formal school sector cannot keep up with the developments. The authors state that the notion exists

“that fundamental education which develops the ability to cope with such changes should be conducted at schools, and that the knowledge and skills needed for work should be obtained at vocational schools or in-company training after formal education. Industry itself appreciates general scholastic ability and adaptability more than skills and knowledge in a specific job area, because it considers that the latter can be provided by the company if students have sufficient scholastic achievements”.

(Muta & Masuda 1996:45)

One of the notable outcomes of the educational reforms of the 1970s was the legislative change which took place in 1975 enabling a new category of educational institution to be established which would diversify higher and secondary education in response to the needs of the economy (Shoppa 1991:195). These institutions will be examined in the Structure of Education data below.

3.3.3 Structure of education data

3.3.3.1 Introduction

Shirato (1988:720) points to five levels in the Japanese educational system:

- kindergarten (*yōchien*)
- elementary school (*shōgakkō*)
- junior secondary school (*chūgakkō*)
- upper secondary school (*kōtōgakkō*)
- colleges, universities (*dagaku*)

Education in Japan is compulsory between the ages of 6 and 15 years (MOE 1993b: 21). The majority of junior secondary learners proceed to the upper secondary school. The ISEI (1996:92) holds that in reality the *kōtōgakkō* has become an essential component of basic education.

3.3.3.2 Kindergarten (*yōchien*)

Kindergarten education is not compulsory, however, provision has been made by the Ministry of Education (*Monbusho*) for three years of pre-school education. Statistics for enrolments at *yōchien* vary considerably (MOE 1993a: 36). Shirato (1980:720) reports that the number of children enrolled at *yōchien* has increased. The NIER (1990:20) records that 4,2% of the 3-5 year old age-group enrolled at a *yōchien* in 1950, this percentage increased to 45,5% in 1988.

An estimated 35% of children entering compulsory schooling for the first time have experience at least one or more years pre-school education (MOE 1993a: 8). Kobayashi (1988:704) holds however, that in 1980 the *yōchien* enrolled more than 64% of all pre-school children. The MOE (1993b:18) records an enrolment of 64,1% for five-year olds enrolled at a *yōchien* in Japan.

Kobayashi (1988:704) makes reference to the competitive nature of Japanese society that is evident in the heavy competition that exists among parents for admission to some of the elite *yōchien*. The parents reportedly send their

children to schools that help prepare them for the entrance screening tests to these famous kindergartens! Pretorius (1996:346) stresses this point as well. More pressure is being exerted on the *yochien* to provide some form of academic instruction. The view is held that the right pre-school will lead to success at other levels of education and ultimately in adult life. Pretorius (1996:347) observed that Japan is the only country in the world that conducts tests on children before they enter pre-primary. Correct pre-school placement is very important for successful progress in the educational hierarchy.

3.3.3.3 Elementary school (*shōgakkō*)

Elementary education in Japan covers the first six years of a learner's compulsory school career. Classes are held six days a week, with standard lesson periods of 45 minutes. Number of hours per week at school during the elementary school years ranges from 24 hours in Grade 1 to 31 hours in Grade 6 (Shirato 1988:721).

It is generally reported that 99.9% of all learners in the age-group 6-12 years are enrolled at the *shōgakkō*, (NIER 1990:20; Ishizaka 1991:3). Elementary children enrol at a state school, however, some learners attend private schools. Private elementary schools are available in the big cities. These private schools are nearly all university schools. According to Lynn (1988:21) they are among the most prestigious in Japan, as learners are assured of a strong academic curriculum with an almost certain admission to a university.

Elementary education is under the control of a local board of education. The Ministry of Education provides a guideline for curriculum design, but each local authority develops its own curriculum based on local needs as well as the availability of community providers, such as libraries, museums, art galleries, etc. These special activities, cultural, spiritual and sport, form an integral part of the whole curriculum (MOE 1993b: 23; ISEI 1996:92).

The purpose of elementary education is firstly to provide a general basic education in respect of literacy and numeracy, and secondly, to focus on developing the whole child. In addition to basic knowledge and skills the

elementary curriculum focuses on developing healthy attitudes and values in the elementary learner. This is evident from the number of hours allocated on the weekly time-table to subjects such as Music, Arts and Handicrafts, Physical Training, Home Economics and Moral Education (10 hours) in Grade 5. In the same grade the time allocated to academic subjects such as Japanese, Social Studies, Arithmetic and Science amounts to 21 hours. In a 31 hour week this amounts to 32% of the time on the academic subjects, (Shirato 1988:72; Lynn 1988:20; Pretorius 1996:347-349).

A distinguishing feature of Japanese elementary education is the provision of supplementary education. Kobayashi (1988:204) refers to the use of home tutors and the attendance at non-formal private schools (*juku*). These supplementary lessons take place outside of normal school hours. A 1981 study of 500 Tokyo families found that almost a third of all elementary learners received supplementary education (Kobayashi 1988:704; Lynn 1988:23-26). The Department of Education and Science (1991:60) (DES) (British) states that at some stage about two-thirds of Japanese learners between the ages of 12 and 15 attend the *juku* to improve their chances of being admitted to a prestigious upper secondary school.

3.3.3.4 Junior secondary school (*chūgakkō*)

The junior secondary is three years in duration. It continues the elementary school aim of providing a basic general education for all learners. Differentiation of the curriculum does not take place. However, school principals decide which optional subjects will be available. The emphasis is on providing an all-embracing and balanced curriculum with greater emphasis on academic achievement. As in the elementary school, progress from one grade to the next is automatic, except at the end of Grade 9 when the learners have to write an intensive examination for purposes of admission to an upper secondary school. As with the elementary schools, success in the lower secondary schools determines acceptance at a prestigious upper secondary institution. The underlying premise constantly being that admission to prestigious educational institutions will inevitably result in a successful career (ISEI 1995:35-37).

At the end of the lower secondary school the learners have to decide between three possible career-orientated alternatives:

- leave school and start work;
- enter the upper secondary school; and
- enter a vocational school or technical college (Lynn 1988:23).

The MOE (1993a: 45) recorded that in 1992 95,8% of *chūgakkō* learners enrolled in an upper secondary school (*kōtōgakkō*) while 0,6% enrolled at a college of technology. The remaining 3,6% is distributed to vocational training (0,8%), employment (1,7%) and unemployed 0,7% and 0,4% to include deceased, unknown and a statistical recount. (Note: rounding off of decimal fractions).

Part-time and correspondence options have become available at the conclusion of the lower secondary phase, however, most learners continue into the full-time upper secondary school. Full-time academic schools have greater prestige than the vocational and technical schools (Kobayashi 1988:705; Shirato 1988:721; Pretorius 1995:349-350).

3.3.3.5 Upper secondary school (*kōtōgakkō*)

The *kōtōgakkō* provide learners with a general and specialised curriculum (MOE 1993b: 21). The curriculum has been constructed around general education courses, general and specialised vocational courses, and vocational courses. The majority of learners i.e. about two-thirds, choose the general academic courses. The remaining third choose the vocational courses.

In this respect the Ministry of Education, Science and Culture recorded the following data for 1992:

Table 3.3
Students (%) by course specialisation

Course	Enrolment	Percentage
General	3 859 817	74
Agriculture	142 645	3
Industry	454 358	9
Commerce	532 465	10
Fishery	14 712	0,2
Home economics	115 020	2,1
Nursing	23 595	0,5
Other	69 015	1,2
TOTAL	5 211 627	100

(Note: rounding off of decimal fractions)

(Source: MOE 1993a: 52)

All students follow a common curriculum during the first year of the *kōtōgakkō*. Subjects include Japanese, Contemporary Society, Mathematics, Science, and English. The students choose either a literary or a scientific direction for the second and third year. The literary curriculum includes, choices from *inter alia*, Japanese, Japanese History, World History, Biology, Chemistry, and English. The scientific curriculum offers, *inter alia*, Japanese, Japanese History, Algebra, Geometry, Physics, Chemistry, and English (MOE 1993b: 52 – 53).

From April 1994 a comprehensive course was made available which would allow learners an option to either complete a general or a specialised course of study (MOE 1993b: 21).

The vocational curriculum is divided into a two-thirds vocational component and the remaining one-third of the time on a standard academic component. No particular vocation is envisaged in the vocational direction. Learning programmes include, agriculture, technical and commercial subjects, fishery, home economics, and trade related subjects. The vocational curriculum is taught at either a vocational high school (3 year course) or a technical college (also referred to as colleges of technology) (5 year course). Lynn (1988:42) holds that the “social standing of the vocational senior high school and technical colleges is rather below that of the academic senior high schools”.

The *kōtōgakkō* differs from the *chūgakkō*. Firstly in the fact that it is no longer compulsory, hence students do not receive free tuition, and secondly automatic advancement from one grade to the next is no longer a feature of the system. Examinations test much factual knowledge. Moral education, while not on the curriculum stresses discipline in relation to work and studies.

A “credit system” was introduced in 1988, which is a part-time or correspondence course at secondary level. A “credit system” for a full time secondary curriculum was introduced in 1993 (MOE 1993b: 21).

The MOE (1993a: 58 & 59) recorded that in 1992 at the conclusion of the *kōtōgakkō*. 32,2% of learners entered university, 16,1% a post-secondary special training college, 13,7% some form of vocational training, 32,4% entered employment, 4,8% were unemployed, while 0,8% accounted for the deceased, unknown and a statistical recount. (Note: rounding off of decimal fractions).

3.3.3.6 Higher education

(a) Introduction

- Universities (*daigaku*) were initially the only types of higher education institutions. Junior colleges (*tanki daigaku*) were established in 1950 because not all of the post-war higher education institutions could comply with university standards. Colleges of technology (*kōto senmon gakkō*) were established in 1962 as a third type of higher education institution. Learners are admitted as students on completion of nine years of schooling. The duration of a College of Technology learning programme is usually five years. In 1976 some of the “miscellaneous schools” (*kakushu gakkō*) were upgraded to special training college status (*senshū gakkō*), and have been included among post-secondary institutions of Japan. The majority of these vocationally orientated schools and colleges are private, they will however, be considered higher education institutions as they train students for specific vocations. An interesting feature of the Japanese higher education sector is the fact that Japan is the only industrial society in which private sector universities and junior colleges outnumber public sector institutions. When the miscellaneous and special colleges are

included in the data the result is a society where the provision of higher education is almost entirely under the control of the private sector (MOE 1993b: 29; Teichler 1997:276-279). Table 3.4 provides a summary of institutions and enrolment in the higher education sector based on data provided by Teichler (1997).

Table 3.4
Number of institutions of higher education in Japan: 1994

	Universities	Junior Colleges	Colleges of Technology	Special Training Colleges	Miscellaneous
Public	146	92	59		
Private	406	501	3	3076	
Total	552	593	62	3437	2934

(Source: Teichler 1997:277-279)

The role of each of these institutions of higher education in providing a relevant education in higher education will be discussed below.

(b) Universities (*daigaku*)

□ Admission

The National Centre on the basis of a standardised examination administers admission to a Japanese university for University Entrance Examinations. At a later stage of selection universities may administer their own examinations. Teachers' recommendations and individual interviews are taken into account. Teichler (1997:281) comments that the more prestigious a university the more it relies purely on examinations for admission. Fierce competition exists for university admission (ISEI 1995:73) the majority of students taking private lessons (*juku*) before sitting the entrance examinations. Other students either wait a few years, or attend a cram school (*yobikô*) before attempting admission to a particular university. The admission process has been modified and improved by the universities (ISEI 1995:74-75).

❑ Major fields of study

In May 1992 the major fields of study for undergraduates according to students' registration included:

- social sciences 39.9%
- engineering 19.6%
- humanities 15.6%
- education 6.7%

(MOE 1993b: 29; ISEI 1995:72).

Universities may have a graduate school which offers masters and doctoral courses with strong research orientations. The research orientation of Japanese universities may vary from one institution to another (MOE 1993b: 29; Teichler 1997:283).

A close link between teaching and research is not always upheld in the research sector (Teichler 1997:283).

❑ Enrolment trends

The MOE (1993b: 30) records an all-time high student enrolment in 1980 (33.5% enrolment ratio). This peak was followed by a decline in 1985, followed in turn by a steady expansion in successive years. Japan ranks very high in the world with regard to the proportion of their age-group enrolled at institutions of higher education. The government of Japan was aware of the rising trend in university enrolment during the 1950s and 1960s. They tried to change the trends by expanding admission to fields where critical shortages existed (e.g. technical, science and engineering), however, these efforts did not stop the expansion in the areas where there existed little or no demand in the employment section (Teichler 1997:284).

The decline in secondary school leavers came about in 1992 as a result of natural demographic factors, expansion in university enrolment continued. One of the reasons suggested for the expansion has been the problem of

employment immediately after graduation. The notion seems to exist that Japanese youth perceive their chances of employment to be greater if they are in possession of a higher education qualification. Relevance for employment is thus linked to university learning programmes and qualifications (Teichler 1997:284-286).

□ Discussion

The high demand for admission to higher education in Japan overshadows all levels of educational provision in Japan. Attempts to reform the admission process has been on-going, based on a 1987 report of the National Council on Educational Reform (ISEI 1996:93). However, critics from the West question the range of quality and reputation of Japanese universities (Teichler 1997:275). The link between Japanese higher education and employers is strong, transition to work is smooth, employers for further training recruit graduates from the popular humanities and social science faculties. In recent years the demand for admission to the private universities has increased, the national funding formula providing only 8.1% (in 1992), of private university expenditure, the result being a sharp increase in student fees. Finally, the increase in the demand for university education appears to have been along the public/private university divide, public university enrolling more students in science and technology, and the private universities in the humanities and social sciences. Reform initiatives at universities and graduate schools have endeavoured to address the issues of qualitative and quantitative expansion of higher education (MOE 1993b: 31; ISEI 1996:52-53; Teichler 1997:276).

(c) Junior College (*tanki daigaku*)

The junior colleges were established in 1950 as a provisional measure while the standards of the Japanese universities were being upgraded. They became a permanent feature of the Japanese higher education system in 1965.

Styled along the lines of the American junior colleges, the Japanese junior colleges offer training in fields such as home economics, literature, economics,

commerce, political science, education and teacher training. Applicants must have completed the *kōtōgakkō* to be admitted. Graduates enter employment, a small percentage (e.g. 3% in 1989) continue their studies (DES 1991:19; MOE 1993b: 30; ISEI 1995:77; Teichler 1997:278).

Junior college courses are usually two-year courses. Some colleges are offering three-year courses with an associate degree (*jungakushi*) introduced during the 1990s. The ISEI (1995:43) identified three characteristics of the junior colleges:

- a large number of the students are female (91.7%);
- a large number of these institutions are private (92.4%);
- a trend exists to locate junior colleges in medium-sized and small towns.

(d) Colleges of Technology (*kōto senmon gakkō*)

Colleges of Technology were established in 1962 as an attempt to respond to the need for more technical skills (Shirato 1988:723). Applicants must have completed the *chūgakkō*, (i.e. nine years of schooling) to be admitted. Most courses are five years in duration, and training takes place in specialised occupationally orientated fields such as mechanical engineering, electrical engineering, industrial chemistry, civil engineering, architecture, aircraft and aircraft engine engineering, printing, industrial design, and metallurgical engineering. Only a small percentage of the Colleges of Technology are private (i.e. 5.2% in 1994). Successful candidates are also awarded an associate degree (*jungakushi*). The final two years of a College of Technology learning programme may be considered part of higher education. These colleges make an important contribution to providing Japanese society with marketable skills (Lynn 1988:41-42; MOE 1993b: 30; Teichler 1997:278).

(e) Miscellaneous Schools (*kakushu gakkō*) and Special Training Schools / Colleges (*senshū gakkō*)

Classified as institutions of higher education these institutions offer secondary and post-secondary education of a specialised work-related nature. These institutions are situated primarily in the private sector. The *senshū gakkō* first

emerged during 1976 under their own name, however, they were actually a development of the *kakushu gakkô*, schools which were offering a variety of vocational course for learners who had not completed the upper secondary phase of schooling (DES 1991:20 & 21; MOE 1993b: 35).

❑ Miscellaneous Schools

These schools aim to provide adults and young people with an education fairly similar to that offered by the secondary schools and some post-secondary institutions (DES 1991:20). The focus of these institutions has been on vocational and everyday relevance; however, many general education courses are currently being offered to prepare students for university entrance examinations. Other courses include driving, home economics, foreign languages, etc. The duration of the courses is about one year, or 680 hours tuition per year. Shorter courses are also offered. University students frequently enrol at the Miscellaneous Schools to acquire practical skills not offered by the universities. Thus early morning and evening courses are offered (DES 1991:20 & 21; MOE 1993b: 35).

❑ Special Training Schools / Colleges

These institutions aim to provide high-level training in areas of specialised technical knowledge. Three types of courses are offered:

- upper secondary courses for those learners who have completed lower secondary school;
- advanced courses for students who have completed upper secondary education; and
- general courses, available to anyone, regardless of qualifications (DES 1991:20).

The duration of the courses is at least one year, with a minimum of 800 hours tuition per year. A three-year upper secondary course at a special training school entitles a student to apply for university admission. A variety of vocational and technical courses are offered in response to the demands of

society, the minimum stipulation being an enrolment of 250 students or more (MOE 1993b: 35).

□ General observations

- Special Training Schools / Colleges are exceptionally well-equipped, courses do however tend to focus on narrow specialism (DES 1991:20).
- General education courses are not excluded from curricula, but more time is allocated to the vocational areas of the course.
- These institutions usually operate in the private sector and are administered by a Board of Trustees.
- According to MOE (1993b: 35) there were 3 409 Special Training Colleges in May 1992, which amounted to a total enrolment of 860 000 students.

While no recent statistics are available, there is an expectation that these institutions will play a much greater role in responding to the demands of a society that is committed to life-long learning (MOE 1993b: 35). This conclusion is corroborated by the findings of Muta and Masuda (1996) who reviewed the expectations of Japanese industry from the formal education sector. The training outcomes of the special training schools featured favourably in the results of their study (Muta & Masuda 1996:46-50).

Muta and Masuda (1996:57) concluded that their survey showed a trend towards a preference in industry for recruits with a practical curriculum in formal education. This trend was particularly forthcoming from the manufacturing sector. The surveys also high-lighted the need, from the perspective of industry for qualitative language ability, particularly in English (Muta & Masuda 1996:52; cf personal interview Sadao Nomura, Co-ordinating Director, Toyota SA Manufacturing, 2 August 1999). Basic ability and good character traits featured high on the list of expectations by the Japanese companies from the formal school graduates (Muta & Masuda 1996:52). Relevance in educational provision in Japan is related to the performance of the Japanese economy. The reflexive relationship between economics and educational provision cannot be ignored in understanding the Japanese experience.

(f) Conclusion

Higher education in Japan has traditionally been three-tiered, i.e. university, junior college, and college of technology. In recent years the miscellaneous college has been included as a fourth partner in the former three-tier partnership. The miscellaneous colleges are mostly private sector institutions and are situated in the upper secondary phase of education as well as in the higher education sector.

Admission to prestigious universities over-shadows all educational activities in Japan. Recent reforms have been attempted to control applications and enrolments. The cost of tuition at private institutions of higher education has soared; the enrolment at universities has nevertheless remained high. Relevance in general education, as well as work-orientated courses motivates parents and students to pursue the higher-education-preparation-for-work approach in Japan. The guarantee of a job on graduation justifies the process. Relationships between higher education and employment in Japan are good. It is to be concluded then that in Japan relevance is in higher educational qualifications, based on a smooth transition from higher education to employment.

3.3.4 Trends, reforms and critical issues in the Japanese system of educational provision

3.3.4.1 Introduction

Reforms in the Japanese system of education dominated the 1990s. These reforms were initiated during the 1980s by Prime Minister Nakasone and influenced the perception of relevance in educational provision in Japan quite profoundly. This discussion will commence with an evaluation of reform in Japanese education. The paragraphs on trends will focus on the provision of vocational education in Japan and evaluate the Japanese approach of providing for the work-place *vis-à-vis* general education and institution-based,

learning programmes. Finally, the critical issues will be examined for problems of relevance in the Japanese system.

3.3.4.2 Reforms

(a) Introduction

Reforms in educational provision in Japan since World War Two was closely linked to the rapid economic growth which took place during the second half of the twentieth century (Ishizaka 1991:24; Muta 2000a: 4 – 5). The historical background to educational reform can therefore not be ignored. Pre-war militarism, World War Two, the Occupation and the reforms of that period left an indelible image on the structure of education and the process of shaping educational policy in Japan. Opposition politicians during the post-war era were cast into the role of defending the status quo. Schoppa (1991:256 - 257) is emphatic that the turbulent history of Japan worked to limit the ability of the government to achieve educational reform. This accounts for Prime Minister Nakasone's political motivation when he initiated the reforms of the National Council for Reform (NCER) in August 1991

A brief of review of some of the early post-war reform initiatives will indicate why they were not successful. Prime Minister Nakasone's reforms will then be discussed in more depth. It will be seen that all the reform initiatives were in fact aimed at relevance in education in respect of the rapid development of the Japanese economy.

(b) The relevance of the post-war reforms

The post-war reforms may be briefly summarised as follows:

1946 – 1952: the period of implementation of the post-war education reforms.

- 1947: New Constitution adopted, as well as the Fundamental Law of Education, and the School Education Law; establishment of the 6-3-3-4 system, and extension of compulsory education to nine years.

- 1948: Board of Education Law promulgated; boards of education set up in all prefectures and municipalities.
- 1949: Private School Law promulgated.

1953 – 1984: the period of improvement of the post-war education system.

- 1953: Central Council for Education, an advisory committee to the Prime Minister established.
- 1956: Board of Education Law abolished; Law concerning the Organization and Functions of Local Education Administration promulgated.
- 1958: Law concerning Standard Class-size and Staffing Quotas for Public Compulsory Schools promulgated; maximum class-size defined as 45 for elementary and lower secondary schools; colleges of technology were established.
- 1971: Central Council for Education recommended to the Prime Minister that drastic reforms in education, at all levels had to be considered.
- 1976: The system of “special training schools” and “miscellaneous schools” legalised.
- 1984: National Council on Educational Reform established as an advisory body to the Prime Minister (NIER 1990:86-88).

These reform initiatives achieved only limited success. Reference has already been made to the impact of history in the provision of education in post-war Japan. Other reasons as provided by Schoppa (1991:251-255) for the failure of post-war reform in Japan:

- The absence of consensus, and the role of political factors

Disagreements within the Ministry of Education that lead to the failure of major reform proposals during the 1970s. The conflict between the Prime Minister, Nakasone and the Liberal Democratic Party dietmen on education (i.e. the *zoku*) resulted in reform proposals being abandoned during the 1980s. Political factors thus impeded reform and the achievement of relevance in education.

The defenders of the status quo prevented the implementation of reform proposals. The dominance of the Liberal Democratic Party and the stability of that party's government contributed to reform stagnation; officials of the Ministry of Education had spent their careers building an educational system, they were reluctant to criticise that same system (Shoppa 1991:251-253).

□ Conservative Rigidity

The conservatism of the education sub-government halted the reform initiatives of the reformers, in a similar manner supporters of education from "outside" the system were unable to influence reforms because of a rigid and inflexible education system. Business, other government departments, or international agencies are not involved in the formal educational sector in Japan. This type of rigidity is characteristic of Japanese education and a major barrier to reform and achievement of relevance (cf Schoppa 1991:254-255; Muta 2000a:5).

(c) Discussion

It was recommended in 1971 to the Prime Minister that education had to be drastically reformed. The NCER was only established in 1984. Conservative intransigence accounted for this delay. Other factors influencing the delay include a protracted season of university unrest and negative public opinion. The immobilist politics of Japan may however, be cited as the main factor retarding reform. There was a lack of parental support for reform. Most parents were concerned only with their own child's progress. The point must be made that other factors in the Japanese system attracted attention, and placed increasing pressure on the government to initiate reform. The immediate catalyst that sparked off the reform process was the on-going problems of bullying and school violence (Ishizaka 1991:26 & 27). The Prime Minister decided to make educational reform a priority among the domestic political issues in June 1984.

(d) The relevance of prime minister Nakasone's reforms for the 1990s

□ Introduction

Nakasone, cited in Ishikaza (1991:27) defined the following problem areas in education his address to the NCER, June 1984:

- an increase in cases of school violence and juvenile delinquency;
- social climate that places too much value on the academic background of individuals;
- a uniform and inflexible structure of formal education;
- a need for internationalising our educational institutions.

These problems, as pointed out earlier, were presented to the NCER for reform in order to keep abreast of changing times. Relevance in educational provision was perceived for Japan within the context of developments taking place in the international community. The issues were debated, and the reforms processed and published in four successive reports over a period of three years. The final report, published on 7 August 1987, presented three basic points of view for educational reform (NIER 1990:72 & 73; MOE 1993b: 56):

- the principle of putting emphasis on individuality;
- transition to life-long learning;
- coping with the on-going changes of trends in internationalisation, and an information-orientated society. In line with the aims of this study, four of the major areas of reform will be discussed below. In each case, the relevance of the reform for Japanese educational provision will be evaluated.

□ Development of a System of Life-long Learning

This recommendation of the NCER reform process was designed to increase the relevance of educational provision in Japan. The most significant implication of this recommendation was the provision of structures designed to integrate education at all levels of learning. Policies were developed to promote life-long learning in ministries other than the Ministry of Education. It

was recommended that the provision of life-long learning take place at three different levels, i.e. state or national level, prefecture and municipal level (NIER 1990:76; Atchoarena 1992:53). The Ministry of Education, took the lead in implementing the reforms. There was a need for consultation on learning and hence the need for clear policy and a community framework in the prefectures. The ultimate success and relevance of the life-long learning system depended on the ability of providers to devise a system of consultation on learning. Universities and junior colleges were required to set up a definite framework for the admission of adults and the provision of extension courses. Priority areas in each community had to be established and enhanced. While the initiatives of private providers had to be respected central government and the local authorities gave indirect support to projects. The NIER (1990:76-77) elaborated on the specifics of the central government's vision for life-long education at community level.

In order to facilitate life-long learning the Ministry of Education promulgated the 1990 Law for the Promotion of Lifelong Learning. This law continues to serve as the legal framework for the life-long learning structures of the prefectures, and ensures that the provision of life-long learning takes place in the designated communities. The act made provision for the establishment of a National Council for Lifelong Learning within the Ministry of Education (Atchoarena 1992:54-55; MOE 1993b: 59). Other ministries of the state had to be included in the national plan in order to co-ordinate national policy on life-long learning. In this respect the Ministry of Trade and Industry established a Division of Lifelong Learning Policy and conducted professional educational activities through the medium of the Chamber of Commerce and Industry. The Ministry of Labour developed a policy on life-long learning by way of centres for workers. Moreover, other centres were planned for the advancement of life-long education within companies in order to develop the professional skills of people in industry. Other ministries of the state developed their own policies in respect of life-long learning (Atchoarena 1992:55-56).

In order to achieve relevance in educational provision the Japanese government perceived the need for a structured and integrated system of life-long education. In one sense this system operates beyond the formal school

system. The providers and the venues may be attached to facilities and staff of the formal school sector, but in another sense the lifelong learning system has a more holistic relevance to the formal school system, particularly at the upper secondary school level. Adults are accepted into the formal curriculum and the system of accumulating credits at the upper secondary level is flexible, and learning opportunities beyond the formal curriculum may include a variety of extension courses (Atchoarena 1992:58-60).

□ Reform of elementary and secondary education

The reforms of the 1990s were intended to abolish the roots of the educational problems in Japan, viz. uniformity, inflexibility and lack of openness. In an initial report the Japanese system of education was criticised as operating on the basis of teacher-centred modes of thinking rather than child-centred ones, there was an over-emphasis on memorisation. Classroom processes hindered the ability to think and judge independently. Criticism was levelled at the large number of stereotyped persons produced by the Japanese education system (Ishikaza 1991:27-28; 43-44). The reforms proposed by the NCER focused on new learning programmes (Courses of Study) for kindergartens, elementary and the lower secondary schools.

Reform in Japanese education is of necessity accompanied by the revision of textbooks as authorised by the Ministry of Education. Government policy guidelines therefore included the system of textbook authorisation, improvement of the quality of teachers, the improvement of national staffing quotas for elementary and secondary schools, the creation of a system of credits for the upper secondary schools, and the development of a healthy outlook on life which included a renewed emphasis on sport (NIER 1990:106).

In respect of textbook authorisation the very centralised system of screening Japanese textbooks was replaced by a more relaxed system of one single stage screening (Ishikaza 1991:22-24). The reforms in the secondary schools included the introduction of a six-year secondary school that would come about by combining lower secondary and upper secondary schools. In order to facilitate easier access to upper secondary education a credit system was

established for subjects in the upper secondary phases. The acquisition of subject credit is recognised, as well as granting of qualifications on the basis of credits. The credit system was expected to introduce greater relevance in the upper secondary phase with more diversity and flexibility in course content permitted by the Japanese educational authorities.

The Central Council for Education presented its 29th report to the Ministry of Education in April 1991. In this report the Council affirmed the direction of the reforms and stated that in order to adapt to on-going societal change, education systems had to be adapted to the needs of the children. Special attention was given to reducing the size of classes. In 1987 the maximum class size for public schools was between 41 to 45. It was recommended that the average norm of 31.5 for elementary schools and 38.1 for lower secondary schools be reviewed in terms of addressing the needs of individual children. The report stressed the need to decrease the amount of mental pressure on children, and pointed to the recovery of human dignity and individuality of children. The report further recommended that the procedures for the selection of entrants be improved to reduce the competitive element in entrance examinations. In this respect a life-long learning society was valued as creating opportunities for people to participate in learning opportunities at any stage of life. The outcomes of their learning would be evaluated and recognised. This approach to learning was able to reduce the pressure of succeeding at the upper secondary level and college or university entrance stage of life (MOE 1993b:58).

□ Reform of Higher Education

Ishikaza (1991:51) highlights some of the many problems that surrounded Japan's entrance examinations:

- too many applicants concentrating on a limited number of prestigious universities, resulting in excessive competition;
- too much emphasis on achievement tests, and too little consideration of overall ability and aptitude;

- upper secondary schools are evaluated according to number of students admitted to prestigious colleges and universities;
- the heavy emphasis on scholastic achievement tests has resulted in the proliferation of private institutions (*juku*); many families who cannot afford *juku* are disadvantaged.

In order to address these critical issues the reform policy guidelines for higher education included the following:

- to individualise, activate and heighten university programmes;
- improve and reform the structures and programmes of graduate schools;
- the reform of the system of university entrance examinations;
- to extend financial assistance to private educational institutions.
- (NIER 1990:75).

The recommendations of the NCER endeavoured to introduce more flexibility and individualisation into the provision of higher education. This included issues such as the “examination hell” of Japanese education. However, apart from the issues of admission which were dealt with in the reform recommendations, the research programmes of Japanese universities had to be restructured to be considered worthy of international recognition (NIER 1990:98). One of the implications of this kind of international thinking was the need for universities to strengthen their links with society. In order to remain relevant to society, joint research programmes with the industrial sector had to be prioritised (MOE 1993b: 48). Teichler (1997:293) develops this line of argument in relation to the changing labour market for graduates. He states that previously graduates were considered as “raw material” for in-company training, a growing trend now exists for companies to encourage science and engineering students to complete a master’s course before entering employment. The demand for specialisation in computer science is applied to the explosion in demand for higher education with computer-related specialisation. Relevance of educational provision in a high-income economy is very closely allied to specialisation in information technology, and computer science is viewed as an essential component of twenty-first century relevance. This aspect is closely related to two further reforms, to be dealt with under one

heading, viz. the promotion of scientific research and the demands of the information age (NIER 1990:79).

□ Scientific Research and Information Technology

The Ministry of Education has been increasing its financial assistance to researchers in key areas of scientific research. In this respect the private sector has been encouraged to expand activities for co-operative research. Information literacy has been encouraged in schools, and in various non-formal education facilities. Teacher training and teacher in-service training in information science and technology is promoted. University faculties have been restructured in order to ensure that the training and recruitment of information engineers keeps pace with the demands of Japanese society (NIER 1990:78-80; MOE 1993b: 48-49).

□ Conclusion

Educational reform in Japan during the 1990s is to be viewed in the context of the limited success of the post-war reforms. Political factors cannot be overlooked, and in the case of Japanese politics the restraining influence of Japanese conservatism restricted major reform initiatives. A further factor that influenced educational reform in Japan is the rapid economic growth that took place after World War Two. In a certain sense economic success retarded reform, as conservative die-hards applauded the education system for contributing to the economic achievements of Japan, other liberal minded reformists urged the government to proceed with major reforms in line with the demands of rapid of national globalisation economies. The on-going changes of modern science and technology required greater flexibility in the education system in order to adapt to the buoyant trends of international markets. Japan had to take cognisance of the need for greater relevance in educational provision, and to create a system of education that was more responsive to the problems of a high-income economy.

The educational achievements of Japan have not been without personal costs to Japanese children. These pressures were identified as generating

psychological maladjustment, fostering conformity and memorisation at the expense of creative thinking, and resulted in adverse effects on less able children. With suicide rates used as an index of extreme reaction to stress the Japanese government was placed under pressure to initiate reforms, and to adapt the system to cultural and social changes in industrial and employment structures, as well as the demands of an information-intensive society driven by internationalisation.

3.3.4.3 Trends

(a) Introduction

The Japanese system of education has a strong academic orientation with an equally strong emphasis on general education. This is indicated in the enrolment figures.

Enrolment statistics for Japanese institutions indicate strong support for a general education orientation.

Table 3.5
Enrolments at post-compulsory institutions of learning, May 1992

Institutions	Enrolment
Upper secondary schools	5 218 497
Colleges of technology	54 786
Junior colleges	524 538
Universities	2 293 269
Special training colleges	861 903
Miscellaneous schools	389 807

(Source: MOE 1993b: 17)

The total enrolment in May 1992 for all institutions (kindergarten to university) was 25 365 318. These trends are clearly biased towards upper secondary education followed by a university education. They have been fairly consistent since 1950 (MOE 1993b:18). Enrolment trends are still in favour of Japanese language and learning programmes compiled from the traditional subjects. Tables 3.6 and 3.7 indicate the strong bias towards humanities at junior colleges and universities.

Table 3.6
Distribution of junior college students by fields of study

Field of study	Percentage (%)
Humanities	26,7
Social Sciences	13,6
Education	15,4
Home Economics	23,7
Health	5,6
Engineering	4,8
General Education	3,5
Agriculture	0,8
Others	5,8

(Source: MOE 1993b: 30)

Table 3.7
Distribution of university undergraduate students by fields of study

Rank	Field of study	Percentage (%)
3	Humanities	15,6
2	Engineering	19,6
1	Social Sciences	39,9
6	Natural Sciences	3,4
7	Agriculture	3,3
9	Home Economics	1,8
9	Pharmacy	1,8
8	Medicine and dentistry	3,2
4	Education	6,7
5	Others	4,7

(Source: MOE 1993b: 29)

The private sector on the other hand, plays a leading role in vocational education. Hence the steady growth in the Special Colleges and Miscellaneous Schools. The Japanese emphasis on life-time employment has become an article of faith in Japanese companies (McCormick 1991, in Ryan (ed) 1991:159). The Japanese system of education, according to McCormick (1988:37), is remarkably free of vocationalism, the broad academic emphasis is characteristic of the Japanese system. Trends in the provision of education in Japan indicate that Japanese employers value the personal qualities produced by the Japanese education system, and that the school-based general education and firm-based vocational education is likely to remain

unchanged (McCormick 1988:45-47; LeClerq 1989:183). The relevance of vocationalism in the provision of education in Japan will be discussed as a distinct trend in the Japanese system of education.

(b) Vocational Education and work-orientated relevance in Japan

□ Introduction

Dore and Sako (1990:34) draw attention to the stipulation of the Japanese education act that at least one third of all tuition time must be devoted to general education, in practice, probably more time is devoted to general education. The following paragraphs will explore the relevance of vocational education in a high-income economy that is strongly biased towards general and academic orientations as a preparation for employment.

□ Vocational Education in the Public Sector

The Ministries of Labour, Health and Transport administer some of the vocational schooling in Japan; however, collectively the public sector provision of vocational education is very small. The Ministry of Labour provides for initial training for school leavers, and further in-service training; other training provided by this ministry includes training for the unemployed, and for vocational instructors (McCormick 1989:139-141). The Ministry of Health administers nursing schools, while the Ministry of Transport administers schools for seamen. The Ministry of Construction administers training for the construction industry. McCormick (1989:141) states that there were about 150 vocational schools operating under ministries other than Education and Labour in 1988. He comments on the promotion of the Small and Medium Enterprise Agency of the Ministry of International Trade and Industry which trains technologists in ten major Japanese cities (McCormick 1989:139-141; Bitzer & Freeman 1993:72-73). The contribution by the public sector to vocational education has been small but significant, the prime responsibility for the provision of relevant post-secondary vocational education in Japan has however, been assumed by the private sector.

(c) Vocational Education in the Private Sector

Japan has one of the most highly educated workforces in the world (Stainer 1995:4). 85% of top managers in Japan have university degrees, in comparison with 24% in the United Kingdom. It is also a fact of Japanese economic society that new employees have a better basic education before their first day at work, and that they receive significantly more on-the-job training than new employees do in the West (Stainer 1995:4). A further fact of Japanese economic society is that more money is spent on training in Japan than in the United Kingdom, and that most of the training takes place in the private sector. LeClerq (1989:188) states that Japanese firms have always thought that it was their responsibility to provide the necessary training for their employees. From the above discussion it is evident that in Japan most of the formal Vocational Education takes place in the context of the workplace, hence McCormick (1988:37) can say unequivocally that Japanese education is remarkably free from the more obvious manifestations of vocationalism.

□ The relevance of firm-based vocational education for Japanese society

The formal school systems in Japan and in-company training have been rather remote from one another (Muta & Masuda 1996:43). What is of significance in Japan is the transition from school to work and the link between in-company training and the Japanese management. In other words, the relationship between labour and capital. Muta and Masuda (1996:46) state that:

“...the money and time that companies spend on educating employees are large, but as long as the employee keeps working for a company, it will see return on its expenditure; in-company training aims to develop not only the specific skills which are required in a particular job but also the potential ability of each individual”.

The relevance for employers lies in anticipated life-long employment, and the fact that investment in human resources will invariably benefit the company. The point has been made repeatedly that all the companies train new recruits

extensively in job specific skills, but that the foundation on which they build is the basic education received at upper secondary school, junior college, or technical college, or university (Bitzer & Freeman 1993:73). The low level of vocationalism in Japan is frequently defended on the grounds that employers value the personal qualities produced by the Japanese system. Specific qualities cited include social and organisational skills, decision-making skills, and the development of styles of consultation. Some support exists for the examination system of Japan, which it is believed, fosters work-related values (McCormick 1988:45-46).

Companies in Japan expect to train recruits specifically for a future in the company, and no preconceived ideas exist regarding direct usefulness of school or university learning for the work-place.

“...few people believe that what is studied at universities directly helps graduates in their careers, especially graduates in the humanities and social sciences; the educational content of university courses are not always practically orientated – rather, university graduates are expected to be more flexible in an actual work environment”.

(Muta & Masuda 1996:45)

Once the annual employment of new recruits has been completed companies proceed with initial training. A new employee is assigned a mentor (cf Nomura 1999). Core training for new employees is on-the-job training, while off-the-job training serves a complementary role, independent learning constitutes a third type of training (e.g. correspondence courses, or company-designed learning programmes (McCormick 1991:166 -173; Teichler 1995:67).

The main purpose of on-the-job training is to provide specific knowledge and skills, while off-the-job training focuses on the broader aims of the employee as a member of society or an employee of the company. Personality issues feature in learning programmes as well. Japanese companies appreciate the high standard of education produced by schools, and an employees' future prospects in a company may be positively influenced. However, company

policy for either off-the-job, or on-the-job training does not change in response to an increase or decrease of school standards, or the ability of new recruits (Muta & Masuda 1996:49). Japanese company-based vocational education and training remains unaffected by changes in the education system, rather industry is affected by economic changes in society which has a direct affect on the employment policy of a company (cf Muta 1997: 11 – 19).

Companies, large, medium and small, engage in training, and provide access to continuing education. The differences to be discerned between large and small-medium companies lies more in matters of degree rather than the kind of training which may be provided. Large companies are able to offer assistance for self-education, correspondence courses, etc., and may have the financial resources to support a company college for off-the-job training. Small and medium-sized companies may engage in subcontracting (LeClerq 1989:191; McCormick 1989:142).

Training experiences and qualifications of employees are however, recognised only by the employer, and portability is not possible in any formal manner.

In reply to my question on national recognition of in-company training Professor Hiromitsu Muta replied:

“In some cases, a company encourages the trainees to take national certificate exams as part of in-house training. In [such] cases, the certificate is nationally recognized”.

(Correspondence: Hiromitsu Muta: Tokyo Institute of Technology: 12 September 2000)

Two concluding observations emerge from the discussion above. In-company education and life-long employment go hand in hand in Japan. The issues of youth unemployment are not critical issues in Japan, hence the low level of vocationalism (cf McCormick 1989:42). The second observation is that the system seems to work, and even if it didn't work the case for vocationalism in Japan would continue to remain dubious.

"Education has served the economy sufficiently well, and the economy has prospered relatively well so that there has not been the clamour of vocationalism evident in Western industrial economies...if the economy were failing to meet expectations, and if these failings could be attributed to educational shortcomings, then the case for vocationalism would be considerably stronger; yet it is far from clear that it would carry the day"

(McCormick 1989:47)

The case of Japanese Special Training Schools is further evidence of Japanese commitment to preparation for work outside the formal schooling system.

□ The Relevance of the Private Sector and Japan's Special Training Colleges

Reference has already been made earlier to Japan's Miscellaneous Schools (*kakushu gakkô*) and the Special Training Colleges (or schools) (*senshu gakkô*). In this paragraph the emphasis will be on trends in the development of these schools in the context of the private sector.

The ISEI (1995:71) states that most of the Miscellaneous Schools are privately operated. The range of learning programmes offered by the Miscellaneous Schools is very wide so as to make it possible for schools to remain relevant to the needs of Japanese society. The reforms of the Ministry of Education during the 1990s made provision for a number of Miscellaneous Schools to be reclassified as Special Training Colleges. The demand for high level vocational education increased quite steadily during the earlier years of the history of these colleges and student numbers increased accordingly. Cantor (1987:38) stated that one of the reasons for the increased student enrolment at the Special Training Schools was the fact that many parents felt that their children's job prospects would be greatly enhanced by attending a vocational institution rather than an institution which offered general academic learning programmes. However, Japanese traditionalists raised doubts about the excessive amount of emphasis placed on vocational education at the expense

of general education (Cantor 1987:39; ISEI 1995:78). Nevertheless, the trend towards privately owned Special Training Colleges continued as the standards of living of parents improved, and the Special Training Colleges embarked on vigorous marketing techniques. The relevance of these institutions exist in the fact that they are one of the few avenues available to school leavers outside of direct employment where job-specific vocational training can be obtained (Cantor 1987:38). This comment must be contrasted with an earlier comment to the effect that the Japanese vocational school has always been viewed as a last resort admission for learners who do not succeed in gaining admission to other types of post-compulsory institutions (Bitser & Freeman 1993:72).

Cantor (1987:38-39) reported some of the advantages of a private sector base for the Special Training Colleges:

- no national examining bodies existed initially to validate courses, the schools were therefore able to adapt rapidly to changes in the workplace; a national system of licensing has however been introduced;
- some of these institutions are extremely well-equipped with up-to-the date equipment; this is possible if the institutions are funded by the private sector; as consumers of the training, relevance in provision can therefore be ensured;
- the majority of graduates of the Special and Miscellaneous Schools find employment in the vocational fields in which they were trained; they are much sought after by employers in preference to university graduates;
- the smaller companies who have limited capital and are not able to provide training of the same quality and duration as the larger companies particularly seek the graduates of these institutions after.

The private sector involvement in vocational training for the workplace has been criticised for being too profit orientated, and that standards vary considerably from one school to another. The Ministry of Education did however, acknowledge the unique contribution made by the private sector *vis-à-vis* the Special Training Colleges in the NCER Reforms. Prime Minister Nakasone appointed the President of the National Association of Special Training and Miscellaneous Schools to the NCER. This was a formal

acknowledgement of the valuable role played by the private sector in the provision of vocational education and training in Japan. In response to my question on the growth of the Special and Miscellaneous Schools, Professor Muta replied, "Yes, Special Schools increased rapidly in general, although they have a hardship lately" (Correspondence, 12 September 2000). Growth has taken place, and reform has been effected in order to balance workplace relevance with government concerns for standardisation and regulation of qualifications. Problems exist, but these are to be expected, as "relevance" is not a static concept. Changes in the employment system inevitably result in a re-definition of what constitutes "relevance", Muta and Masuda (1996:52) hold however, that "it seems that the expectations of Japanese companies of school education still focus on basic ability and character-building".

(d) Productivity, the Private Sector and Life-long Education

□ Introduction

For the Japanese economic success is a national priority. Economic success implies productivity that in turn implies a qualitative workforce. Stainer (1995:4) holds that the Japanese understand the need to develop individuals to their full potential. Allied to the human resources emphasis of Japanese productivity is the notion of investment in a qualified workforce with a view towards life-time employment in one company. Life-long education is an integral part of firm-based vocational training. The problem of relevance in educational provision for the Japanese is resolved in the on-going educational development of the workforce. This aspect of educational provision is beyond the immediate aims of this study, but for a further acknowledgement of the fact that productivity in the private sector is based on a sound education system. The MOE (1993b:56) states emphatically that "education has served as a driving force for the economic, social and cultural development of the nation". These paragraphs will make reference to the relationship between productivity, the private sector and life-long education. The concluding paragraph will contextualise the evaluation into the context of the formal school sector.

□ Life-time Employment, Investment and Market Trends

McCormick (1991:159) notes that Japanese companies are willing to invest in employee skill development if they can be assured of a return in respect of productivity. However, McCormick also notes a recent trend to re-think the nature and purpose of training employees. Spending more money on training does not necessarily imply a more productive workforce. One of the trends noted by McCormick (1991:175-176) in this respect was that the life-time employment system was becoming very expensive and difficult to maintain. An ageing labour force, slower growth in the world economy has to be considered in relation to the human resource value of the younger generation (*shin-jinru*) who are willing to engage in a rigorous and competitive educational system, to acquire organisational skills, and to apply their skills across a wide range of company tasks (Muta 2000a: 7).

□ Life-time Employment, Productivity, and Economic Recession

It has been stated repeatedly that Japan's "two most precious resources are people and time" (Stainer 1995:7). However, the utilisation of these resources has had to be adjusted during the 1990s. Trends have emerged among the younger employees (*shin-jinru*) to question, inter alia, long working hours and sheer unquestioned obedience. The older generation on the other hand has demonstrated arrogance (Stainer 1995:10 & 11). Productivity and lifetime employment is being questioned. Large companies have sustained losses and the challenges are being addressed in terms of a "more efficient use of corporate human resources" (Stainer 1995:10). Attention is now being focused on sectors in the economy other than manufacturing, e.g. the service industries and agriculture. Multi-national investments are taking place in the manufacturing and service sectors in developed and emerging economies of the world. Adjustments of this nature require a pliable and adaptable workforce. Narrow specialisation is perceived to be counter-productive. Japanese productivity may find itself moving away from its traditional position of life-time employment, but the basic principles of Japanese productivity remain intact: attention to detail, commitment, mutual respect and co-operative spirit, as well as discipline. The close link between productivity and a highly-

qualified workforce resides in the intrinsic qualities of a workforce that has been educated at all levels to face the challenges of a competitive global economy (Atchoarena 1992:52-56; Stainer 1995:4-11; ISEI 1996:40-58).

(e) Conclusion

Economic success in Japan is people-based. The development of human resources is a priority in Japanese society. This takes place on the foundations of good general education. Firm-based training seeks to invest in people as relevant skills training has a direct affect on productivity. In the training process a one-to-one relationship is established during initial training, however, training is supplemented by on-going training either on-the-job, or off-the-job. In order to remain relevant internationally training and education (or re-education) is viewed as being life-long. This process of interval training is imperative as the employee proceeds up the promotional ladder of the company.

The formal school system cannot be expected to keep abreast with the rapid technological changes, and the employee demands of the company, the role of schools, colleges and universities is therefore perceived to be preparatory to specific training for a vocation. Nomura (1999), made specific mention of the importance of language (English) as a requirement for international success in companies. It is concluded that good communication skills are essential for international trade, but a university degree is not necessarily a pre-requisite. What is more relevant is linguistic fluency in a foreign language, and an understanding of culture, and basic life-skills such as building trust between negotiating partners. A sound general education will suffice. While 80% of Japanese school-leavers proceed to university, the standards of school-education are not very high, as a result of automatic passing. The employers are therefore increasingly looking at the Special Schools for employees with a relevant educational background, viz. the possession of practical insights complemented by good general educational foundations.

3.3.4.4 Critical issues

(a) Introduction

The critical issues will endeavour to summarise salient problems in the Japanese education system. These issues are critical firstly, because they will determine the future prospects of the nation and secondly, because these problems will have to be addressed if Japan intends to retain her position as one of the world's foremost high-income economies. These issues are problems that relate to Japan but they are also problems that may be found in other high-income economies of the world. Critical issues if not resolved may impact negatively on the relevance of educational provision.

(b) The competitive element in schools and universities

Economic growth in Japan resulted in an intensification of competitiveness in school and university entrance examinations. Much stress has been placed on entrance examinations. According to the ISEI (1995:35) the competitive element has "resulted in the distortion of the educational process". The ultimate goal of placement in a prestigious university as a means to obtaining a good job on graduation overshadows all else. Examinations have dominated the thinking of parents and teachers. The role of Japanese cram schools and hiring of special tutors to prepare children for entrance examinations have been noted above. This phenomenon persists in Japanese society (Pretorius 1996:361).

(c) *Yugami*

The word *yugami* refers to the distortion of children's development, a problem related to the high income-earning phenomenon of Japan. Physical and mental problems in children have come to be viewed as a problem of an overly competitive educational system. Reference was made above to the prevalence of juvenile delinquency among Japanese youth, which included school phobia, truancy, bullying, and violence in school. The *yugami* phenomenon is related to the cultural and social milieu of communities, but

there are indications that *yugami* has a direct link to the excessive emphasis on examinations, achievement in school, university and in the workplace (ISEI 1995:35; Pretorius 1996:361).

(d) The demand for pre-school education

There is a trend for more and more parents to expect a sound pre-school education for their children in order to prepare them intellectually for the formal schooling system. The entrance examination scenario once again dominates the demand factor. There was a government plan to lower the compulsory age for admission to the formal schooling system by one year. This did not materialise and the demand for pre-school education continued. With more mothers wishing to work in order to provide a qualitative education for their children the demand for educational and care facilities at an increasingly younger age remains a critical issue, as more and more unauthorised nursery schools or “baby hotels” enter the market (Lynn 1988:18-20; ISEI 1995:36).

(e) The problem of the increase in demand for secondary education

In 1976, 92.6% of junior high school-leavers entered the upper high school. The Ministry of Education tried to encourage learners to enter vocational high school. The Ministry of Education’s motive was to expose learners to skills required in the workplace. This did not work, and the demand increased for more general education. More applications were received for the upper secondary school level. In March of 1992, the transfer rate from the junior (or lower) high school to the upper high school was 95.9% (ISEI 1995:36). The same scenarios with regard to examination stress exist at this level as has been highlighted in previous paragraphs. In order to gain admission to the upper high school, entrance examinations, which evaluate intelligence and ability, are set. The stress of admission to an upper high school has distorted the functioning of the lower high school. The “examination hell” issue of Japan is a critical issue and the possibility of introducing combined lower and upper high schools in Japan is being explored (ISEI 1995:36-37; Pretorius 1996:362).

- (f) The problem of the increase in demand for higher education

The number of universities in Japan increased dramatically after World War Two. In 1992 the university students numbered 2.3 million and the students in the junior colleges numbered 524 000 (ISEI 1995:37). Massification of higher education in Japan produced problems, which resulted in poor standards of attainment. With mass education quality has been sacrificed in favour of quantity. In Japan facilities have become neglected and staff-student ratios have not always met with national standards. There was a brief period at the beginning of 1977 when student numbers declined in what appeared to be in support of the popularity of post-secondary trade and vocational schools. This temporary decline was also a reaction to entrance examination stress. However, the decline was reversed and student applications from the upper high schools for universities increased once again. Concern was expressed about the standard of education received by students at universities (Nomura 1999). When viewed against the Japanese tradition of company-based training, the issue becomes critical, as companies seek employees with high technological expertise, along with critical thinking skills. Personal qualities of good human relations are also required. Future developments in the internationalisation of the economy will determine whether employees from universities or the more vocationally orientated Special and Miscellaneous Schools will be more suited to the demands of the globalisation of the economy (ISEI 1995:37-38; Teichler 1997:284-288).

3.3.5 Conclusions

3.3.5.1 Introduction

Factors of relevance for the Japanese system will be concluded in historico-legal data, socio-economic, structure of education data, and in the material that emerges from the trends, reforms and critical issues of provision of education in the Japanese system of education. Barriers to relevance will also be indicated.

3.3.5.2 Historico-legal factors

Factors of relevance exist in the value placed on education in the long history of Japan (para 3.3.1.1). The Japanese emphasis on education can be traced to Confucian values and the educational developments that took place during the Tokugawan and Meiji periods (para 3.3.1.2 (a)(b)). The notion of the economic value of education became entrenched in Japanese society from very early times. During the closing years of the nineteenth century the industrialisation of Japan was supported by reforms in education, in general and vocational education (para 3.3.1.1 (e)(f)). The strong emphasis on the value of education in Japanese society was a distinct factor in the recovery of Japan after World War Two (para 3.3.1.2 & 3.3.1.3).

The relevance of an enabling legislative framework emerged in historical data. It can be concluded that legislation institutionalised the socio-cultural traditions of Japanese society. National issues associated with the high value attributed to literacy, life-long learning, and the growth of the vocational school movement were entrenched in early legislative frameworks (para 3.3.1.1 (g)). Militarism and war all but destroyed the Japanese economy. The new wave of legislation after the Second World War once again entrenched Japanese values and respect for education. Based on the principles of democracy and free enterprise, the post-war legal reforms of Japan created an environment in which the individual was able to develop in a free society, and contribute towards re-building the Japanese economy (para 3.3.1.2 (b)(c) & 3.3.1.3).

3.3.5.3 Socio-economic factors

Japan has a particularly strong private sector (para 3.3.2.5 (a)). Training for work and life-long employment in a company has been the function of the private sector in Japan for a long time. Internationalisation and rapid technological changes have raised questions about the relevance of company-based training. The development of the Miscellaneous Schools and Special Training Colleges introduced a new factor into the Japanese system of education. These institutions were designed to ensure that the problems of work-place relevance were addressed in secondary and post-secondary

education. Work specific training, with the aid of up-to-date technology and equipment can be provided in institutions managed by consortia in the private sector (para 3.3.2.5 (b)). The strong economy of Japan is concluded to be a factor of high relevance (para 3.3.2.1 – 3.3.2.4). The reflexive relationship between the Japanese economy and education is generally acknowledged as holding vocational relevance for this high-income economy, globally acknowledged as a world leader in technology.

3.3.5.4 Structure of education factors

The strong emphasis on education in Japan is a factor of high relevance. The obsession with education commences with pre-school education and continues unabated until the learner either leaves school or has achieved a post-secondary qualification (para 3.3.3.1 – 3.3.3.6). The perception exists in Japanese society that relevance in education is achieved *vis-à-vis* general education learning programmes. Based on American educational learning programmes Japanese schools emphasise traditional liberal education values and curriculum content (para 3.3.3.4 & 3.3.3.5). This applies to the junior colleges and universities as well (para 3.3.3.6 (a) (b)). Limited relevance has been perceived in the Colleges of Technology; the growth of the Miscellaneous Schools and Special Training Colleges introduced another factor of relevance into Japanese society. For Japanese society high relevance is perceived in admission to a university (para 3.3.3.6 (b)). This approach appears to meet the basic needs of a very a very competitive Japanese society. Reformists in the upper secondary educational levels advocate more relevant learning programmes. For Japanese reformists factors of relevance exist in vocationalisation of aspects of the senior curriculum, as well as the establishment of new types of secondary schools. Conservative opinion in Japan view vocationalism in the upper secondary school as a barrier to relevance and an inferior alternative. The role of specific vocational preparation has become primarily the function of the company (para 3.3.3.6 (e) & (f)).

3.3.5.5 Trends, reforms and critical issues as factors of relevance

(a) Introduction

Criteria identified above as factors of relevance may be repeated in this paragraph as they impinge on the evaluation of trends, reforms and critical issues.

(b) Reforms

The reform process of the 1990s addressed the problems of relevance (para 3.3.4.1). Post-war reforms in Japan were of limited success. Relevance in educational provision in Japan was measured against economic success. Conservatism impeded educational reform in Japan until 1984 (para 3.3.4.2 (a)(b)). Academic learning programmes were scrutinised for relevance. The problems associated with relevance are related to Japanese participation in the global markets and her position as a leading high-income economy of the world. Global participation demands high-skill technicians in the fields of information technology, computer skills, and qualifications at higher education level (para 3.3.4.2 (d)).

The immediate catalyst for the reform process was concluded to be delinquency among Japanese youth. The problems of bullying and school-based violence prompted the Japanese reforms. Politicians and the policy-makers associated the delinquency problems to the rigidity and stress of the Japanese learning programmes.

Factors of relevance critical to the reform process included the development of a system of lifelong learning, the reform of elementary and secondary schooling, and of the higher education sector. The renewed emphasis on the relevance of scientific research and the critical need for Japanese society to remain world leaders in the field of information technology (para 3.3.4.2 (d)).

Life-long learning, the credit system, and the refocusing of educational emphases to the needs of the individual were issues of the reform process (para 3.3.4.2 (d)). Political immobilism was identified as a significant barrier to

relevance in the reform process in Japan. Conservative versus liberal values retarded reform in Japan (para 3.3.4.2 (b) – (d)).

(c) Trends

Trends in the Japanese system of educational provision hinge firstly, on the history and traditions of preparation for work (para 3.3.4.3 (b)), and secondly on the pressures exerted by the reformist movement in Japan. The first trend of high relevance in Japan is the strong academic orientation in educational provision in Japan (para 3.3.4.3 (a)). The second trend is the relevance of a very strong private sector and the almost exclusive involvement of the private sector in vocational education (para 3.3.4.3 (a) (b) & (c)). The public sector does not prepare many workers for the workplace. Neither do the schools. Vocational schools occupy very low status in Japanese society. Hence the noteworthy trend in Japan in respect of the Miscellaneous Schools and Special Colleges. A further factor of relevance to note is the private sector involvement in the establishment and management of these institutions (para 3.3.4.3 (c)).

Other ministries of state are also involved in vocational education, these include the Ministry of Labour, Health, Transport and of Trade and Industry. The Small and Medium Enterprise Agencies are involved in vocational education as well (para 3.3.4.3 (b)). A strong trend exists in Japan to invest in training. The success of the Japanese system of vocational education in the private sector is linked to the value placed on people and time. Well-trained people are synonymous with productivity (para 3.3.4.3 (c)).

Life-long employment and life-time education are further trends and factors of relevance that emerged from the Japanese country data. The direct usefulness of school learning programmes is not indicated in the Japanese data. This type of relevance is not an issue (para 3.3.4.3 (c)). The definition of relevance, as informed by the Japanese data, yielded the conclusion that relevance is not a static concept. The Japanese system indicates that relevance is relative and can change. A productive workforce needs to be adaptable to changing circumstances, as a result of the demands of the economy and the rapid changes taking place in the world markets. The value

of general academic education is thus attested in the requirements of the international markets. English language is a critical requirement for trading with the West, furthermore, relevant lifeskills are valued requirements. Relevant lifeskills include knowledge and understanding of other cultures and the ability to build up trust between business partners. The trend therefore in Japan is to emphasise academic general education and lifeskills (para 3.3.4.3 (c) & (d)).

Relevance in the transition from school to work is perceived in the reflexive relationship between the economy and the providers of education in Japan. Japan is a very competitive country, and the education system is an integral part of the achievement process of Japanese society.

(d) Critical issues

The competitive nature of the schools and universities were identified as critical barriers to relevance (para 3.3.4.4. (b)). Stressful schooling was identified as a barrier to relevance, so too the *yugami* phenomenon (para 3.3.4.4(c)). These barriers are phenomena of the high-income economies. The origins of these factors emerge during the pre-primary years. The demand for more qualitative pre-primary schooling was identified as early indicators of the life-long preparation for work that characterises Japanese society (para 3.3.4.4 (d)).

Excessive emphasis on examinations, cram schools and success has characterised Japanese schooling. So too the authoritarian, rigid and uniform nature of the schooling system. These issues were concluded to be distinct barriers to relevance in educational provision. The increased demand for upper secondary schooling as well as higher education was noted as a distinct trend. However, these demands were evaluated as critical issues. The Japanese country data indicated that critical questions were being asked in Japanese society about the relevance of this demand. It was concluded that these trends did not meet the needs of all the people of Japanese society. The vocational school, colleges of technology and the apprenticeship system do not hold appeal to the majority of Japanese youth. The ultimate goal of admission to a prestigious university overshadows all educational practice. With the rapid expansion of higher education in Japan critical questions have been asked

about the standard of education in Japanese universities, and whether degrees in social sciences or the humanities are really necessary for employment in the private sector. The relevance of educational provision in Japan has therefore been subject to searching questions, and conclusions have been ventured that certain social institutions of Japanese education are in fact barriers to relevance (para 3.3.4.4 (e) & (f)).

3.4 THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN SCOTLAND

3.4.1 Introduction

The reforms and developments in Scottish education will be investigated as the third high-income economy of this chapter. Certain aspects of the Scottish reform will be seen to be relevant to the provision of education in KwaZulu-Natal (KZN). Scotland is one of the four divisions of the United Kingdom and is administered from London. For the purposes of this study Scotland will be treated as an individual country, distinct from England and Wales. Scotland has its own legal, church and educational systems. The Scottish Office is directly responsible for the administration of Scotland. The Scottish Office Education and Industry Department (SOEID) "administers Government policy for education and training, and advises the Secretary of State on industrial and economic development in Scotland" (Scottish Office Website 1998).

3.4.2 Historico-legal data

3.4.2.1 Introduction

Recent reforms in Scottish educational provision have aimed to create a greater degree of relevance between education and industry. Gunning (1993:33) writes of the "astonishing pace of development", and states that "every aspect of vocational education and training ... has been radically changed". Fairley (1998, in Finlay, Niven & Young (eds) 1998:20) holds that "VET has become more Scottish as a result primarily of the reforms of the 1990s ... and differs in many ways from VET elsewhere in the UK". Of significance is the fact that Scotland has a coherent awards system that is

flexible, and responsive to the needs of business and industry (Gunning 1993:33).

The paragraphs that follow will examine the historical background to the present election of the first Scottish Parliament in almost 300 years, and the emergence of a distinctively Scottish system of VET that has stimulated world interest in Scottish education and industry.

3.4.2.2 Historical background

On the death of Elizabeth I of England in 1603, James VI of Scotland acceded to the English throne. As James I of England he united the crowns of England and Scotland. This precipitated the eventual union of the two parliaments in 1707 (cf Whitaker 1995:567). "The problems of economic viability made union inevitable in 1707" (Horn 1988, in *Encyclopaedia Americana* 1988:416; cf Paterson 1998:58). The Scottish economy became integrated with that of England, but many Scots felt resentful at the loss of their own legislature, frequently "evaluating Scotland as the junior partner in the merger" (Horn 1988:416). A separate administration in Scotland did ensure that Scottish national and cultural identity was retained. Scottish nationalism did, and still does, emerge from time to time, frequently in response to economic hardship, but by and large the union has remained and has prospered (Paterson 1998:58; Hassan 1999:1-5).

In many ways this trend of periodic negative reaction to economic distress continued from the beginning of the union into the twentieth century. World War I saw 74 000 Scottish lives lost, but it also saw the mobilisation of Scottish industry, particularly that of shipbuilding and engineering. The Great Depression of the 1920s resulted in a major setback for the thriving wartime economy of Scotland. Political radicalism resulted, and Scotland produced a few notable Unionist and Labour leaders. In 1934, partly as a result of economic distress, the Scottish National Party (SNP) was formed (Simpson 1991, in *New Encyclopaedia Britannica* 1991:117). Experiencing a brief period of electoral success during the 1970s, the SNP appeared to capitalise on the upsurge of Scottish nationalism following the discovery of the North Sea oil.

The Labour Government attempted to approve devolution legislation by means of a referendum in 1979. However, the percentage poll was unacceptably low, and the referendum was invalidated.

3.4.2.3 Background to the action plan

Scotland has nevertheless been influenced by the education debates of the English south. This was particularly true of the "Great Debate" on education and training, which arose during the mid-1970s as a result of concern about the standard of education in the schools. The debate sparked off a similar reaction in Scotland, and it provided the educational authorities with an opportunity of examining the school-to-work strategies that existed within the educational system. An inquiry found a confusing array of vocational awards administered by a range of bodies, some were Scottish-based and others English-based. These awards were generally based on national syllabuses but were heavily knowledge-based. An assessment was mostly by formal examinations. Although the various awards were well recognised for specific occupations, there was generally no credit given for part-completion and the awards were not transferable, in whole or in part, from one occupation area to another (Gunning 1993:18). It was against this background that the Action Plan, a consultative document was published. Raffe (1991, in Ryan (ed) 1991:59) however, holds that the Action Plan was an attempt by the Scottish Education Department (SED) to curtail English interference into Scottish affairs. Political motives can therefore not be ruled out in determining the historical foundations of recent reform in Scottish education and training.

3.4.2.4 The action plan: features and developments

The aims of the Action Plan were:

- to provide for all the vocational needs of the 16-18 year group;
- to rationalise vocational education and vocational qualifications;
- to make vocational education accessible, flexible and relevant;
- to introduce a modular curriculum with pre-defined vocationally relevant standards. (Gunning 1993:18)

One of the key features of the Action Plan was the establishment of a new body to administer the emerging modular system. The Scottish Vocational Education Council (SCOTVEC) was set up in 1985. SCOTVEC would operate a national system of quality assurance of standards. SCOTVEC would administer all new certificates issued, which would list every module completed successfully by a learner. A sophisticated computer database would be required to operate the national qualifications system (Gunning 1993:19-20). The prime objective of this system was to administer all qualifications, however, the creation of the organisational framework SCOTVEC, was decisive action by the Scottish Authorities to provide a more relevant education for Scotland (SCOTVEC 1994:4; Fairley 1998:36).

The economic needs of Scotland featured in the aims of the Action Plan. The provision of relevant learning programmes was however, the result of strong educational leadership. Industry was involved in the developments of Scottish educational reform through consultation, but educational leadership produced the Action Plan (Raffe 1991:56).

The Scottish reforms that resulted from the Action Plan included a range of comprehensive links that were introduced at secondary, and post-secondary level, enabling students to transfer between academic and vocational education (Fairley 1998:36).

Gunning (1993:20) states that the Action Plan's intention was to revolutionise the basic levels of vocational education and training. Learning programmes were thus developed at an Advanced Level, leading to technician level qualifications called Higher National Certificates (HNC) and Higher National Diplomas (HND). After the Action Plan was introduced these learning programmes were modularised, adding a more flexible dimension to existing programmes. Credit for partial completion was introduced.

Gunning (1993:20) records the detail of the credit system as envisaged during the phasing in period, 1988 – 1992:

"In the new system, introduced in a phased programme from 1988 to 1992, an HNC award is made up of a minimum of 12 credits (one 40-hour Higher National unit = 1 credit) and an HND award of a minimum of 30 credits. In each case, the precise mix of units in the award is determined by SCOTVEC through a process of validation. Thus, the learner is certificated for each individual Higher National unit successfully completed and, upon completion of the defined award programme, also receives a separate 'group award' in the chosen subject such as, for example, Higher National Certificate in Applied Physics"

In the same reference the above-mentioned author makes mention of record-keeping:

"For certification, SCOTVEC decided that each Higher National unit successfully completed should be listed on the same document as the National Certificate modules to provide a complete, cumulative certificate. This was first introduced in 1989 and is called the 'Record of Education and Training' (RET). It lists all successfully completed modules and units, details any group awards which have been separately certificated and records any agreed recognitions attached to particular modules or group awards (such as professional body recognition)".

The VET system that emerged during the 1990s encouraged the private sector to become involved on a voluntary basis by means of partnerships. The partnership body, ASCETT (Advisory Scottish Council for Education and Training Targets) was established to inter alia, set targets for improved performance at school, to advise government on targets to be adopted, to monitor and report on progress. It is of interest to note that half the members of the ASCETT Council are from the private sector, while the remainder comes from local government, further education, and other education related bodies.

The new partnership was to provide clear leadership in the process of developing vocational education practise. This included researching systems

in other countries, with the view to advising government on policy. Fairley (1998:37) describes the composition and influence of the ASCETT Council as follows:

“Half of the first ten-member Council was drawn from the private sector. The others came from local government, further education, the STUC (*Scottish Trade Union Council*), SCOTVEC and the SEB (*Scottish Examinations Board*). By 1997 ASCETT was already emerging as a powerful and influential stakeholder in the system. Its power derived from its influential members, from its unique relationship with government, and from the strongly consultative approach that it adopted. In 1994-5 the consultations involved some 9 000 people and 80 organisations.... providing a broad basis of support for its recommendations to government and helping to create consensus”.

The quality of the provision of education at the upper secondary level came in for scrutiny.

3.4.2.5 The Howie Report (1992)

In 1990 the Howie Committee was established by the Secretary of State to investigate the upper secondary curriculum, its qualifications, relevance, and to make recommendations to the Government (Gunning 1993:32-33).

The Committee's findings is summarised as follows:

- overall low achievement;
- inequitable distribution of challenges in different years;
- no coherent provision for vocational education, nor for co-ordinating SEB and SCOTVEC qualifications.

(Scottish Office 1997:6)

The Report initiated a radical reform of the examination structure in the upper secondary school, as well as the structure of the qualifications. The widening gap between vocational and academic programmes also came in for criticism

and review, (Rollinson 1992:25; Scottish Office 1997:7; Scottish Office Website 1998).

Rollinson (1992:25) reports that the Howie Report further recommended:

- the replacement of the Higher Grades and the Sixth Year Certificate with either the Scottish Certificate (SCOTCERT) or the Scottish Baccalaureate (SCOTBAC);
- SCOTCERT would be a one year or a two year course; based on the existing National Certificate Modules the certificate would combine general education, core skills and broad work preparation; the envisaged certificate would focus on 60% of the school population; and
- SCOTBAC would be a three-year course; the envisaged route would be the recognised route to higher education and the standard would be above the existing higher grade and some Sixth Year subjects; the envisaged baccalaureate would focus on 40% of the school population.

3.4.2.6 The Scottish Qualifications Authority

In order to achieve coherence in qualifications "Higher Still-Opportunity for All" was published in 1994. This document recommended that the SEB and SCOTVEC be combined into one single awarding body, viz Scottish Qualification Authority (SQA). The union took place on 1 April 1997 (Scottish Office Website 1998). According to the Scottish Office, White Paper on Education (cf Scottish Office 1997:6) the SQA would promote "parity of esteem between knowledge-based and practical learning and improve the status of the latter. The emphasis is on opportunity for all. Everyone, from those who have severe learning difficulties to those with exceptional abilities will be able to select from a large menu of programmes something that is right for them. There will be a strong emphasis on core skills, the essential transferable skills needed for work in a modern, technological society".

In his forward to the "White Paper on Education and Skills Development in Scotland", the Secretary of State for Scotland, the Michael Forsyth said that the aim of the White Paper was to ensure that the process of reform and raising the standards in Scotland was on-going. He claimed that Scotland had

“a better qualified workforce than ever before which is better able to meet the demands of the increasingly competitive modern workplace ... the programme of change which we have led has been guided by a radical vision of our education and training system in which schools, colleges, universities, teachers and training providers focus on quality and standards ... that vision has ensured that greater numbers than ever before have the opportunity to take part in further and higher education” (Scottish Office 1997:1).

3.4.2.7 The Scottish Parliament

The provision of relevance in education in Scotland may be attributed to political factors. The status quo in respect of the union with England may not have changed had it not been for Thatcherism. The profound reaction in Scotland to Margaret Thatcher's hostility to Scottish civil society was “a set of quite radical proposals for Scottish national self-government (Paterson 1998:66). Scotland's Parliament was established in May 1999, “after more than one hundred years of debate on devolution and home rule, thirty plus Bills presented to the Commons, two referendums and two Scotland Acts receiving Royal Assent” (Hassan 1999:1). Thatcherism aroused Scottish nationalism. The Scots were not prepared to risk political interference from Westminster into the domestic affairs of Scotland. Political and constitutional changes came about as a result of the Scots' pride in the unique achievements of the reforms in education, VET, and economic development.

Despite the inconclusive 1979 referendum on devolution the Scots set their minds on reforming their economy, their system of education, and their administration. Self-government at local level in respect of municipal authorities was introduced (Simpson 1991:107). In education school boards were introduced (Rollinson 1992:23). The trend in Scottish society has been towards devolution of power, and the provision of relevance at local, community, level of society.

3.4.2.8 Conclusion

Scotland has a long history that has been closely linked to that of the English south. Political developments during the late 1970s set in motion a series of events that resulted in dramatic reforms in Scottish society. These reforms were primarily educational, however, as a result of the integration of education and industry in Scotland the benefits of educational reform were extended to the industrial sector of Scotland. Developments with respect to the Scottish Parliament cannot be overlooked as a factor of relevance in Scottish society, however, the partnership between education and industry provides the key to the success of the Scottish reforms in education and will be examined later in this chapter.

3.4.3 Socio-economic data

3.4.3.1 Introduction

A few selected economic indicators will be cited to locate Scotland in the world economy. The indicators give an indication of the performance of the Scottish economy. This paragraph will indicate points of comparison with KZN.

3.4.3.2 Scotland

Scotland occupies the northern part of the main island of Great Britain. Scotland includes the mainland as well as the islands of the Hebrides, Orkney and the Shetlands. The population is concentrated around the main centres, e.g. Edinburgh, Glasgow, Aberdeen. The islands are sparsely populated, and many regions of Scotland are inaccessible. Physical features of Scotland include many peninsulas, fjords, lochs, rivers, estuaries and waterfalls (Whitaker 1995: 564).

3.4.3.3 The Economy

The Scottish economy has been dependent on developments in the English south as well in Europe. Problems were experienced with unemployment as

well as the decline of some of the major industries, such as coal mining, steel and shipbuilding. The move away from manufacturing to the industries of high-technology contributed towards the problems of the Scottish economy. The discovery of oil in Scottish waters in the 1970s did not imply an increase in revenue for Scotland. The British Government owns the oil fields and the revenue received have not accrued to Scotland. North Sea oil did, however, create tens of thousands of jobs, particularly in Aberdeen and parts of the Shetlands. Traditional industries of agriculture, fishing and forestry continue to contribute to the Scottish treasury. The computer, office equipment and electronic industries have expanded in the regions of Fife, Lothian and Strathclyde (Moulton & Macleod 1991, in New Encyclopaedia Britannica 1991:105 –106). The Scottish authorities have had to take cognisance of the fact that changes were taking place in Scottish society. The problems experienced in the Scottish economy during the 1970s and 1980s had direct implications for education. The problems of relevance in education had to be addressed.

3.4.3.4 The indicators

Scotland will be compared with selected countries in order to establish a useful frame of reference. Comparative data will include the GDP, area, population, and population density. Table 3.8 provides a summary of basic economic data.

Table 3.8
Basic economic data: Scotland (1996 – 1998)

Population	5 122 500 (1997)
GDP	\$79 592 m ** (1996)
GDP per capita	\$15 520 ** (1996)
EAP*	2 484 000 (1998)
Area	78 133 km ² (1996)
Unemployment	5.5% (Dec. 1998)

(Source: *Scottish Enterprise Website 1999*)

* Economically Active Population

** Sterling converted to dollars (Rates, 24 September 2000), for purposes of comparison

Using the above data, and World Bank (1997:206-207; 214-215; 236-237) indicators for 1995 the GDP places Scotland between the categories middle-

income economy and upper-middle-income economy. Scotland also compares favourably with high-income economies such as New Zealand (\$57 070), Ireland (\$60 780), and Israel (\$91 965). The World Bank classification of economies is based on GNP per capita, and in this respect Scotland qualifies as a high-income economy in her own right. Table 3.9 illustrates the data:

Table 3.9
GNP per capita comparisons

Country	GNP per capita	Classification
Slovenia	\$8 200	Upper-middle-income
Greece	\$8 210	Upper-middle-income
Korea, Rep.	\$9 700	High-income
Portugal	\$9 740	High-income
Spain	\$13 580	High-income
New Zealand	\$14 340	High-income
Ireland	\$14 710	High-income
Israel	\$15 920	High-income
South Africa	\$3 160	Upper-Middle-income

(Source: World Bank 1997:215)

Table 3.10
Population and surface area comparisons

Country	Population (millions)	Area (km ²)
Slovenia	2.0	20
Greece	10.5	132
Korea, Rep.	44.9	99
Portugal	9.9	92
Spain	39.2	505
New Zealand	3.6	271
Ireland	3.6	70
Israel	5.5	21
KwaZulu-Natal	8.7	92

(Source: World Bank 1997:215; Central Statistics 1996 1.1 & 3.3)

3.4.3.5 Conclusion

Scotland compares favourably with economies in the upper-middle-income and high-income categories. A further similarity emerges between Scotland and KZN in respect of population, surface area, the existence of a few main centres, and the dependence factor.

While constitutionally dependent on the United Kingdom, Scotland enjoys a measure of independence in respect of her own economic development. For political and constitutional reasons Scottish education has traditionally been stronger than industry in Scotland. Reforms in Scottish education have aimed to create a more responsive relationship between education and industry, and thereby stimulate economic growth. The high-income classification of Scotland may be concluded from the economic indicators cited. Scottish dependence on British world competitiveness status must inevitably benefit Scotland as well.

3.4.4 Structure of education data

3.4.4.1 Introduction

The Scottish system of education is compulsory from 5 to 16 years of age. The challenges of providing relevant education to scattered communities living in the remote highland and island regions has created new learning opportunities. Modern technology has been used to provide stimulating lessons on the Internet. Devolution of power in Scotland has encouraged partnerships between stakeholders and providers of education. Central and local government, parents and the business community create partnerships in order to enhance the quality relevance of education provision. The Scottish Office Education and Industry Department (SOEID) itself a partnership, oversees the provision of education in Scotland (Scottish Government Website 2000).

3.4.4.2 Scottish qualifications

(a) SCOTVEC and the SQA

Reference has already been made to the establishment of SCOTVEC in 1985 and its subsequent merger with the SEB in 1997. The significance of this merger is that Scotland only has ONE awarding body for all qualifications.

(b) Modularisation

The standard SCOTVEC (1994:4) definition of a module is that of:

"free-standing units of learning with widespread and flexible application; each unit covers a number of skills or *competencies* which the candidate must achieve".

Raffe had the following to say about the modular system:

" ... Each module conforms to a standard design framework, and is specified by a module descriptor that includes a list of learning outcomes. To complete a module, a student must achieve all the learning outcomes to a level specified by performance criteria. Passes are not graded; a module is either completed or not completed. A single National Certificate, awarded by SCOTVEC accredits completed modules. There are no general levels of modules, although there may be recognised lines of progression within a subject area. Modules vary widely in "difficulty" and are designed for all ability levels. On paper at least the modular system increases flexibility and choice with respect to the content, place and pacing of study, with multiple entry and exit points".

(Raffe 1991:52)

Modularisation was perceived to be of value to Scottish industry because the learning programmes could be adapted from time to time and thus remain relevant to changes in the socio-economic sector. For the full-time worker who is intent on studying at intervals, the modular system holds distinct advantages. A single national qualifying body, facilitates progression through the system (cf De Bruijn & Howieson 1995:83).

(c) Different types of vocational qualifications as developed by SCOTVEC since 1985

□ Higher National Certificate and the Higher National Diploma

These qualifications are offered by colleges, universities and training centres, they are in demand by employers for positions at the higher technician and junior management level (SCOTVEC 1994:8; cf Pearson 1999:445 & 514).

□ Scottish Vocational Qualifications

These courses are designed in consultation with employers to meet the needs of specific jobs, they are suitable for on-the-job training, and can be taken at a college or a training centre (SCOTVEC 1994:8; cf Pearson 1999:445 & 514).

□ General Scottish Vocational Qualifications

These courses prepare a student for a variety of employment areas; they are aimed at 16 – 19 year olds in schools and colleges, and for adult education (SCOTVEC 1994:8).

□ National Certificate Clusters

Designed for pupils at school to aid them in the process of making choices from a wide range of National Certificate Modules. Each cluster is a group of three module credits (SCOTVEC 1994:9).

□ Skillstart

Designed for those who have no existing formal qualifications, for slow learners, and for people who are unemployed and need to develop new skills (SCOTVEC 1994:9).

(d) National record of achievements

Because education and training is based on a system of units SCOTVEC developed a personal Record of Education and Training (RET) for all its candidates. An award is made once all the units have been achieved, (SCOTVEC 1994:7). The Scottish Office (1997:10) endorsed the use of the RET, and calling for its re-design in order to be used “throughout people’s lives which should develop the individual’s personal effectiveness” (Scottish Office 1997:11). Re-named the “National Record of Achievement” (NRA) in 1997 the Ministers were considering a report on recommendations for the final design of the NRA (cf Farrell, Kerry & Kerry 1995: 189 & 190).

(e) Diagrammatic representation of Scottish education and qualifications

Figure 3.1 provides an overview of the structure of education for school-based education.

Figure 3.1
Diagrammatic Representation of Scottish Education

School Education Structure			Certificate of sixth year studies
		Standard grades	Higher grades
		<i>National certificate in vocational subjects</i>	<i>National certificates in vocational subjects</i>
Pre-school	Compulsory school education		

(Source: British Council 1998b:3)

3.4.4.3 Pre-School Education

The Scottish Government is committed to the provision of free pre-school education for all children in the preceding admission to the primary school. Pre-school education is provided by the state as well as private and voluntary centres. The SOEID has published a framework curriculum for pre-school education in order to guide all providers of pre-school education. Pre-school centres all have their own particular approach to school readiness, the framework curriculum aims at guiding the centres in planning effective pre-school programmes. Registered pre-school centres qualify for pre-school education grants (Scottish Government Website 2000).

3.4.4.4 The Primary School

The primary school admits learners between the ages of 5 and 12 years. The foundation years in the primary school is devoted to providing a broad, basic

education. Between 10% and 25% of primary school curriculum time is spent on language (15%), mathematics (15%), environmental studies (25%), expressive arts (15%), religious and moral teaching (10%), optional studies (20%), such as the orientation of learners into the possibilities of modern technology. Computers are used from an early age. Learners in the remote areas rely on computers to supplement and enrich their learning.

The sizes of primary schools vary quite considerably. Rural schools of less than 20 learners exist, while schools of over 600 learners exist in cities and urban areas.

Statutory curriculum documents do not exist. The SOEID 5–14 Programme provides guidelines for the progress and performance of learners at different stages of learning. Her Majesty's Inspectors closely monitor progress in the schools. The development of each primary school is the responsibility of the principal, the School Board, with the support of the parents and the local community. Learners proceed to a secondary school at the conclusion of their primary schooling (British Council 1998b: 11; Scottish Government Website 2000).

3.4.4.5 The Secondary School

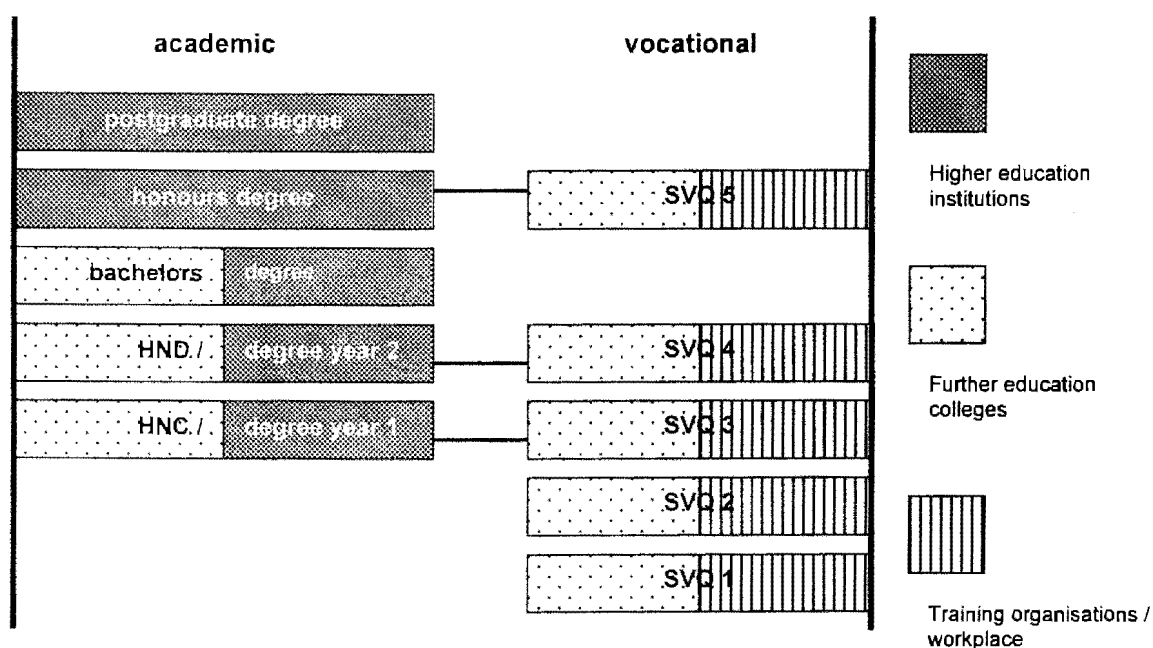
Secondary schooling may be terminated at the age of 16 years with a Standard Grade Certificate (or a national certificate in vocational subjects). The Standard Grade Certificate may be taken at the foundation, general or credit level. Higher and Advanced Higher was introduced in 1999 and offered at five levels: Access, Intermediate, Intermediate 2, Higher and Advanced Higher. Managing learner assessment has become increasingly important in the award of secondary qualifications. The SQA acknowledges the use of internal and external assessment at the secondary level of educational provision. Secondary schools are becoming more business-like, with a wide range of modularised vocational subjects available in the 5th and 6th years. In general the core skills at the secondary school level include communication and numeracy, information technology, problem-solving, personal and interpersonal skills (British Council 1998b:13).

While the majority of secondary schools (403) are publicly funded schools, a small number (57) of independent secondary schools offer an alternative to public schooling. These schools usually provide boarding school accommodation. As was the case with the primary school, each secondary school creates its own learning programmes with advice from the SOEID, local authorities' education departments and other specialist agencies. Learners study English, Mathematics, Science, a foreign language and a social subject. During the 5th and 6th secondary year a wide range of modular courses with a vocational orientation may be included in the school-leaving curriculum (Scottish Government Website 2000).

3.4.4.6 Post-secondary education

Figure 3.2 illustrates the structure of post-secondary education in Scotland.

Figure 3.2
Diagrammatic representation of post-secondary education



(Source: British Council 1998b: 8)

The 46 further education colleges and 23 higher education institutions primarily provide post-secondary education in Scotland. The following paragraphs will examine the Scottish provision of post-secondary education in the context of the reforms during the 1990s to facilitate relevance to the needs of Scottish society.

3.4.4.7 Further Education in Scotland

(a) Introduction

Vocational Education in Scotland is referred to as Further Education (FE) and according to the Association of Scottish Colleges (ASC) Executive (May 1998) offers "lifelong learning, skills and experience from basic to advanced level; a responsive and flexible service for individuals and employers; easy local access and wider participation; services for, and links with employers and businesses; recognised qualifications and records of achievement". Rollinson (1992:25) adds that one of the key advantages of the Scottish system is "where the links and flexibility between academic and vocational education have been strengthened", and the British Council's (1998a: 15) document on education and training stresses the integration of all aspects of post-secondary education, this means "that there is no dividing line between training for work, continuing education or studying for a degree". This paragraph will provide the basic data relating to the structure of further education in Scotland. The section on Trends, Reforms and Critical Issues will examine developments in this particular area of educational provision in Scotland, with applicable illustrations.

(b) The Learners

The learners (or students) include those who have recently left school (some without a formal certificate). There are learners who are registered with a FE college who are still at school, taking vocational and/or general courses with specific jobs in mind. Older learners enrol for the same courses. International students, the unemployed, persons with disabilities or special learning needs. The relevance of the Scottish further education colleges is to be discerned firstly, in the flexibility of provision, and secondly, in the endeavour to meet the needs of industry and the local communities (Scottish Government Website 2000). A fairly recent innovation of the further education sector is the introduction of an off-the-job training programme for employees, or Skillseekers.

(c) Skillseekers

Skillseekers is a training programme that enables 16 – 17 year olds to undergo work-based learning which will lead to qualifications in craft, technician and trainee-management subjects (British Council 1998a: 15). The Scottish system is unified and coherent, combining the routes for vocational and academic qualifications. The Scottish Qualifications Authority ensures that all qualifications in Scotland are “relevant, that they meet the needs of individuals, society and the economy and that they are flexible enough to respond to change” (British Council 1998b: 8).

(d) Modules

Reference has already been made to the Scottish emphasis on modularisation. This approach is used to enhance relevance in the further education sector.

With regard to the vocational route Rollinson (1992:25) notes that “pupils can choose from over 3 000 National Certificate modules, the modules are competence based qualifications which are normally awarded after a 40 hour course of study; pupils are encouraged to pursue a coherent package of modules which complement and build on their other academic and vocational achievements; ... the modules have proved extremely popular and over 10 000 fifth year students, i.e. approximately three-quarters of the total, enrol for them each year”. Relevance is thus in the job-specific nature of the modules and in the fact that recognition is given to previous learning and qualifications at later stages of an employees career.

(e) Certification

Further Education awards include:

- SVQs designed by industry for industry, assessment takes place in the workplace;
- National Certificates, and Higher National Certificates;
- Higher National Diplomas;

- GSVQs (General School Vocational Qualifications) for school and Further Education students (16-19 years) and adult learners;
- “Higher Still” for Further Education students who have progressed beyond the Standard Grade;
(Scottish Government Website 2000).

The Higher Still awards, currently being phased in (August 1999 – August 2002) will be examined in the next paragraph.

(f) Higher Still

According to the Falkirk Stirling Centre Website (1999), the Higher Still programmes of the Scottish Government offers students the opportunity to study for vocational and/or academic qualifications at an appropriate level. These qualifications will eventually be offered in more than 50 subject areas. Courses (or learning programmes) are made up of units; each unit is made up of 40 or 80 study hours. Students who pass a number of units and courses may be able to build these into a Scottish Group Award. The Higher Still courses were designed to develop core skills critical to lifelong learning. The core skills are:

- communication: reading, writing, speaking;
- numeracy: number, including graphing;
- problem-solving and critical thinking: planning, reviewing, evaluating;
- information technology: computers;
- working with others: task management; working in a team.

The Higher Skill programmes were designed to add variety and relevance to Scottish qualifications, to improve the pathways from education into employment, and as a consequence are expected to be of interest to employers.

(g) Conclusion

The development of the Scottish Further Education sector has captured the imagination of other countries as well as their English neighbours. Success factors include an increase in the number of participants in Further Education, meeting individual and community needs, and meeting the needs of industry and employers (cf Association of Scottish Colleges (ASCOL) Website 1998). The Further Education strategy implies working in partnership with other sectors, agencies and employers. The Scottish Further Education sector is at the heart of the Scottish economic and social environment.

3.4.4.8 Higher Education

Scotland has 23 institutions of higher education. There are 14 universities, the Open Universities, and 9 other institutions. Most of the universities are situated in four Scottish cities: Glasgow, Edinburgh, Aberdeen and Dundee. Twenty-three institutions serve a population of five-and-a-quarter million people. Statistics indicate that 215 200 persons were enrolled at higher education institutions as at 2 February 1999. This implies that almost half of all young Scots enrol for higher education courses. Programmes of study include a wide range of courses from the humanities, the sciences and engineering. Courses in Slavonic, East European and Middle Eastern Studies are offered, as well as Sports Studies and Computer / Information Studies. These courses endeavour to meet the needs of international students. The emphasis on vocational and professional education ensures that relevance is maintained in the provision of higher education. The University of the Highlands and Islands (UHI) Project is a unique development in higher and further education. The UHI is a federal university, based on a partnership of 13 colleges and research institutions. The aim of the project is to bring higher education to individuals and communities in the remote regions of Scotland (Committee of Scottish Higher Education Principals (COSHEP) 1999 :Scottish Government Website 2000).

3.4.4.9 Conclusion

The Scottish reforms focused on relevance of education to the socio-economic needs of Scotland. Major reforms took place in the Further Education sector, as well as the development of the Scottish Qualifications Authority. The generation of relevant qualifications for the work-place has been the prime aim of the reforms. Relevance is not perceived in isolation, and the quality of education provided at school has to be assured in preparation for future learning. Critical questions have been asked of the Scottish system. Given its constitutional dependency on the Westminster Parliament, critics have questioned whether the Scottish system of education is a system at all, and whether Scotland can be considered a high-income economy. These, and other issues will be addressed in the remaining paragraphs of this chapter.

3.4.5 Trends, reforms and critical issues in the Scottish system of educational provision

3.4.5.1 Introduction

The factual data in respect of the trends, reforms and critical issues of the Scottish system have already been examined in the preceding paragraphs. These paragraphs will further examine the Scottish country data for factors of relevance in educational provision.

3.4.5.2 Trends

(a) Introduction

The problem of relevance in Scottish education was addressed firstly *vis-à-vis* the further education sectors, and secondly in partnerships concluded between education and industry.

(b) Relevance in further education

□ Introduction

There are currently 46 FE colleges in Scotland. Many of these colleges are situated in remote, rural and island regions. In 1998 it was reported that there was a 27% increase on the 1996/97 enrolments at Scottish FE colleges. This represents more than 400 000 students for the 1998/99 academic year. The same document also refers to 70 000 students who have enrolled for higher education courses. Student enrolments in the over-25 year age group also increased by 54% over the preceding 2 years. Approximately (40%) of students enrol for the first time at FE colleges. Many of these students are adults or students who are financially disadvantaged. In this paragraph Falkirk College of Further and Higher Education will be used to illustrate the trends in achieving relevance *vis-à-vis* the further education sector in Scotland (cf ASCOL Website 1998; Scottish Government Website 2000).

□ Falkirk College

The College was established in 1962, and currently enrolls more than 16 000 students annually. These statistics include full-time, part-time and flexi-learning programmes. Three faculties are responsible for the development of a matrix of courses in business, the humanities, and technology (Falkirk College 1998:1-6). Pathways to qualifications are displayed in Illustrations 3.1, 3.2 and 3.3 respectively.

□ Faculty of Business

This faculty includes the:

- School of Finance
- School of Hospitality and Tourism
- School of Management
- School of Office and Information Technology

Illustration 3.1

School of Office and Information Technology: Business Administration

Higher National Diploma (HND)

Entry requirements include two Higher Grades, or appropriate National Certificate modules, or, 21 years of age with relevant experience.

The duration of the HND is two years and the course consists of theoretical and practical units. Students may progress to degree programmes or Advanced Diplomas.

Higher National Certificate (HNC)

Entry requirements are the same as for the HND; the duration of the course is however, one year with similar theoretical and practical units as in the HND. Students may progress to the HND Business Administration.

General Scottish Vocational Qualification (GSVQ) Level III

Entry requirements include four Standard Grades at Level 3, or above. Mature applicants with no formal qualifications are considered. The duration of the course is one year, and the content provides a sound basis for business and administration. Successful students may proceed with the HND Business Administration course or be admitted to other Falkirk College HND courses.

National Certificate

There are no entry requirements for admission to the course and selection is by interview and references. The duration of the course is one year. The course provides basic training in business administration. Successful students may be admitted to the GSVQIII Business Administration. Progress to the HND Business Administration or other Falkirk College HND courses will be guaranteed.

(Falkirk College 1998:28-30; cf Pearson 2000:170)

□ Faculty of Humanities

This faculty includes the:

- School of Art and Design

- School of Child Care, Health and Social Studies
- School of Communication and Media
- School of Continuing Education
- School of Leisure and Physical Recreation

Illustration 3.2

School of Art and Design

Degree (BA)

Entry requirements for Year 1 include a creative portfolio, and Three Higher Grades or the equivalent. Entry requirements for Year 2 include a creative portfolio and relevant prior learning. The HND in Art and Design may be considered as relevant prior learning. The duration of the degree is 3 years full-time study, and the content focuses on a deeper understanding of design. Successful students may progress to BA Honours.

Advanced Diploma

Entry requirements include the HND or HNC or substantial work experience in an art of design subject. The duration of the course is one year, and the content provides the skills and knowledge required to promote the integration of business management into design. Successful students may progress from the Advanced Diploma to the third year of the degree.

Advanced Certificate

Entry requirements are the applicants' portfolio of work, and four Standard Grades and Higher Grade Art. The duration of the course is one year, and the content focuses on a range of units in design. Successful students may progress to the HND courses, or to the BA Design Degree (Falkirk College).

(Falkirk College 1998:32-36: cf Pearson 2000:170)

❑ Faculty of Technology

This faculty includes the:

- School of Building and Civil Engineering
- School of Construction Crafts
- School of Electrical Engineering and Instrumentation
- School of Electronics and Mechatronics
- School of Information Technology and Computing

- School of Motor Vehicle and Welding Fabrication
- School of Science, Mathematics and Environmental Studies

Illustration 3.3

School of Electronics and Mechatronics

Mechatronics

Courses are available at the level of: degree; HND; HNC; NC and GSVQ.

Computer Technology

Courses are available at the level of: HND and HNC.

Electronic and Electrical Engineering

Courses are available at the level of: HND, HNC and GSVQ.

Electronic Manufacture

Courses are available at the level of: HND and HNC.

Manufacture and Mechanical Engineering

A qualification is available at the level of GSVQ.

Manufacturing Systems

Courses are available at the level of: HND and HNC (full-time only).

Music and Audio Technology

Courses are available at the level of HND (full-time only) and HNC.

Music Technology Electronics

A qualification is available at the level of NC (full-time only).

Unless otherwise indicated, all courses are offered as full-time and part-time courses.

(Falkirk College 1998:68-73; cf Pearson 2000:170)

□ Conclusion

The matrix of courses offered by the Falkirk College is flexible and supportive of government initiatives regarding new learning methods. Falkirk courses also enable students to study at an accelerated rate. Life-long learning has become a fact of life, and the flexibility of Falkirk modules remain responsive to the needs of the challenges of the twenty-first century Scottish community.

(c) Relevance in partnerships

□ Introduction

The second trend in the Scottish system of vocational education and training are the partnership links that have their origin in the Scottish department of education. These links permeate the system of education at all levels. Partnerships also exist between schools and business.

□ Partnerships

Fairley (1998:21) draws a distinction between “stakeholders” and “partners”. In Scottish vocational education jargon the term “stakeholders” includes the trainee, the actual or potential employer, the training provider, the training funder and the taxpayer. “Partners” according to Fairley (1998:22) may include employers’ organisations, trade unions, colleges and training providers, the government and its agencies, and the European Union. Broadly speaking, partnerships take place between education and industry.

Wilson (1998, in British Council (ed) 1998: 100 & 105) draws attention to the seemingly incongruous combination of education and industry in one state department, i.e. Scottish Office of Education and Industry Department (SOEID). The same author (1998:104) in an address in 1998 replied to his critics who expressed concern about a possible distortion of the purposes of education resulting from close linkages with industry, argued that a balance between the development of industry and the needs of the country must take place. He maintained that in preparing for life it does not help individuals if

they leave the education system ill-equipped to earn a living either through working for an employer or through self-employment.

Scottish education is a partnership between government and numerous agencies, organisations, and the business community of Scotland. The role of the SOEID is to guide the system and oversee funding of further and higher education. Business investment in education commences with pre-school education, and continues throughout the primary and secondary years. Practical work experience motivates the future work force and aids the process of vocational decision-making. However, Scottish FE colleges and universities also work in partnership with industry, providing services that include the development of systems and infrastructure to support vocational qualifications; the training for trainers in management technology and curriculum design; development of new technical and vocational courses (British Council 1998b:15).

Partnerships have been perceived to be highly relevant mechanisms in the provision of education in Scotland. Two illustrations will be used to highlight the trend in partnerships. The Highlands and Islands Enterprise (HIE) and the Scottish Enterprise (SE) will be discussed below. These institutions emerged in the vocational education sector of Scotland by means of a series of partnerships.

□ Highlands and Islands Enterprise (HIE)

Scotland has to provide education to a scattered population across remote highland and island regions. Accessibility is a major problem, and hence the provision of materials to these scattered populations. The Highlands and Islands Enterprise network aims to provide opportunities for training and education in these regions by means of modern technological learning. The HIE project is a partnership between ten local enterprise companies, the aim is to create economic growth and prosperity for the island and highland communities by investing in human resource potential (Scottish Office 1997:40 – 43; British Council 1998a:23; Fairley 1998:32 – 34).

□ Scottish Enterprise (SE)

Scottish Enterprise is the economic development agency for 93% of Scotland's population. The purpose of SE is to create jobs and prosperity for the people of Scotland. SE is a partnership of education and training programmes. Small businesses are able to benefit from education and training initiatives of SE. The SE initiative is a departure from the isolation of education from the community. Education is integrated into the workplace by the active participation of individuals, industry, providers and government (Scottish Office 1997:29; British Council 1998a:29).

□ Conclusion

The partnerships developed by the SOEID are based on the principle of the integration of education and industry in Scotland. This is evidenced in the administration of education and industry into a single government department. The needs of smaller partners, such as the small business sector, are not overlooked, and the development of skills in the work-place remains relevant to the needs of the employers. Channels of communication have been established, and the probability of relevance in educational provision is enhanced.

3.4.5.3 Reforms

(a) Introduction

The reforms of the 1990s in Scottish education have been examined in the preceding sections on educational provision in Scotland. This paragraph will briefly highlight the reforms that took place in general education. Reference will be made to the Quality Initiative introduced in Scottish Schools.

(b) Reforms in general education

Themes for reform in general education has focused on quality and standards. Wilson (1998:100) attributes the problems experienced in general education to earlier reforms that resulted in a "free and easy" approach to education. An

increase in the number of failing schools heightened the awareness of problems in standard setting. Poor general educational standards became particularly problematic when it became obvious that Scottish standards were not comparable with international standards.

Standards and quality had to be raised in schools. This was addressed by the introduction of a system of self-evaluation in schools (Osler 1998, in British Council (ed) 1998: 31-36), taking action in schools that produced below standard results, and setting targets in all schools (Wilson 1998:100 -104). MacBeath (1996:25 & 26) describes "home-school self-evaluation as a partnership". He holds that parental involvement in the day-to-day life of the school as a significant development, particularly when all the stakeholders – parents, pupils and teachers – are involved in a collaborative venture of school self-evaluation.

Osler (1998:32) described the Quality Initiative in Scottish Schools by stating that "the principal lever in pursuit of a quality revolution was not a national curriculum, tests or inspection, but making schools responsible for their own quality through self-evaluation. It is essential that the high levels of public expenditure on education are not wasted: the Quality Initiative aims to achieve the best possible stewardship of this high-cost, important public service".

Various processes contributed to the development of an ethos of school improvement in Scotland. An international seminar hosted by the British Council (International Networking Events) held in Edinburgh (19 – 24 November 2000) focused on issues of assuring quality and accountability in school education, including:

- the use of performance indicators
- school development planning
- school leadership and management
- the quality of teaching and learning
- school ethos and culture
- school self-evaluation
- external inspection of school performance

- assessment and target setting for raising attainment

(Correspondence: British Council Networking Events Seminar 0015:2000)

A further theme in educational reform in Scotland has been a growing emphasis on accountability. Educational providers have to account not only for the efficient expenditure of taxpayers money but for the assurance that a qualitative education will be provided at all institutions of learning, that research will be of the highest standard and that parents are involved at all levels. In other words education has to learn to live with a greater public accountability for what it does (Wilson 1998:103). The improvement of the ethos of the school, according to the same author, is an essential but difficult area to reform. Issues such as truancy, bullying, health, responsible personal behaviour need to be addressed, as they foster healthy social attitudes in the preparation of children to take their place in society as responsible adults. Not an easily definable or measurable area of the curriculum, but Wilson nevertheless recognises that approaching school reform in this area has much potential.

(c) Conclusion

Considerable progress was made during the 1990s in raising standards at school. Scottish schools developed a systematic approach to school management and quality assurance under the banner of Quality Initiative in Scottish Schools. These issues are relevant in the context of high-income economies and even more relevant in the context of the middle-and-low-income economies.

3.4.5.4 Critical issues

(a) Introduction

The provision of relevant education will inevitably present any modern society with endless challenges. Critical issues for the Scottish system rests with the problems faced by a small country competing in the international arena. The issue of foreign funding for local projects is critical for economic development.

The Scottish population is scattered, and sparse, the critical issue of Scotland's self-governing status will have a direct impact on future development in respect of providing on-going relevance in education provision. These issues will be discussed in the final paragraphs of this section.

(b) International competitiveness and foreign funding for Scottish projects

According to a British Council Scotland video (1998), "UK Education in Scotland", Scotland has "an internationally acclaimed economy driven by global enterprises", the video ascribes Scotland's "innovative successes" to her education and training system. Global economic activity takes place in the fields of micro-electronics, energy, oil and gas exploration, engineering, and bio-technology, as well as in the fields of the more traditional skills and craftsmanship, e.g. fishing, agriculture, forestry, textiles and whisky. These successes are dependent on and judged by various economic indicators. Statistics that we may use to measure the nation's socio-economic well-being include the GDP, unemployment, industrial growth, exports, international investment. These statistics are not static and pose on-going challenges to business, educational and national leaders. The economic indicators are also affected by events that take place within as well as beyond the borders of a country.

Scotland has a small population. The regions of Scotland that have been developed for industry are also relatively small. International competition is fierce and merciless. To remain competitive the quality of products has to be extremely high. This requires a highly skilled workforce, with good basic general education skills, critical and problem-solving skills, as well as relevant technological knowledge. Scotland will therefore have to ensure that the quality of her educational provision, both general and vocational, remains one of the highest in the world. For a small nation this is quite a tall order. Foreign markets are notoriously unstable, and this will undoubtedly put additional pressure on the Scottish system of education to remain relevant to business and industry, and that work-related qualifications are not only transferable, but that adequate provision has been made for life-long education (Scottish Office 1997:40-44).

The interest shown by foreign investors is an indication of foreign business confidence in a country. This in turn has a direct bearing on the labour force's level of skills, and the country's provision of relevant and qualitative education and training. It was reported that during 1996 Scotland exported £18,4 billion worth of manufactured goods, and that these exports directly supported 117 456 jobs in Scotland (Scottish Enterprise Website 1999).

Overseas investments in Scotland include 268 facilities from North America, 189 facilities from European countries, and 75 from the rest of the world, giving a total of 578. These facilities, it was noted, accounted for 45% of employment in the electrical and optical engineering sector in 1995 (Scottish Enterprise Website 1999).

Another comparison can be made with the international manufacturing sector. The Scottish Enterprise Website (1999) reports that growth in manufacturing productivity from 1985 – 1995 measured in “% change output per hour” can be tabulated as follows:

Table 3.11
Manufacturing Productivity (% change per hour)

Scotland	5.4%
United Kingdom	5,2%
Italy	3,6%
Japan	3,8%
Netherlands	2,4%
France	3,6%
United States of America	3,4%
Germany	2,6%

(Source: Scottish Enterprise Website 1999)

The statistics above all indicate growth in the Scottish economy, with confidence expressed by the international community in Scottish business and industry. Scottish business and industry is supported by a vibrant and relevant education and training system. Reflexivity has encouraged and sustained funding for the development of Scottish education and training from the European Union. This aspect will be discussed in the following paragraphs.

(c) The European Union and the problem of relevance in Scotland

The challenge of funding development projects and VET in Scotland has been aided by financial support from the European Social Fund (ESF). The support has been primarily for the Scottish FE Colleges, as administered by the Principals of the Association of Scottish Colleges. EU funds assist member states in their struggle against unemployment and the re-development of industrial and rural decline. Fairley (1998:37) states that 85% of Scotland's population live in areas eligible for EU support. The author points out that when some smaller initiatives are considered, the whole of Scotland is eligible for EU funding.

"ESF is primarily an unemployment, training and re-training fund which aims to improve employment opportunities in the EU by providing financial support towards the running costs of vocational training schemes and job creation measures run by a variety of organisations including support for some Government Programmes" (ASCOL Website 1998).

The process of accessing the funds is based on the principle of decentralisation to seven area-based partnerships (Fairley 1998:37). These partnerships do not provide for a trade union and the private sector to be included, while the Scottish Office regulations preclude local elected politicians from participating in the EU partnerships. It has been pointed out above that the exclusion of non-partners from a partnership can be potentially problematic. Dialogue and debates on critical issues affecting the regions ought to include all stakeholders and role-players in the community.

"Agenda 2000" will continue to fund Scottish further education programmes once the current term of the ESF-programme for Scotland expires on 31 December 1999. This augurs well for Scotland; however, certain disquiet is suggested by the dependence of Scottish VET and the other development projects on EU funding. Does the Scottish economy have sufficient resilience to survive without EU funding, and is Scottish further education sufficiently responsive to the needs of the economy in order to support and preserve the partnerships that characterise this unique system?

(d) The challenge of self-government and the problem of relevance in Scotland

The semi-dependent nature of the Scottish national status has already been referred to. This political status according to Raffe (1991:60) sets the limits for the separate development of Scottish education and training, this is primarily because Scotland is part of the same political system as England and is affected by the same political processes. Raffe's argument may have some validity, particularly as political dependence often inhibits national growth and development.

However, election of the Scottish Parliament may change everything. What are the challenges that Scotland will have to face in the new era of self-government? Paterson (1998:74) has suggested that issues such as the redistribution of wealth and the shedding of British middle-class values by professionals will become critical issues for the new parliament. As the Scottish Parliament becomes more powerful the issue of independence will inevitably arise. However, the issue of formal independence is still very unclear at this point, and as Hassan (1999:14) puts it "the future of Scotland is still an open book ... nothing is inevitable or decided about the future of Scotland beyond that it is in the hands of the Scottish people to make the modern nation and society they want". That modern nation and society will have to be built on a successful economy and an education system which remains relevant to the needs of that economy.

3.4.6 Conclusions

3.4.6.1 Introduction

Factors of relevance for the Scottish system will be concluded in historico-legal data, socio-economic, structure of education data, and in the material that emerges from the trends, reforms and critical issues of provision of education in the Scottish system of education. Barriers to relevance will also be indicated.

3.4.6.2 Historico-legal factors

Factors of high relevance were concluded in the political and economic developments in Scotland during the closing years of the 20th century. It was concluded in the Scottish country data that these developments related to the constitutional union between Scotland and England (para 3.4.2.2). The immediate impetus to recent developments in Scotland resulted from objections to anti-Scottish rhetoric, in the English south (para 3.4.2.2 & 3.4.2.7). The Scottish leaders were prompted by declining standards in education to critically examine relevance in educational provision. Educational reform was designed to *inter alia* to stimulate the Scottish economy by making education more responsive to the needs of industry (para 3.4.2.1).

The legislative framework that emerged encouraged a distinctively Scottish system of vocational education. Legislation encouraged the acquisition of relevant qualifications within the context of a Scottish national qualification framework (para 3.4.2.4, 3.4.2.5 & 3.4.2.6). Pathways to life-long learning were made possible at all levels of society. The system of further education that emerged during the period of reform encouraged private sector involvement in the qualification generating process (para 3.4.2.4). The improvement of standards in the workplace, and the preparation of the Scottish nation for participation in the global economy required a more skilled workforce (para 3.4.2.4 - 3.4.2.6). Factors of relevance in the Scottish historico-legal data were perceived in the highly successful education-enterprise partnerships that characterised the Scottish system.

3.4.6.3 Socio-economic factors

The socio-economic data indicated that Scotland was a high-income economy with a population and surface area almost equivalent to that of KZN (para 3.4.3.4). The majority of the Scottish population lives in the built up areas of the big cities. The rural population is scattered in the regions of the highlands and islands (para 3.4.3.2). Cognisance had to be taken of the technological changes in the world markets. The Scottish economy adapted to these trends.

Factors of relevance were concluded in the responsiveness of education to the needs of the economy (para 3.4.3.3 & 3.4.3.5).

3.4.6.4 Structure of education factors

Several factors of relevance emerged in the Scottish structure of education. The Scottish Qualifications Authority mapped out clear pathways to learning for learners at all stages of life. The relevance of Scottish qualifications were perceived in, *inter alia*, the flexibility of the modular system. (para 3.4.4.2 (b)). The varieties of possible levels of learning were concluded to be of relevance to the needs of the workplace. Shorter courses were more suitable for short-term on-the-job training. Scottish qualifications are available either on a full-time or on a part-time basis. Opportunities are provided for persons who have no formal qualifications. The portability of qualifications is a feature of Scottish national life *vis-à-vis* the National Record of Achievements (para 3.4.4.2 (d)). Portability was concluded to be a factor of relevance.

The employment of modern technology made it possible for people living in remote and inaccessible regions to benefit from the provision of relevant education (para 3.4.4.1).

Secondary education has been modularised and has become more businesslike. (para 3.4.4.2 (e)). The emphasis falls on managing the needs of the learners. The credit system takes the pressure off learning for those who need more time to complete their qualifications. The introduction of Highers and Advanced Highers, encouraged learning by offering learning programmes at five levels.

Post-secondary education in Scotland emphasises the link with work (para 3.4.4.6). Vocational qualifications feature on the SQF. Factors of relevance were concluded in the parity of social esteem attributed to these qualifications. The Scottish further education sector has approximately 3000 national certificate modules available. The modules offer core-skills as well as lifelong learning (para 3.4.4.7 (a) – (g)). Quality assurance was concluded to be a

factor of relevance to be achieved by *inter alia* designing courses in collaboration with the workplace (para 3.4.4.1).

3.4.6.5 Trends, critical issues and reforms as factors of relevance

(a) Trends

Trends in Scottish society were aimed at improving the quality of life of all citizens. Factors of relevance were perceived in the trends in further education sector and in the network of Scottish partnerships. Relevance is enhanced in the confluence of these two trends.

Factors of relevance were concluded in the increase in the enrolments in the colleges of further education. Courses are offered in broad fields, e, g, business, the humanities and technology. More enrolments were noted in the FE sector than in the HE sector (cf para 3.4.4.6, 3.4.4.8 & 3.5.5.2 (b)). Pathways to higher qualifications are created as a result of the matrix of courses. Trends in secondary education similarly accrue from the flexibility of courses offered as well as the variety of work-orientated programmes offered in the community (para 3.4.5.2(b)).

Factors of relevance were concluded in the involvement of all stakeholders in partnerships. Business investments in education at all levels of schooling were perceived to be relevant to the needs of society. A factor of high relevance on the other hand was perceived in the value of the network of links established in a society. The value and relevance to education accrue in the interaction of the business community with the providers of education. A prime barrier to relevance in partnerships were perceived in the problems associated with unequal partnerships. (para 3.4.5.2 (c)).

(b) Reforms

The reforms of the 1990s focused on the quality of general education at all levels of schooling. The responsibility for assuring quality education was devolved to the lowest level of provision. Practical considerations made it

impossible to control all aspects of educational provision in schools. The emphasis therefore fell on strategies of self-improvement and internal evaluation. Self-reliance was concluded as a pathway to relevance. The integration of the school and the local community emerged as a factor of relevance in the Scottish school reform movement. Schooling became a collaborative venture. From the point of view of the community accountability emerged as an issue of relevance. Accountability to the local community emerged as an integral part of the Scottish Quality Initiative and was concluded as a factor of high relevance (para 3.4.5.3 (a) – (c)).

(c) Critical issues

Scotland is a small country. The implications of the Scottish semi-dependent status was concluded to be critical issues for future development. Foreign funding was a further critical issue, as were the demands of international competitiveness. These issues impacted on the quality of the products produced in the Scottish markets. Negative developments in any of the critical issues identified could result in barriers to relevance becoming major obstacles to qualitative living in Scotland (para 3.4.5.4 (a) – (c)).

3.5 HIGH-INCOME COUNTRY DATA IN COMPARATIVE PERSPECTIVE

3.5.1 Historico-legal factors

Factors of relevance in respect of the influence of historico-cultural data on educational provision emerged in all three studies. The long tradition of German craftsmanship and the high value attributed by Japanese society to literacy and life-long learning emerged from these national traditions as factors of relevance. Both studies indicated relevance in the traditions of vocationalism that were unique to each economy. The German part-time vocational school emerged in the late nineteenth century and became the principal means whereby Germany trained skilled workers. Confucian values are considered to be factors of high relevance in contemporary Japanese society.

The country data indicated that both economies were severely disrupted as a result of the ravages of World War Two. The aim of post-war legislation

focused on economic recovery and the relevance of learning programmes that aided the process of recovery. The post-war constitutions of Germany and Japan entrenched the principles of democracy and free enterprise in their respective constitutions.

The emergence of a very strong private sector in Japan was identified as a factor of high relevance in the re-building of Japan. Post-war legislation facilitated economic recovery. However, conservative politics in Japan obstructed reform initiatives until the late 1980s. Lack of reform in Japanese education was identified in some elements of the Japanese country data to be a barrier to relevance.

In Germany the provision of relevant education was piloted *vis-à-vis* the legislation of the Ministry of Labour. Tensions exist in the German system of VET between stakeholders. Legislation has however, made provision for dialogue and operational procedures between stakeholders. The Japanese view has traditionally been that the training of workers for the workplace has been the role of the private sector. This view persists in Japan.

Recent developments in high-income economies have challenged the relevance of educational provision and the historico-legal traditions. The competitiveness of the international markets has posed new stress points for both economies. Computer and information technology superiority has direct implications for the relevance of educational provision in the high-income economies. The German economy experienced a potential barrier to relevance with the re-unification of East Germany and the Federal Republic. Relevance can be concluded, as the international rating of the German economy was not adversely affected. The strenuous demands of international competitiveness and the volatility of the Asian markets added new demands to the Japanese economy, and the relevance of traditional systems of vocational education has had to be re-examined for factors of relevance in the Japan.

The Scottish country data provides a third perspective. Recent developments have had a profound impact on Scottish politics.

The poor performance of the Scottish economy acted as a catalyst for the reform and legislative developments of the last quarter of the 20th century. These processes focussed attention on the relevance of qualifications in a system of life-long learning. In Scotland education took the lead in the provision of relevant education. Political developments aimed to make Scottish markets more responsive to the demands of the international markets. The Scottish private sector was integrated into the process of education and training (or re-training). This process included all stakeholders.

3.5.2 Socio-economic factors

Germany and Japan are high-income economies and leaders in the world economy. These conclusions were made by an examination of the relevant economic indicators. German and Japanese products are highly esteemed in the world markets. Factors of relevance exist in the programmes and initiatives that address the problems associated with the transition from school to work. Different approaches were adopted by the two economies. Relevance nevertheless exists in the clear pathways that have been mapped out in the respective societies to ensure that school-leavers acquired relevant qualifications for absorption into the workplace.

Scotland's population is situated in a few main centres; the remainder of this semi-dependent economy consists of a scattered rural population. The Scottish economy adapted to the challenges of the global markets by making a transition from the more traditional industries to the industries of the modern technological age. Scotland's relevance as a high-income economy is concluded from the economic indicators, as corroborated the ratings of world competitiveness. The conclusion was made that Scotland addressed these issues in the reform processes of last century.

3.5.3 Structure of education

Both Germany and Japan have well-established systems of education with long traditions. The German system of education makes provision for an early vocational selection of learners. Provision has been made for compulsory

vocational school attendance for early drop-outs. While streaming is a reality of the German educational system, the value attributed to the general educational component of learning has not been over-looked. The German *Abitur* is a very important educational qualification, even for admission to the *dual system*. The Japanese system's strong emphasis on a university education was concluded as an essential aspect of Japanese educational preparation for the workplace. Workplace relevance was also perceived in the emergence of the Miscellaneous Schools and Special Training Colleges. These institutions combine general educational learning programmes with relevant learning in vocational subjects.

Financial investment in training is a priority in the high-income economies. Investors expect market-related returns to these investments. This applies particularly to the German system. In Japan early vocational selection is considered as a barrier to relevance. Vocational education and training is the prime prerogative of the company. Individual companies allocate annual budgets for training and retraining. The principles of life-long learning and life-long employment by the Japanese corporate sector continue to assume relevance for Japanese society. A prime factor of relevance that emerged from the Japanese country data was the foundational value attributed to the provision of a qualitative pre-primary education for all children.

Similar traditions exist in Scotland with an emphasis on the acquisition of relevant qualifications in colleges of further education. The Scottish further education sector is a partnership with the private sector. The factors of relevance accrue to the workplace in a system of life-long learning in the portability of qualifications and the flexibility of learning. Employees can improve their qualifications while they remain on-the-job. The foundational value of school education is emphasised in the reforms. Relevance in post-secondary learning is inhibited if qualitative foundational learning does not take place in the formal school system. The Scottish Quality Initiative is focused on promoting quality in school education. Relevance in the senior secondary school was concluded in the modularisation of learning programmes. The emphasis on the core skills and lifeskills as a relevant preparation for the workplace emerged as a critical component of the quality assurance initiative.

This initiative held relevance for other areas of learning and hence was perceived to be critical issues well.

3.5.4 Critical issues, trends and reforms as factors of relevance

3.5.4.1 Trends

Trends as factors of relevance in the German country data include the issue of the costs of training as related to productivity. Conflicting interests are inevitable in a system that includes many stakeholders. The relevance of regional and national councils (or fora) in pursuit of consensus are factors of relevance. Dialogue between stakeholders in a complex system of VET facilitates relevance.

The Japanese country data indicated a distinct trend towards perceiving economic relevance in the academic orientations of educational provision. The involvement of the private sector as supplemented by more classroom-based learning including theory has been re-examined in Japan in the light of the intrinsic values of liberal education. Vocational schooling occupies low status in Japan. By way of contrast, the Miscellaneous School and Special Schools appear not to have assumed the same stigma. A possible reason for this trend may be the close link between the schools/ colleges and the private sector. In contrast to German tensions in respect of training costs the Japanese country data indicated willingness in the Japanese private sector to invest in human resources. The synonymity of investment in human resources and productivity was concluded to be a factor of high relevance in the Japanese country data.

The direct usefulness of school education for work was not indicated in the Japanese data. The educational requirements for an adaptable workforce resulted in conclusions in support of strong general educational foundations. English language skills, critical thinking skills, and lifeskills were factors of high relevance in the Japanese country data.

Relevance in the Scottish system accrues in the confluence of two major trends in Scottish society. Relevance in educational provision in Scottish

education is perceived in qualifications and in partnerships. The Scottish approach becomes a third possible approach to the provision of relevant education in a high-income economy. Factors of relevance were perceived in the mobilisation of the Scottish private sector.

3.5.4.2 Reforms and future developments

The country data indicated that both the German and Japanese systems had been criticised by national leaders for being rigid. Authoritarianism permeated both systems. While opportunities for dialogue had been created by German legislation, the data nevertheless indicated that the problems of the rigidity of the system would require evaluation in respect of relevance. The frequently asked question “has the *dual system* run out” required critical examination by German authorities in the light of the highly competitive world market. The reforms of the Japanese system were also focused on achieving greater relevance in the global markets. The limited success of these reforms was attributed to conservative opposition to reform. Traditions in the Japanese system of educational provision proved to be more of a barrier to relevance than the reformers had anticipated. Renewed emphasis was directed at scientific and information technology research.

The Scottish country data demonstrated that Scottish society welcomed the reforms of the final decade of last century. In the absence of entrenched traditions the reforms were implemented with a lack of noticeable resistance. Devolution of power to the local levels of educational provision characterised the reforms. Factors of relevance were therefore discerned in the Scottish country data in policies of self-reliance and self-evaluation at the local level. The emphasis was placed on the local authorities liaising with school authorities in a bid to ensure quality of provision. Provision of education was identified as a collaborative venture. Accountability to local communities formed an integral part of the Quality Initiative.

3.5.4.3 Critical Issues

The German data indicated the on-going problems associated with the transition from school to work. The continuous demands of modern technology on the training system of Germany and rapid changes in the workplace shifted the emphasis from vocational preparation for work towards the value of more general education. The poor image of the vocational school has become a critical issue in Germany. The problems of youth unemployment, the provision of relevant education and the demands of the workplace require fine-tuning. The problems of the high-income economies are complicated even more by the personal problems of youth and their resistance to the stress of learning programmes. This critical issue was discerned in the Japanese country data. *Yugami* was identified as a major barrier to relevance. Excessive emphasis on examinations, cram schools and the fear of failure was identified as strong factors of *irrelevance* in the Japanese country data. The high expectations of the youth of Japan resulted in a youthful backlash in respect of undisciplined behaviour. Adolescent suicide has been a phenomenon of Japanese society that has raised critical questions among researchers and educational leaders. The strong orientation towards the Japanese universities has also raised critical questions about the quality of the university qualifications.

The Scottish system provided the third approach in respect of the colleges of further education. However, the main barrier to relevance in the Scottish system of relevance appeared in the form of the semi-dependence political status of the Scotland. The conclusion that seems to emerge from this comparative discussion on critical issues in the high-income economies is whether established traditions are not inherently barriers to relevance. The Scottish system, a more recent system is not entrenched in tradition. The flexibility of the system could thus be construed to hold greater relevance for the twenty-first century. For this reason it could be more easily be transposed into other national settings. The semi-dependent status of the region may well then be construed to be an insignificant barrier, or become translated into a factor of relevance.

Chapter 3 examined the problems of relevance in three high-income economies, the following chapter will investigate the problems of relevance in a sampling of three mid-low-income economies of the world.

CHAPTER 4: THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN LOW- INCOME ECONOMIES

4.1 INTRODUCTION

Chapter Four will address the first aim of the study:

- to make a thorough study of the problem of relevance in educational provision in three low-income economies of the world;
- to focus on current trends, critical issues and future developments or reforms in each system of education;
- to evaluate the comparative data in respect of the relevance of the selected systems of education to the socio-economic needs of each country.

The theoretical insights gained from Chapter 2 will be further investigated in this chapter. The analytical format that emerged in the preceding chapter will be applied to this chapter. The historico-legal, socio-economic and structure of education *formata* will facilitate the emergent factual data. The critical analyses will on the other hand be facilitated by the format: critical issues, trends and reforms.

Three international systems of education were selected for comparison. The Soviet-Russian model was selected as representative of a system of education that evolved within the socio-economic context of a centrally-controlled command economy. The Russian component will demonstrate the problems yielded by the poor socio-economic conditions for the accrual of relevance during the post-communist era. The Israeli model is representative of a relatively young system of education that has emerged during turbulent times. The responsiveness of the Israeli system of education to the economy will be examined against the background of the transition made by the Israeli economy from a low-income to a high-income economy.

The emerging Palestinian system of education provides a contrast to the other two more established systems of education. The Palestinian system of education provided the study with the necessary low-income economic data.

4.2 THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN THE FORMER SOVIET- UNION AND RUSSIA

4.2.1 Introduction

Using the World Bank 1997 classification of economies by income Russia is situated in the lower-middle-income category of world economies (World Bank 1997:264 & 265). The Russian Federation is probably more accurately described as a mixed economy, containing elements of low, middle and high-income economies with an aggregate low/middle-income economic classification. Russia was the biggest republic in the former-Soviet Union, the most powerful Communist country in the world until its disintegration in 1991. The former-Soviet Union entered the 1980s with a heavy burden of serious unsolved problems and it began to fall behind the other high-income competitors in the global economy (Malkova 1991:31). With an estimated population of 150 638 000 people in 1996 (World Book 1997:463), Russian history has been dominated for almost 200 years by socio-economic issues. In short, the issues have been how to feed, clothe and educate the people of a vast nation. Today it is alleged that illiteracy has been eradicated in Russia (personal interview, First Secretary Tatiana Kogergina, Russian Embassy, Pretoria 1999; cf World Bank 1997:214).

The historical background will demonstrate the influence of Communist ideology on the relevance of educational provision during the Soviet era, and how repeated reform in education did not always result in the responsiveness of the education system to the Soviet economy.

4.2.2 Historico-Legal Data

4.2.2.1 Introduction

The historical data will demonstrate how relevance in educational provision was inextricably linked to political and ideological issues as espoused by the Soviet state. Relevance in education was inextricably linked to the Marxist-Leninist ideology as espoused by the Soviet state. The Soviet Union began to

fall behind the rest of the world in critical areas such as scientific and technical development. Basic literacy skills appeared also to decline. The historical overview will further demonstrate that when Russia returned to a market orientated economy the provision of relevant education in Russia experienced unprecedented renewal.

4.2.2.2 The Romanov Dynasty to the revolution

Russian history, since the ascendancy of the Romanov dynasty centred on socio-economic issues, with education being used by the Communist rulers for the furtherance of their political and economic goals. The Romanovs played a decisive role in Russian history up until 1917, one of the key issues of this period was “keeping up with the west” (World Book 1997:422). A second, and more demanding issue, of the Romanov dynasty was the demands of the growing Russian working class in the cities. The Romanov rulers introduced cycles of reforms in an attempt to satisfy the needs of the vast peasant population. During the late nineteenth, and early twentieth century various revolutionary movements were formed. Tensions between these movements and the tsars increased as the Russian economy worsened. The movements challenged the tsars for not going far enough in their reforms. During the reign of Nicholas II the number of political movements increased as a result of a series of bad harvests which caused widespread starvation among the peasants (World Book 1997:484-493; Hayes, Baldwin & Cole 1967:649-653).

Hayes *et al* (1967:653) capture the relative backwardness of Romanov Russia in a concluding paragraph on Russian tsardom by stating that “as the twentieth century opened, Russia was politically an autocracy comparable with that of Louis XIV. Economically, it was a vast land of peasant agriculture, with industrialised islands bound together by a network of railways. Socially, it was primarily a peasant country with a strong land-owning nobility. But it had a growing bourgeoisie, a considerable number of intellectuals dissatisfied with the political backwardness of the nation, and a rising proletariat already infected with revolutionary teachings”.

In this politically volatile society three major political organisations developed their ideals (World Book 1997:489):

- the Liberal constitutionalists who wanted to replace the tsar's rule with a parliamentary government;
- the social revolutionaries who aimed to promote a revolution among peasants and workers; and
- the Marxists who wanted to promote revolution among workers in the cities.

Marxist-Leninist ideology requires further elaboration because of the central role that it played during the Soviet era in shaping Soviet domestic and foreign policy.

4.2.2.3 Marxist-Leninism and the relevance of educational provision during the Soviet era

(a) Ideology

Relevance in educational provision during the Soviet era in Russia was in respect of the interpretation and promotion of the ideals of Communism. The Soviet leaders did not always agree with each other on the issue of how to interpret Soviet ideology. Education as the main agent of the Soviet state in the promotion and interpretation of Soviet ideology was undisputed.

The Marxists based their political ideology on the social philosophy of Karl Marx. In 1898 they established the Russian Social Democratic Labour Party. Worker discontent developed between 1899 and 1904, and in response to social upheaval the party split in 1903, the minority became known as the Mensheviks, and the majority party of V.I. Lenin was known as the Bolsheviks. This party later changed its name to the Communist Party (Hayes *et al* 1967:700; 718-719).

The Marxist ideology influenced the direction of Russian history and education for almost a century. Singer (1980:35) quoting from Marx's Preface to A

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Contribution to the Critique of Political Economy [1859] highlighted some of the details of the Marxist conception of history:

“In the social production which men carry on they enter into definite relations that are indispensable and independent of their will; these relations of production correspond to a definite stage of development of their material powers of production. The sum total of these relations of production constitutes the economic structure of society – the real foundation, on which rise legal and political superstructures and to which correspond definite forms of social consciousness”.

In relation to the cause of the problem of poverty in society Singer (1980:35) further quotes Marx as saying that “it is not the consciousness of men that determines their existence, but, on the contrary, their social existence determines their consciousness”. Material forces of production are inevitably in conflict with the relations of production, resulting in social revolution. The revolution in turn will transform society into one, which is structured on an economic base. Singer (1980:35 & 36) quotes Marx again to illustrate the Marxist goal of history:

“With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed. In considering such transformations the distinction should always be made between the material transformation of the economic conditions of production, which can be determined with the precision of natural science, and the legal, political, religious, aesthetic, or philosophic – in short, ideological-forms in which men become conscious of this conflict and fight it out”.

Once the revolution is over Marxism builds the rest of the societal superstructure on the economic base. It must be observed that after the death of Marx, Engels, the authoritative interpreter of Marx's ideas, denied that Marx had held that the economic element was the only determining element in society. Engels asserted that both he and Marx had affirmed that “the

economic movement finally asserts itself as necessary" (Singer 1980:38). Whichever view is adopted, the fact remains that Soviet society and its educational structures were designed to serve the economy that in turn shaped the Soviet foreign policy of world domination (Hayes *et al* 1967:679-681).

Interpretations of Marxist-Leninist ideology in respect of vocational and general education varied from one Soviet leader to another, the goal, as suggested above was more than developing a skilled work force. Maurer (1984:22) says that the Soviet educational leaders used vocational education to foster Soviet ideology in the Third World, to bring cheap labour into the Soviet Union, and to develop the natural resources of the remote areas of the country. The Soviet theory of polytechnical (or vocational) education made a unique contribution to educational theory. Combining the features of Soviet political, economic, and educational theory, polytechnical education was neither debated nor accepted in Western Europe and America (Holmes, Read & Voskresenskaya 1995:5 & 6). A résumé of the particular interpretations of each of the Soviet leaders will be briefly outlined below.

(b) Lenin

Maurer (1984:23) states that Lenin believed that a general education not linked to a programme for creating specialists was ineffective. It must be pointed out that Lenin had reservations about early specialisation. Nee (1988:30) says, "Lenin had no special desire for students to receive vocational training at an early age. He was concerned instead for the general and complete education of the individual for the purposes of the Soviet State as determined by the Communist Party". With the outbreak of World War I Russia had a modest, but growing educational system. The primary school network was run by the central government, local authorities, and the church (Matthews 1982:1 & 2). This tsarist system was immediately dismantled when the Bolsheviks came to power. The state assumed full control of education, although as Zajda (1980:9) points out, "in practice the vestiges of pre-revolutionary education remained until the 1930s".

In October 1918 the *Narkompros* (People's Commissariat for Education) gave notice of its "unified labour school" policy (Kuebart 1988, in Kurian (ed) 1988:1295; Matthews 1982:4). The policy was to involve children in socially useful labour from a very early age. "Polytechnical" education was one of the key concerns of the Bolshevik educational policy. Principles of the revolution in education included, "free, compulsory nine-year common school, polytechnical education and productive labor, the collective as main agent of socialization, and self-government of the school community. The new Bolshevik ideas were not immediately successful as the industrial basis for polytechnical education did not exist (Kuebart 1988:1295).

A decree by the Seventh Congress of the Russian Communist Party in 1919 compelled individuals between the ages of 8 and 50 to learn to read and write (illiteracy in 1916 was 66% and in 1930, 38%) (Tomiak 1972:13; Zadjia 1980:11).

In 1924 and 1926 schools were introduced to a strong vocational bias aimed at reducing the shortage of skilled workers. This was also done at secondary school level, e.g. the factory apprentice school and the *tekhnikumy* (secondary specialised school). The idea of "socially useful labour" that permeated secondary education during the Soviet era was developed during this period. The idea of the pre-revolutionary Russian educationalist, Ushinsky (1824-1870) concerning the unity between school and life was put into practice during this period (Tomiak 1972:15; Zadjia 1980:9 & 11).

(c) Stalin

During Stalin's years general education was declared to be the basis of specialist training, and all polytechnical education was removed from the curriculum by 1937 (Matthews 1982:5; Zadjia 1980:23 & 24; Kuebart 1988:1295). Stalin continued the drive of his predecessor to eliminate illiteracy. In August 1930 a Party decree announced that primary education would be universal and compulsory up to the age of 15 (Tomiak 1972:16). Discipline was harshly enforced, as the entire system came under the close scrutiny of the Communist Party. Despite his decrees on polytechnical

education Stalin permitted the VUZy to exist alongside the universities. Enrolments in the VUZy and *tekhnikumy* increased significantly between 1932 and 1940.

The Second World War saw the reform of vocational education for “lower level” skills and blue-collar jobs. The State Labour Reserves (SLR) established by Stalin during the 1940s in order to mobilise unskilled youth between the ages of 14 – 17 years for labour industry, mining and construction. Other lower-grade schools also existed at the time, e.g. the factory and works apprentice schools (abbreviated in Russian to FZU), which provided more limited training for the less able (Matthews 1982:67-73). The state took control of the FZUs and all the trade schools. The infamous SLR schools drafted approximately 800 000 to 1 million 14 to 17 year olds into these military-styled schools annually (cf Tomiak 1972:19; Kuebart 1988:1296).

Stalin’s so-called academic orientation was not able to deal with the post-World War Two problems, *inter alia*, the agricultural crisis and the need to raise levels of production to feed the nation. Smorgorzewski (1991, in the New Encyclopaedia Britannica 1991:1011), in an assessment of Stalin says that Stalin invested heavily in primary and higher education, particularly in the training of engineers, technicians and scientists. The same writer queried whether the chronic shortages in food, consumer goods and housing could ever compensate for the priority given to heavy industry by Stalin’s policies on education and training. Kuebart (1988:1296) develops the same point when he observes that by the mid-1950s the academic orientation of Stalin’s policies resulted in school-leavers not being prepared for employment in industry. They were more interested in higher education.

(d) Krushchev

Krushchev set about strengthening the ties between education and the working world, which in practice meant reversing the Stalinist policies on polytechnical education and labour training. When Stalin de-polytechnicised the curriculum in the 1930s he introduced the SLRs as a substitute on the

pretext that developments in industry required trained labourers. When Krushchev came to power he addressed the economic crisis by re-organising the infamous SLRs into the professional technical schools (PTUs), in order to meet the demand for low-level and mid-level skills, particularly on the farms. Matthews (1982:79 & 80) says that between 1960 and 1975 there was a significant increase in the output of the PTUs, and “by the mid-1970s the new system was training about a third of the young people who took manual jobs ... as time went by, industry as a whole gained over agriculture, and significant numbers of youngsters began to be trained for light industry, food-processing and trade”.

Polytechnicisation of the curriculum took place on a very large scale. Based on the December 1958 Reform Law Krushchev forged closer links between education and production (Kuebart 1988:1297). In a memorandum which appeared in *Pravda*, 21 September 1958, Krushchev criticised schools for being divorced from life, he called for radical reform. In November of the same year Krushchev's controversial decree was issued by the CPSU, “strengthening the ties of the school with life, and further developing the system of public education” (Tomiak 1972:23 & 24; Zadjia 1980:9, 32 & 33). General schooling was extended by one year to accommodate the polytechnical programme. Pupils who terminated their general schooling at 15 years (or in the eighth grade) would be accommodated at evening, part-time or correspondence institutions, so that they could complete their secondary education. In this respect the VUZy curriculum would focus more specifically on part-time, or “sandwich” courses (Matthews 1982:11).

Krushchev's concept of combining production work with the general school did not meet with much success. Kuebart (1988:1297) reports that economics and factory managers, academics and educationists opposed the reforms very early on, primarily on the grounds that production training was responsible for organisational problems for schools and factories.

Furthermore Krushchev's reforms offered a limited choice of skills, and these frequently did not correspond with the career choices of school-leavers. It also became obvious that the young school-leavers did not always continue to

work in the area of skills-training received at school. Other problems experienced by Krushchev's polytechnicisation was the fact that academic studies at school suffered, while the VUZy reported that the general educational standards of their entrants had dropped (Kuebart 1988:1297; Matthews 1982:10 -11).

Krushchev's polytechnical ideal was designed to turn out motivated and skilled workers, but instead his experiment failed on the grounds of "over-loading, inefficiency and superficiality" (Dunstan & Suddaby 1992:6; Tomiak 1972:26). Zadjia (1980:33) adds that the Krushchev experiment was disastrous because the allegedly classless Soviet society had departed from Marxism and the polytechnical principle. New social strata had come into being under Stalin, and the Soviet structures had to take cognisance of these changes. Even before his dismissal in 1964, the Soviet leadership commenced with a curtailment of the polytechnical component of the curriculum. The 1958 Reform Law failed to achieve its purpose (Holmes *et al* 1995:15-16).

(e) Brezhnev

The Brezhnev leadership issued a new educational policy in respect of general secondary education. While being careful to note that the polytechnical character of the secondary school would be maintained, the new Communist leadership re-emphasised in their 1966 decree the role of academic general education. The needs of science and technology were to be fostered in the new academic orientation of the curriculum. Labour education became more theoretical, limited to 11% of all lesson time, and linked wherever possible to mathematics and science. The development of job skills was not provided for, the emphasis shifted to vocational guidance, and counselling in respect of occupational choice.

The Brezhnev leadership focused their reforms on achieving universal secondary education by 1970 (Tomiak 1972:28), and in order to achieve this goal attempts were made to include general education lessons in "specialised-secondary (technical) schools" as well as the vocational schools. A third avenue was then introduced for the completion of secondary education, viz.

the so-called SPTU, (*srednie professional'no – tekhnicheskie uchilishcha*). When the 1977 Constitution was prepared the Soviet commitment to polytechnical education was once again stressed (Dunstan & Suddaby 1992:6), general school completers would be required to have “nearly mastered a specific occupation”, the intake of the new SPTUs would be doubled at the age of 15, and labour training and socially useful production experience was again on the curriculum.

One of the challenges the Soviet leaders of the Brezhnev era had to deal with was the demographic change that took place between 1970 and 1975. Zadjia (1980:35) reports that over 6 million peasants moved to the towns during this period. This resulted in a drastic shortage of semi-skilled and skilled workers in the rural areas. By 1975 39% of the total population lived in the rural areas, compared with 55% in 1956.

The Soviet authorities had to take this significant demographic trend into account in their planning of relevant educational provision for the 1970s. Zadjia (1980:36) holds that “qualitative changes in the schools after 1970 [represented] the most definite proof that education, in general, had fallen short of Soviet goals”. There was a growing imbalance between the careers aimed at by the general-school graduates and the requirements of the economy that brought about the major turning-point in the educational policy of the Brezhnev leadership. Dunstan and Suddaby (1992:6) observe that the overall time for labour training was increased by 100%, which was “enough at the senior stage to train people in low-grade skills but making a very awkward fit with the function of preparing for higher education”.

Sowtis (1991:23) cites “deepening shortage of labour” as the major domestic reason for the 1984 reform. He claims that in 1975 5,2 million eighth-graders entered vocational and secondary education, a decade later the figure had declined to 4,0 million. The CPSU Central Committee 1984 Draft Guidelines for the Reform stated:

“... the school reform should orient young people to socially useful labour in the national economy and prepare them for this. Labour

upbringing should be regarded as a highly important fact in the molding of the individual and as a means of satisfying the national economy's requirements for labour resources".

(Sowtis 1991:25)

Sowtis (1991:25) gives a three-point summary of the 1984 Reform Proposals:

- to increase the number, and to upgrade the labour training content, of the vocational secondary schools;
- to introduce pupils to vocational education and on-the-job training from an early age;
- to strengthen the relationships between local enterprises and regional schools by means of mentorships and contracting.

These reforms did not last; the era of *perestroika*, under Gorbachev changed everything.

Zadja (1980:37) points out that even before the announcement of the 1984 Reforms extreme changes were taking place in mathematics and basic sciences. Reform of the curricula, at all levels in these two subjects took place, the revision of textbooks, and the introduction of new electives (1975). Learners were encouraged to pursue science and maths courses. These reforms increased the enrolments in science and mathematics courses from 5,8 million in 1971 to 8,5 million in 1973 (Zadja 1980:38: cf Gladkii 1983: 50 – 60).

Democratic mechanisms to facilitate changes in society were emerging. Dunstan and Suddaby (1992:7) are of the opinion that by 1984 "educationalists felt that at last the state authorities were listening to them rather than to the scientists who had shaped the over-ambitious post-Krushchev curriculum". Even though their aspirations were not fully realised at the time, the expectation of greater democratic freedom in the process of decision-making was gaining momentum (cf Brodinsky 1992:378-385).

(f) Gorbachev

Gorbachev's early years in office focused on the modernisation of the economy, which included a critical appraisal of, *inter alia*, the Soviet occupational profile. The Soviet educational debate however, continued to revolve around the vocational-general education issues until the end of the decade (cf Berulava 1992:7). Gorbachev's priorities during his early years in office may not have focused on educational issues *per se*, his insight into the problems of Soviet educational provision were however, in line with the trends of the time. The following excerpt from an address by Gorbachev in October 1987, as reported by Holmes *et al* illustrates this point:

"We see that the educational system has in many respects fallen short of today's requirements. The quality of education in schools, colleges, and universities and of training of workers and professionals does not fully meet the needs of the day".

(Holmes *et al* 1995:27)

Dunstan and Suddaby (1992:11) summarise the uncertain outlook of the closing years of the Soviet era:

"In the 1980s it was still possible to speak of 'Soviet education'. By the early 1990s the concept had become fraught with difficulty. The school system was beginning in some respects to fragment and in others to fray at the edges. The underpinning ideology was no longer sacrosanct. School curricula were being partly decentralized and rethought, and new types of school created. Teachers and lecturers were officially encouraged to adopt a more individualized approach to their pupils and students and a more open-ended style in presenting their subjects. In educational administration too, democratization was the new watchword".

Kuebart (1992:131) describes *perestroika* as the "reform of the reform", it was an attempt to clean-up the legacy of the Brezhnev era, "but its aims were not yet aligned to the basic restructuring of the economy and society".

Gorbachev's *perestroika* could not provide a solution to the socio-economic dilemma of the Soviet society, it required, as Kuebart observed in the preceding quotation, a total restructuring of the society and the planning of its economy. Educational provision would then be re-conceptualised in terms of democratic principles and a free market economy. Soviet power structures would have to change. Holmes *et al* (1995:20) hold that under *perestroika* educational reform was not debated as vigorously as political and economic reform.

(g) Conclusion

During the years of *perestroika* the process of socio-economic reform indicated to the Soviet leaders not only the depth of the crisis in education, but a need to change the nature of the motivation for educational reform. The reforms of February 1988 did not (for the first time), insist on linking the education system so closely to the employment sector.

The announcement in October 1990 of a shift towards a Soviet market economy and privatisation was the first step towards the final dismantling of the Communist ideology. The 1990 *State Basic Curriculum Policy Document* was the last Soviet educational policy change. The document was influenced by the liberal-democratic principles of democratisation, humanisation and differentiation. The coup of August 1991 ended the Soviet era of curriculum reform.

4.2.2.4 Developments in educational provision in post-communist Russia

(a) The 1992 Reform Law

The 1992 post-communist educational reform in Russia was based on the 1990 Soviet Basic Curriculum, which in turn reflected the spirit of *perestroika*. The 1992 Reform Law (The Law on Education) espoused the principles of equity, quality and accountability in its educational principles (Zadja 1993:5). "The sudden shift towards the market economy and privatisation" (Zadja 1994:77) was in fact the end result of a process of democratisation that had

begun in the early 1980s. Evidenced in the waves of curriculum reforms during the 80s and early 90s the renewal in the Russian schools continued to address the “qualitative aspects of schooling, including the development of the autonomous individual for a more humane and just society” (Zadja 1994:77). The universal human value of democracy, humanism, human rights and freedom had been “re-discovered” says Zadja before the 1991 transition. This last Soviet education reform prepared the way for the re-structuring of education in the post-communist era. This document, according to Zadja, incorporates three liberal-democratic principles: democratisation, humanisation and differentiation. The post-communist administration had to reform education without the restrictive communist ideology determining policy. Reconstruction reflected the principles of freedom, and in particular the political, economic and social changes of post-communist Russian society. The demands of emerging businessmen participating for the first time in a market-orientated economy were a new factor to be provided for in educational reform.

(b) Yeltsin

The early years of educational reform during the Yeltsin era were dominated by the reforms of the Russian Minister of Education, Eduard Dneprov. The post-communist Russia inherited by Dneprov had 66 679 schools, 20 million learners and 1,5 million teachers (Zadja 1994:18).

De-centralisation of authority was one of the priorities of the Dneprov reform programme. The problems inherited from the Soviet state had to be addressed with urgency. Another policy was to develop a strategy to combat the general awareness of falling standards.

The apathy of young Russians towards education – general and vocational – constituted a crisis for post-communist reformers of enormous proportions. Dneprov is reported by Zadja (1994:79) to have stated that :

“The school is unable to guarantee the development and the realisation of pupils’ abilities ... more than 90 per cent no longer

regarded education at school as a means of developing and realising their abilities; about 85 per cent thought that the school failed to give them realistic orientations for their self-satisfaction in life; 83 per cent do not see the school as a place where they acquire culture and finally, more than 90 per cent do not think that the school provides them with the necessary skills for professional orientation “.

This concern was raised by Kogergina as well, “there is an attitude problem, too many young Russians leave school early, and enter the labour market, thinking they will get rich quickly” (Kogergina 1999).

The Russian educational crisis was reported by the World Bank in a Confidential Report in 1994 when the bank warned of falling standards and a decline in quality in Russian education (Zadja 1994:80). Yeltsin’s response was a return to a more conservative programme of reform in education. The Russian president expected the masses, collective farmers, and industrialists would perceive greater relevance in a conservative approach to reform. The president dismissed his liberal advisers, including the former Minister of Education, Eduard Dneprov. The pursuit of relevance would, according to Yeltsin (December 1993), be along the lines of enlightened authoritarianism (Holmes *et al* 1995:273).

(c) The basic curriculum 1993 and subsequent trends

In order to address the crisis in post-communist Russian education the *Basic Curriculum of the General Secondary School Document* was produced. This document was based on the 1992 *Law on Education*, and was published in June 1993. Addressing issues of basic educational standards in the light of the proliferation of educational providers the 1993 *Basic Curriculum* document adopted a three-pronged approach:

The *Basic Curriculum (Bazisny Uchebny)* defined basic standards in core disciplines.

The *Regional Basic Curriculum (Regionalny Bazisny Uchebny)* developed the basic plan of the state for the needs of individual regions and different ethnic groups.

The *School Curriculum (Shkoly Uchebny)* reflected the state and regional curriculum plan in the light of the specific profile of the school.

(Zadja 1994:81)

According to Article 32 of the 1992 *Law on Education* schools were permitted to implement their own specific school programmes. Power and responsibilities developing curricula at school level was made possible in the 1992 *Law*. Bannatyne and Hall (1996:11) draw attention to the increase in choices available to Russian students in subject selection. This seems to be related to the increase in the number of private schools. The authors cite a figure of over 400 private schools operating in European Russia since 1992.

The elections of December 1993 set the tone and pace for reform in Russian education. Minister of Education, Dneprov's strategy to democratise the Russian education system met with conservative opposition and the process of reform was slowed down. The supporters and opponents of Dneprov's strategy of democratisation agreed however, that the economic conditions of post-communist Russia greatly inhibited any forms of comprehensive reform of the education system (Holmes *et al* 1995:277).

Two broad trends could however, be discerned in the democratisation of education:

- the return of religious values in educational provision;
- the return of western educational aims in educational provision.

(Holmes *et al* 1995:277-287)

Decentralisation of policy formulation and the promotion of democratic values introduced new freedoms at local levels. Religious groups were permitted to formulate their own aims and goals for the individual educational development of their children. This democratic right was extended to the general school sector where western values became associated with educational learning

programmes, e.g. programmes to develop children's ability to think critically. Greater flexibility in the curriculum became a feature of the post-communist era. Differentiation of the curriculum was not common in the Soviet-style command plan for education. Democratisation of education introduced new freedoms and opportunities for individual decision-making in the process of learning (Holmes *et al* 1995:315).

(d) Conclusion

Developments in the provision of education in the post-communist era are difficult to assess because of the absence of accurate data. What does emerge is a re-definement of the provision of education in a market economy. Issues such as privatisation of colleges and the marketing of education have been a feature of post-communist Russian society. The Russians have expressed a renewed interest in foreign systems of education. Providers of education have endeavoured to re-define vocational education in terms of the markets. A sense of urgency to reform and re-structuring emerged as many schools and colleges faced possible closure. The 1992 *Education Act* made provision for "a one-line budget" for colleges. However, severe pressure from an inflationary economy made it very difficult for some colleges to survive. The problems of relevance in the provision of education in Russia, continue to be inextricably linked to the historical legacy of political and economic issues of Russian society. Data from the preceding paragraphs on the historical origins of the Russian system of education indicate quite unequivocally that relevance in education is seriously inhibited when political and economic conditions in society are unstable, or in the process of transition.

4.2.3 Socio-Economic Data

4.2.3.1 Introduction

The provision of relevant education in the former Soviet Union and the Russian Federation was considerably influenced by demographic factors and socio-economic factors. These factors collectively determine relevance in education. The Russian system of education is one of the biggest systems of

education in the world. In some instances accurate data is difficult to obtain, and instances exist where available data are subject to contradictions. A sampling of socio-economic indicators will be examined.

4.2.3.2 The Indicators

(a) Literacy

Kogergina (1999) confirmed that illiteracy had been eradicated in Russia, and that most Russians had an incomplete secondary education. No adult illiteracy is indicated by the World Bank (1997:215). On the issue of illiteracy Irina Filatova, (Department of History, University of Durban-Westville, personal interview, 1999) holds the opposite view. She said, that given the difficult economic circumstances of the post-Soviet era it was to be expected that there would be an increase in illiteracy.

(b) Surface area and population

Russia occupies a surface area of 17 million km² (the biggest in the world), and with a population of 148,2 million. Population trends indicate an increase in the population to an estimated 155,2 million by 2001 (World Bank 1997 215; World Book 1997:463).

(c) Gross National Product

Russia has a GNP per capita of \$2 240, which ranks 78th in the world in 1995 (cf Switzerland \$40 630, the highest GNP, out of 133 nations). This GNP ranking places Russia in the middle to lower income bracket (World Bank 1997:215).

(d) Economic growth

A negative annual growth rate of -5,1% was reported (1985 – 1995). Average annual inflation (1985 –1995): 148,9 % (South Africa: 13,9 %) (World Bank 1997: 215 & 217).

(e) External debt

\$120 461m (total external debt (1995), exceeded only by Mexico (\$165 743) and Brazil (\$159 130) (World Bank 1997: 247).

(f) Human Development

The percentage of the population living on less than \$ 1 a day is indicated at 1,1% (cf South Africa 23,7%), life expectancy at birth was 65 years in 1995 (cf Japan 80, Germany 76 and United States 77) (World Bank 1997: 215). The reader's attention is drawn once again to the remarks in the introduction (para 4.2.3.1) on accuracy in Russian statistical data.

(g) Gini Co-efficient

This index is a measure of the equality of wealth distribution among individuals and households in a society (a Gini index of zero represents perfect equality, and 100 perfect inequality). The index for Russia is recorded as being 49,6 (cf Japan and Germany: statistics not applicable: South Africa: 58,4)(World Bank 1997:223 & 253).

(h) Urbanisation

Most Russians live in the urban areas, (74%), consequently better schools and health care facilities have been provided in these areas. The majority of the urban population live in the cities of western Russia. The central and eastern regions are sparsely populated (World Bank 1997:231; World Book 463 & 470).

(i) Natural resources

According to the World Book (1997:480) Russia has a skilled labour force and an abundance of natural resources. Russia is one of the richest countries in terms of its natural resources, enormous energy

supplies, vast stretches of farmland, and extensive mineral deposits. These details were confirmed by Filatova (1999).

4.2.3.3 Conclusion

It is concluded that Russia is a potentially wealthy country with an abundance of natural resources, severe problems of human resource development and deep problems related to demography and socio-economics. Education has had to face enormous challenges in a harsh economic environment as a critical stakeholder in the development of human potential.

4.2.4 Structure of Education Data

4.2.4.1 Introduction

In answer to my question about possible structural changes in educational provision in post-communist Russia Kogergina (1999) replied, "Not much has changed". Filatova (1999) agreed that substantial structural changes had not taken place. This outline of the structure of education in Russia is based on available Russian material available in South Africa at the time of writing.

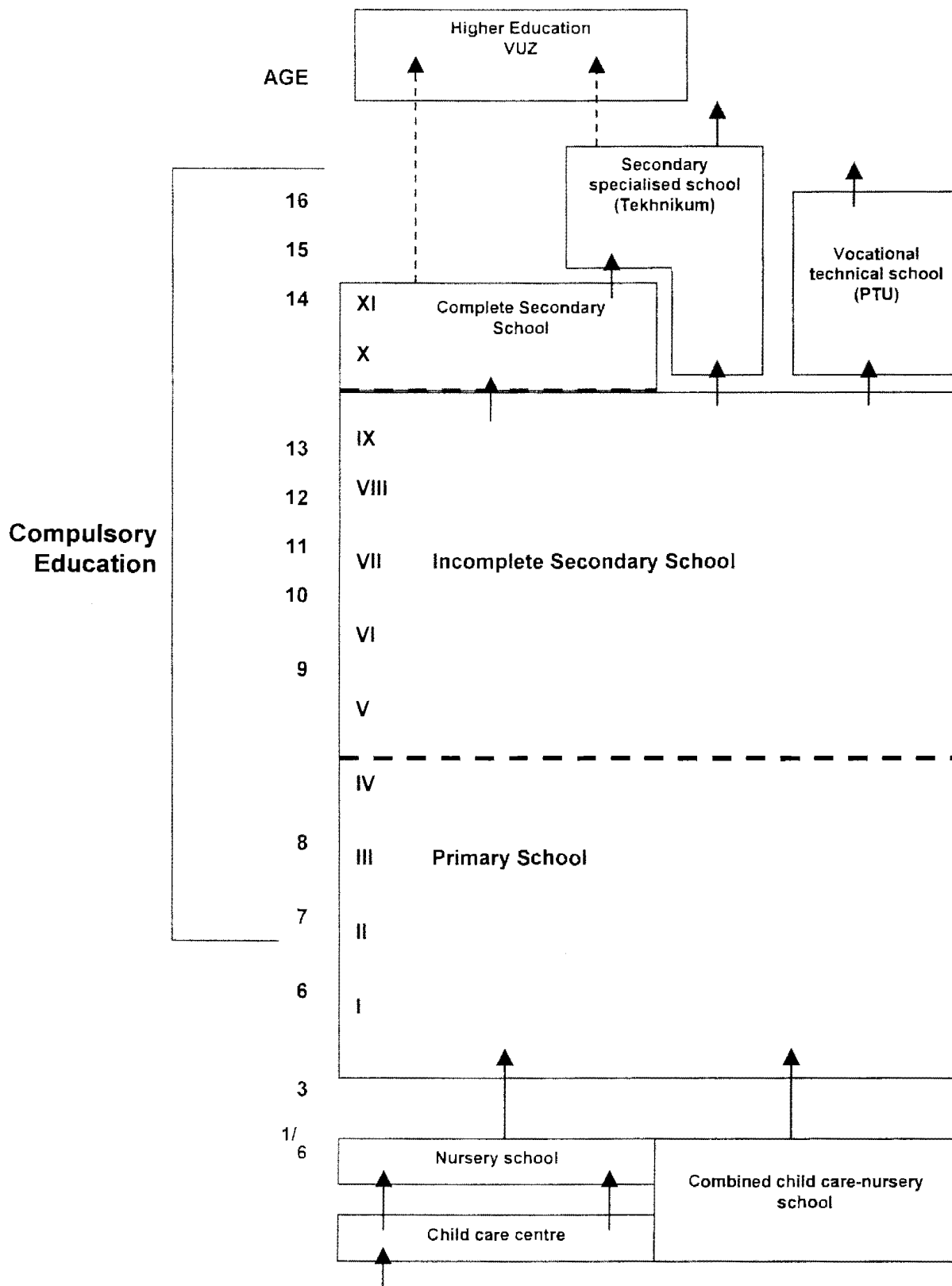
The structure will commence with a framework-outline of educational provision in Russia. The structural analysis that follows is therefore essentially the Soviet system. Grant (1992:69) states that:

"...clean breaks with the past are extremely rare in human events. It has been observed by many commentators that the Soviet system, throughout its history of 1919 to 1991, was heavily influenced by the Tsarist Russian system that it had overthrown...similarly, at the end of the winter holidays in 1992, the same children were being taught in the same schools by the same teachers, many of them with the same attitudes, often working from the same textbooks".

Three illustrations from Holmes *et al* (1995) will then be used to provide specific data on how changes have influenced educational provision in Russia.

Figure 4.1 below, based on Squelch and Truter (1991, in Dekker & Van Schalkwyk 1991;245) provides an outline of the structure of education in Russia. The outline shows an eleven-year structure of learning for compulsory schooling, with an additional two years.

Figure 4.1
Structure of the Russian system of education



(Source: Squelch & Truter 1996:245)

4.2.4.2 Pre-school Education

Genuine concern for the welfare of pre-schoolers existed in the former-Soviet Union. Truter (1989, in Dekker & Van Schalkwyk (eds) 1989:185) raises the point that their concern was not always influenced by educational motives. Ideological interests prevailed over purely pedagogic reasons for pre-school education. Pre-school education has not been compulsory, and nursery schools (*yasli*), kindergartens (*detskie sady*) and combined nursery-kindergartens (*yasli-sady*) exist for children under 3 years and up to seven years of age (Tomiak 1972:54). Formal schooling commences at age seven (or 6).

Considerable growth has taken place in this area of education since the 1950s (Kuebart 1988:1305). One of the aims of pre-school education has been to provide good facilities for pre-school children in order to release the female worker for an early return to the labour market after child-birth (Squelch & Truter 1996:246).

4.2.4.3 Compulsory school education

(a) Introduction

Three main types of general education schools exist (Tomiak 1972:57; Truter 1989:187; Squelch & Truter 1996:246-251):

- a four year primary school;
- an incomplete secondary school which includes a primary school and concludes at the end of the eighth school year, (i.e. eight-year schools);
- a complete secondary general school which adds a further two years to the incomplete secondary course, (i.e. ten-year schools).

In some areas separate primary schools exist for the first three grades. Some eleven-year compulsory general schools still exist, emanating from the Krushchev era. Kuebart (1988:1306) mentions that "in 1983, a total of 59 000

of 10 (11) - year schools accommodated 84% of all school students (33,9 million of a total of 40,4 million)".

(b) Primary education (*nachalnye shkoly*)

The aim of primary education is to teach basic facts about life and to provide the learners with fundamental study and life skills. During the first three years primary classes are taught by a class teacher, subject teaching is only introduced from the fourth year. The curriculum consists of language teaching (approximately half of the prescribed 24 weekly hours), 6 hours per week to mathematics, the remaining time allocated to nature study, art, music, physical education and labour education (Kuebart 1988:1306). Changes and reform in this phase of educational provision are on-going, e.g. the 1984 Reform proposed the lowering of the age of compulsory education to six years, so as to provide an additional year for the consolidation of the fundamentals of basic learning. Primary education concludes with the fourth grade, and incomplete secondary education commences with Grade 5 (Squelch & Truter 1996:24). Illustration 4.1 shows the nature of the problems experienced by a ten-year school during the transition era.

Illustration 4.1

School 1201

Introduction

Formerly known as School 6, this institution has a long history of specialising in the English language and literature. In 1991 it was still a ten-year school with a three-year primary section. When the school first admitted six-year old learners, plans were implemented to convert the school to an eleven-year school.

Enrolment and size of staff

836 learners and 72 members of staff.

Learning programme profiles

School 1201 specialised in humanities and science. Economics and General Education was added after the fall of the Soviet system of education.

Further learning

Learners not entering higher education may enter a vocational college, the military, or employment.

Features

Opposition from Soviet authorities had been experienced when the integrated course in the humanities and the sciences were first introduced. Teachers tried to avoid teaching history and social studies because of political controversy inherent in subject material (Holmes *et al* 1995:135-137).

(c) Incomplete secondary education (*vosmiletnie shkoly*)

This phase provides basic general education for learners up to the age of 15 years. One of the aims of general secondary education is to meet the demands of “social, scientific and technical progress, to acquaint pupils with a sound knowledge of the principles of science...” (Tomiak 1972:59).

Initially during the early grades of this phase the emphasis continued to be on language and mathematics. New subjects are gradually introduced. These included: a foreign language, the natural sciences, history, social studies, etc. Optional subjects were introduced in the seventh and eighth grade, as well as initiatives in developing mass computer literacy. Optional subjects were intended to enrich and extend existing learning programmes. Greater freedom was permitted in subject choice in recognition of the different abilities of the learners in the post-communist era. While the emphasis in the Soviet classrooms was on uniformity and rote learning; the content-orientated approach of many Russian classrooms aroused genuine concern among educators. Creative thought and critical thinking has been encouraged in schools (Squelch & Truter 1996:247).

In general, the curriculum in the Incomplete Secondary School is a preparation for more advanced learning in the complete secondary school. At the conclusion of the first eight years of common schooling the first decision has to be made on how the secondary course will be completed (Kuebart 1988:1307 & 1308). Illustration 4.2 illustrates the development of learning programmes in a post-communist Moscow school. The illustration also shows the transition of the administrative structures of a school.

Illustration 4.2

School 825

Introduction

This school is typical of one of Moscow's schools for the masses. Most of the parents of this school are employed and they take their children to school in the morning and collect them again in the afternoon. The school provides an integrated day that includes aftercare and recreation. The ethos of this school is designed to develop the whole personality of the child.

Enrolment and size of staff

960 learners with 42 teachers.

Learning programme profiles

Integration of learning programmes feature quite highly on the list of priorities of this school. Subjects taught in this school include the usual subjects from the fields of science and the humanities. The subject packages include psychology, drama and art. The principal complained about the problem of subject overload.

Further learning

Learners who completed the ninth grade leaving certificate received, i.e. a certificate of basic education, were entitled to pursue their education in the final upper secondary phase of education.

Features

School 825 had abandoned the authoritarian Soviet command system of administration before the onset of *perestroika* and proceeded to individualise the process of teaching and learning. Teaching methods became more appropriate to the level of development of the learners. A 100 member Council had administered the school. Party organisation of *School 825* was to be phased out. The school was in the process of including the learners in the planning and implementing of school programmes (Holmes *et al* 1995:132-135).

(d) Conclusion

A marked trend during the Soviet-era in the compulsory school phase was the emphasis on unity and uniformity. The illustrations indicated that transformation had taken place. New subjects were introduced, classroom practice had become more imaginative, and there appeared to be a shift towards child-centred approaches to teaching and learning. The Russian-styled pedagogy of co-operation had provided educators with guidelines for involving learners in the processes of learning. It is concluded that the trend towards encouraging learners to question and to think critically has been regarded as a vital step towards the development of democratic processes in education. The incomplete secondary phase together with the four years of primary education constitute the nine years of compulsory education. It is noted that compulsory school-leaving examinations continue to play an important role at the end of the incomplete secondary phase (and again at the end of the complete secondary phase). At the conclusion of compulsory education Russian learners are able to consider continuing their basic education in a complete secondary school, or at a *tekhnikum* or at a PTU.

4.2.4.4 Complete Secondary Schools

(a) Complete secondary general curriculum (*desyatiletnie shkoly*)

The final three years of the general education curriculum builds on the nine-year incomplete secondary curriculum and completes the learner's general education (*pólnoe srédnee obrazovánie*).

The 1984 Reforms attempted to reduce the number of learners entering the complete secondary general schools. Admission is according to academic achievement. The complete secondary school is the main route to a higher education. The standards in these schools, according to Kogergina (1999) are very high. Methods of teaching have moved away from rote learning, and more emphasis has been placed on problem-solving, dialogue and independent learning. The introduction of private religious schools has become a feature of Russian educational provision. Illustration 4.3 indicates not only the emphasis on religious issues in these schools but also the trend towards providing education in smaller schools, with smaller class groups.

Illustration 4.3

School 1106 Radonezh Religious Society's School

Introduction

This school was unusual as it was situated on one of the unused floors of the building of School 1106. The Radonezh Religious School was a private school of the Russian Orthodox Church.

Enrolment and size of staff

The school could accommodate 175 learners, it was reported that 1 000 applicants had been received for admission to the school.

Learning programme profiles

All basic general education subjects were taught in this school, as well as a foreign language, the fundamentals of religious education, sacred music, and religious art. Russian philology, classical Greek, Latin, and Old Church Slavonic language were taught in the seventh and eighth grade.

Further learning

The school issued its own graduation certificate, however, learners had to take state examinations to qualify for a state certificate.

Features

Learners in some of the grades wore traditional uniforms. Religious music was introduced in Grade 5 history. Each school day was started with a religious service. This service eventually was able to open a new Russian Orthodox Gymnasium, with all its learning programmes based on the religion and traditions of the Russian Orthodox Church (Holmes *et al* 1995:142-143).

(b) The special schools for highly talented learners

Special schools for gifted learners exist. Special classes for talented learners within ordinary schools also exist. These schools or classes offer intensive training in fields such as ballet, sport, natural science and languages. As in the normal secondary schools learners have to follow a general education curriculum, while at the same time specialising in their field of exceptional ability (Zadja 1980:88; Squelch & Truter 1996:250).

Kuebart (1988:1309) estimates that these special schools account for 2% of all complete general secondary schools, which amounts to about 1 300 schools. Controversial because of their elitist image, these schools have nevertheless played an important role in enhancing the chances of a learner for admission to an institution of higher education. This naturally also ensures good career opportunities for the future.

(c) The vocational-technical education (*professional'no-tekhnikeskoe uchilishche*[PTU])

These schools prepare students for skilled work in industry, construction, agriculture, the public services; the emphasis of these schools is on manual trades; tuition is by means of practical instruction, in workshops and in the workplace (Wolansky & Bax 1994:19 & 20). The PTUs offer a combination of general education and highly specialised vocational training (Squelch & Truter 1996:249). The duration of PTU courses varies from one to three years, and evening and correspondence courses are offered. The PTUs also retrain workers in new skills and thereby upgrade their qualifications.

The general education/vocational education combination is regarded as being essential for the training of a labour force capable of adapting to technological changes (Berulava 1992:11). Skills training is also offered on a broader basis in order to avoid narrow specialisation and future obsolescence. Kuebart (1988:1311) reports that training at the PTUs is available in "1 400 mass occupations, this covers only part of the whole spectrum of over 7 000 specialisations".

Graduates from the PTUs enter the workplace, only a small percentage may be successful in applying for admission to an institution of higher education. The more practical orientation of these schools, and the somewhat lower standard of the general education component may preclude further progress (Tomiak 1972:78-81).

- (d) The specialised secondary schools (*srédnie spetsiálnye uchébnye zavédeniya* [ssuz; plural ssuzy] which includes the *tékhnikum*; *tékhnikumy*

The policy of the provision of universal secondary education is supplemented by a policy of universal vocational training. This ensures that new entrants to the labour market are equipped with relevant skills.

More than one type of specialised secondary school exists, the term *tékhnikum* referring more specifically to the larger schools that offer a wider range of specialisations.

These schools provide a preparatory curriculum for students at the mid-level of technical specialisation in various commercial and industrial sectors of the economy, under the authority of the Ministry of Higher and Secondary Specialised Education. Courses include general education as well as vocational education. Admission is from applicants in the final year of the incomplete secondary school, from the complete general school, or from the PTUs. Graduates who are referred to as “specialists” are able to apply for entry to higher education (Kuebart 1988:1310).

4.2.4.5 Higher education (*Vysshee Uchebnoe Zavedenie* [VUZ; VUZy])

The VUZy refer in the former-Soviet and present Russian educational structures to any higher educational institution. The VUZy focus on qualified professionals to be absorbed by all sectors of the economy. The VUZy include the universities, polytechnical institutes and specialised mono-technical institutes. The *aspirantúra* admit candidates who are in possession of a VUZ diploma for further study and research at post-graduate levels. The

technical (or polytechnical) institutes, are a major provider of highly specialised technical personnel for, *inter alia*, all sectors of the economy. The institutes are responsible for training engineers in various fields of specialisation. The status of the qualifications received from a technical institute does not vary when compared to university qualifications (Kogergina, 1999).

4.2.5 Trends, Critical Issues and Reforms in the Soviet - Russia System of Education

4.2.5.1 Introduction

The paragraphs on trends in the Russian system of education will focus on the problems of providing an equitable system of education in a post-communist society, in which the economy suffered near collapse during the 1980s. The paragraphs will demonstrate the inter-relatedness of the economy and relevance in educational provision. The same issues will be discussed in the paragraphs on critical issues, in order to emphasise the prevalence of crisis in educational provision in a society in transition where the economy is incapable of supporting the personal and social needs of the population. The paragraph on reforms and future developments will ask critical questions of the future, and in particular whether relevance is possible in a state with very little evidence of economic growth.

4.2.5.2 Trends

(a) Introduction

The problems of the provision of education for the masses in Russia posed the same problems for the post-communist Russian state as the same situation had done during the Soviet era. The main difference in educational provision during the post-communist era was the influence of democracy, free enterprise and an emerging economy on educational provision. The relevance of vocational education was debated during the post-communist era,

particularly in the context of the demands of the global markets. These trends will be examined below.

(b) The problems of declining standards in education

A former world power such as Russia will undoubtedly have educational institutions of excellence, however, there are regions that experience the same problems as those of other middle-and-low income economies. One such problem is that of declining standards in education.

Zadja (1994:80) reports on growing illiteracy in Russian elementary and secondary schools; one in five learners in Grades 5 – 7 are practically illiterate. At secondary school level one out of three learners lacks basic knowledge in mathematics and physics. The same author attributes the new apathy in learning “largely to economic and social” factors. Bannatyne and Hall (1996:11) report a different perspective. They comment that on a visit to schools and colleges situated in towns along the River Volga in 1996 they observed a lack of modern equipment (i.e. 1950s and 1960s vintage). They do acknowledge however, but they were “impressed at how well grounded in the basics of reading, writing, mathematics, and general science Russian students seem to be”. Grant (1992:77) also links the trend towards an early termination of schooling (Grade 8 or 9) and entering employment to political and short-term economic factors. The first experience of democratic freedom did not manage to secure a complete secondary education for all workers.

Kogergina (1999) holds that the standard of educational provision in Russia, particularly at secondary level is very high. A similar view is held by Filatova (1999), while schools in remote rural areas struggle to maintain standards, educational institutions in the cities produce very high standards of achievement. With the withdrawal of State funding from education, the regions and local governments have been unable to provide funding for education. With the result a large number of Russian schools have been under-resourced in recent years. Zadja (1994:80) estimated that only 25% of rural schools had the required resources to maintain normal teaching-learning processes. Previously textbooks were provided by the State, but during the

1994 - 1995 school year the financial stringency of the Education Ministry determined that the State's contribution to textbooks would be drastically cut. With no more than two books per grade in some schools (Zadja 1994:80) general educational standards were bound to decline steadily. Russian teachers were unpaid for long periods at a time. Financial constraints in post-communist Russia did very little to raise the morale of Russian teachers, and standards in education (Holmes *et al* 1995:332-337).

- (c) The problem of educational provision as addressed by the trends towards privatisation and the Russian youths' attitude towards education

Another feature of post-communist Russian education has been the trend towards the privatisation of schools and colleges. The provision of education that previously was the sole responsibility of the State became a marketable commodity. Zadja (1994:80) points out that the average family's contribution to education in 1995 was 0,1% of the family budget. A new trend emerged during the 1990s of early drop-outs from school. Two reasons are cited for this trend:

- the influence of poverty and deprivation on the learning processes (Zadja 1994:80);
- the attraction of markets and the free enterprise systems operating in Russia (Kitaev 1993:14-18).

Kitaev (1993:14) and Kogergina (1999) both describe the modern attitude of the Russian youth as being sad but pragmatic. The Russian youth was not politically visible during the years of transition to a democracy. Their attitude was described as "political apathy" (Sandi 1992:110), and during the first stages of post-totalitarianism the Russian youth found themselves a bewildered generation, "disillusioned with the ideals of socialism" (Kutsev 1992:7). Confronted by the problems of rising unemployment, particularly among graduates the Russian youth was attracted by the market economy and the possibilities offered for self-employment in the informal sector (Kitaev 1992:63-94; Filatova 1999).

The acquisition of qualitative entrepreneurial skills featured very high on the list of priorities of 1000 secondary graduates surveyed in Kuzbass in January 1991; 96% of those interviewed indicated that the ability to establish business contacts was the most important skill required in a market economy, while 64% of respondents indicated very strongly that economic competence was a highly desirable entrepreneurial quality in a market economy (Kitaev 1993:16 & 17). The importance of higher education receded during this period, or as Kitaev (1993:16) expressed it, education is a necessity only for "a limited number of higher education profiles, e.g. economics, finance, law, etc".

Peregudov (1992a:72) summarised this trend in the attitude of the Russian youth towards education in the following points:

- an orientation towards secondary professional levels; (and consequently)
- a decline in the prestige of knowledge and education;
- a belief that one does not need to learn much to acquire an occupation.

Two seemingly opposite trends, yet related to the political and socio-economic developments of post-communist Russia. Filatova (1999) confirmed all these trends during our interview.

- (d) The relevance of the provision of vocational education in a market economy

The free market economy of Russia created new opportunities for the providers of relevant education. The survival of the Communist vocational institutes could not be guaranteed. The re-definition of "responsiveness" and "relevance" implied, *inter alia*, competitiveness and an accurate assessment of the needs of the labour market. Evans and Birch (1995:167 – 170) surveyed business and economics students in Russia, Poland, Bulgaria and the former Yugoslavia in order to gain a better understanding of the role of education in post-communist Russia and Eastern Europe. Their conclusions produce valuable comparative data on the relevance of business and economic education in former communist countries. The authors' conclusions satisfied their original hypothesis, i.e. that the rapid transition of the Communist

societies would result in the failure of the educational systems to adapt fully to the emergent needs of society.

In their conclusions the authors noted that:

- there was a strong desire in the business and economics disciplines at universities to dispose of Marxist ideology in order to understand the principles of business and economics;
- the development of democratic capitalism depended upon the rapid establishment of the fundamentals of a market economy;
- economic progress depended on an educational system that was able to help students to become effective participants in the emerging economy;
- programmes to help transform the educational system of faculties are as important (and less expensive) than foreign aid.

(Evans & Birch 1995:170 –171; cf Semenov 1993:73)

The paragraphs that follow will illustrate that even the best intentions of the older generation were not sufficiently relevant for the needs of the market economy. Reform and transformation of society had to include every aspect of society, including education, before relevance could accrue.

Scepticism characterised the writings of some of the former-Soviet educationalists as they reflected on the effect of *perestroika* on the vocational-education sector. Aleinikova (1993: 34, 38 & 39) reports that Kolomiets, an associate professor in sociology at Moscow State University was critical of the so-called “hour of triumph” for vocational education, he held that the transition to a market economy implied, “the stock market ... getting rich in an instant, the threat of complete collapse, and rising crime”.

Recognising that a market economy entailed initiative, enterprise and entrepreneurship, Kolomiets, nevertheless condemned the system by saying that it “primarily requires head work ... the ability to take risks, to hold out, will power, emotionality”. He concluded by saying, “Thank God that we have other kinds of young people besides those who just sit for hours at their little desks” (Aleinikova 1993:38 & 39). Grant (1992:79) sympathised with the sceptics by

acknowledging the achievements of Soviet education. The author stated that Soviet education had raised the level of education in a backward country to a spectacular degree, however, he did not think that Soviet education would be re-called in the immediate future.

(e) The need for mid-level specialists

It would appear that the focus in post-communist Russia would be on the younger, and more realistically qualified generation to spearhead the transition to a democratic and market economy (Kitaev 1993:9; 27 & 28).

Shipunov (1993:3) discusses the demand for mid-level technical specialists in a market economy. He questioned the survival of the SSUZy and posed the critical question of the future development of the *tekhnikumy*, more like the institutions of higher education, or more like vocational-education institutions. The following year in an interview with Semenov (1993:75) the same author re-iterated his view that the SSUZy would have to focus on the "multi-level character" of its curriculum content. During the same interview with Semenov (1993:73) Shipunov indicated that there was an over-supply of "engineering and technical cadres" but a shortage of specialists in the fields of economics, law and ecology. In respect of economics Shipunov cited areas such as marketing, management, finance and accounting which required specialised education at mid-level. He expressed concern about the disproportion between the graduates from higher education and the SSUZ-sector.

(f) Transition to privatisation and vocational education

The transition to privatisation affected the vocational education sector quite significantly. In terms of reforms and destatisation vocational-technical institutions could be sold to individuals (Pet'iukh 1993:46). This implied much greater autonomy (Peregudov 1992b:75) and greater powers at internal organisation and economic independence. Peregudov does however, acknowledge the added responsibility that autonomy imposes on the vocational education institutions in respect of property ownership and the financing of the training of the specialists. Peregudov may have been right,

many vocational-technical institutions faced closure or a redefinition of their function in the market after the transition. These trends point unequivocally to the importance of remaining relevant to the needs of the market (Bestem'ianova & Starikova 1993:17-20).

Two different types of illustrations are cited as examples of trends in the vocational-education sector to ensure survival in the market:

Grishina (1994:53) writes:

“... as is well known, a number of PTUs and SSUZy are trying to find other ways to survive under present-day conditions, they are beginning to teach new specialities, providing training in cost-accounting-based courses; they are co-operating with technicums and higher educational institutions to form levels of instruction in a single centre, they are upgrading their status to the title of lyceum, college, etc.”

Semenov (1992:79) interviewed E.K. Shustikova, director of Moscow's Industrial-Pedagogical Technicum No. 3. Cited as being the most distinguished *tekhnikumy* in Moscow for its high-quality work and vigorous implementation of *perestroika*, the director replied to a question on practical experience for students as follows (Semenov 1992:83):

“... the technicum has concluded an agreement with the capital city's trade organizations regarding the manufacture of men's and women's clothing. The workshops produce more than 10 000 rubles in profit every year, which is distributed as wages to the students and the masters of production training and is also spent for social development and the strengthening of the school's material base”.

The problems of the universalisation of education in Russia focused on the provision of general and vocational education. The former-Soviet administration tended to separate general and vocational education. However, the competitiveness of the international markets determined that Russian policy-makers review this trend. The relevance of the general education component in vocational education qualification in preparation for the labour market was discussed by Novikov (1994:47, 48). He held that the Soviet Union had slumped to fortieth position in the world as a result of the population's poor level of education. The Soviet Union had dropped from the third position it occupied during the 1950s and 1960s. Novikov developed his argument by suggesting that education's unpopularity and lack of prestige was a temporary phenomenon. However, when compared to other highly developed countries such as Japan (68%) and the United States (58%), Russia only recorded 20% of young people entering an institution of higher education. The demands of a market economy, according to Novikov (1994:48) required an "integration of processes in vocational education ... not only in the structural and organisational aspects ... but also in the content of vocational education". Speaking of "hybrids" in the vocational education sector as institutions combine to remain relevant to the emerging market trends, Novikov (1994:48) compared the relevance of the broad-profile specialist's qualification in terms of employment to that of the graduate or the blue-collar machinist. He concluded that the "broad-profile specialist" was more relevant, primarily because of the broad-base. The widening of the focus of the "professionalism" of the PTUs and SSUZy, he held was a social protection against unemployment. Berulava (1992:13) stressed the importance of the integration of general and vocational education as an important factor in the preparation of the young person for life and the workplace. Artificial distinctions between work and school (or college) had to be broken down. However, new developments were taking place in the general and vocational sectors that would address the critical issue of the attitude of the younger generation towards education.

(h) Conclusion

Trends in educational provision in the Russian Federation were aimed at the introduction of relevance in educational provision in respect of declining standards in education. The problems of spreading illiteracy were also concluded. A further trend was concluded in the move towards private schooling, and the rejection of public schooling by the Russian youth. The introduction of market-related forces into post-communist Russian society brought new pressures to bear on the providers of vocational education. Adaptations to the market economy was critical, intransigence to change in this sector implied closure. The need for mid-level skills had to be addressed, particularly in the fields of business and management, learning areas previously not provided by the Soviet authorities.

4.2.5.3 Critical Issues

(a) Introduction

It is possible to identify any number of critical issues in an educational system in transition. This is particularly true when major restructuring of an entire society has taken place. However, in the case of Russia some of the issues identified as trends will be redefined as critical issues, but in a broader context, and in conjunction with other issues.

(b) Ideology and reform

The Yeltsin era attempted to cope with the inflationary and political instability of the post-communist era (Griffin & Bailey 1994:182). Holmes *et al* (1995:337) hold that Yeltsin "has never been able to deliver on his promise to make education a priority, in order to develop Russia's intellectual, cultural, and economic potential". Yet, despite the legacy of communism, reform has taken place in educational provision in Russia. Filatova (1999) made the point during our interview that Russia is a very different country today, a country of great achievement, but one with many teething problems. The legacy of

communism may yet be a critical issue, and inhibit reform, and relevance. This development is still unclear (Griffin & Bailey 1994:182).

- (c) The vast problem and the critical points in the provision of basic educational requirements in Russia

❑ The problem

A critical issue for post-communist Russia is what this present author has described, as “the vastness of the problem”. The World Book (1997:480) describes Russia as “one of the richest countries in terms of natural resources. It has the world’s largest forest reserves, enormous energy supplies, vast stretches of farmland, extensive mineral deposits, and many potential sources of hydroelectric power”. Bannatyne and Hall (1996:11) make a similar point when they comment that “Russia may be one of the richest nations in the world, but during the Soviet era thinking for the future was government driven and controlled”. In respect of the potential wealth of Russia, Kogergina (1999) was in full agreement. The fact cannot be overlooked that the Soviet Union was militarily a former super-power, and at one time the world’s leading nation in space exploration. Levels of development in the fields of science and technology must have been very high during this era.

Yet, Third World problems persist, and appear to be spreading. Zadja (1994:80) cites an October 1994 World Bank Confidential Report on education in Russia in which the bank warned of falling standards and a decline in quality. The new culture of poverty and deprivation is largely economic and social, and affects pupils and teachers alike. The problems of growing illiteracy, primarily at the secondary school level are a new and rapidly spreading phenomenon in Russia (Zadja 1994:80).

These contradictions are critical issues that will determine future directions of development. Kogergina (1999) holds that Russia still has the technology and scientific expertise to compete internationally. However, the signs of a former superpower drifting into a Third World situation of rampant illiteracy, poverty

and unemployment appear to be emerging from reports by experienced Russian-observers, like Zadja. No accurate and reliable statistics appear to be available. The vastness of the problem precludes accuracy in statistical recording and analysis of critical issues.

❑ The critical points

The Russian system displays similar characteristics to other emerging or transitional systems of education:

- eighty percent of the education budget is spent on teachers' salaries;
- local authorities are unable to keep up with the cost of new school buildings; and the repair of existing structures;
- schools are not adequately funded as a result of massive subsidies granted to inefficient projects in the remote regions of Russia;
- the erosion of the salaries in the education sector has resulted in a low morale among teachers;
- with the proliferation of the number of new schools the Russian Ministry of education has had to take steps to establish national standards and accreditation procedures;
- the problems of equal opportunity in the Russian Federation to benefit from a basic core curriculum does not exist; parents of learners find this disturbing;
- a fair opportunity to achieve the required learning outcomes that will be assessed nationally implies that all schools will accept and teach a common core curriculum that is mandated by state standards;
- teachers will be professionally competent to teach the core curriculum;
- instructional aids and materials will be available to promote the upliftment of the standards in schools.

(Brodinsky 1992:378-383; Holmes *et al* 1995:337-339)

The vast problem of producing quality education for the masses has grave financial implications for the Russian authorities.

(d) The younger generation: the problems of education and work

❑ The problem

This third critical issue has already been referred to in some of the preceding paragraphs. The change in the attitude of the younger Russian generation towards formal education is a critical issue. It was stated above that the gymnasia and lyceums admitted the best students. The students at risk are those who cannot cope with the traditional knowledge-based, compulsory nine-year curriculum, and who cannot find a place in a vocational school, or a trade school. The fear is that the economic crisis in Russia will increase the number of students at risk. Vocational and technical schools are refusing to admit nine-year dropouts (Grant 1992:322 & 339, 340).

Peregudov (1992a:72) pointed out that the key to *perestroika* in the vocational education sector lay in the following cause-and-effect relations:

- stagnation of technology;
- decline in the prestige of vocational, and especially technical, education; and
- decline in the quality of specialist being trained.

It must be re-iterated, that a further reaction from the Russian youth has been an orientation towards secondary professional levels, and not higher education. Outdated skills and irrelevant higher education qualifications, which were in over-supply, contributed towards the problem of mounting unemployment.

❑ Education and work

Kitaev (1993:22 & 23) writes of the entrepreneurial trends in higher and post-graduate education. These trends described as penetrating the area of education like a "chain of reaction" to the facts of life. These trends may remain theoretical and "trendish" and thus irrelevant if the demands of the new entrepreneurial class of Russians are not met. Kitaev (1993:28), and

Kogergina (1999) concur when they state that the traditions of small-scale entrepreneurship, the informal sector, and self-employment survived through the communist regime and now serve as a basis for the entrepreneurial activities of youth. However, entrepreneurial training at the level of higher education is not the critical sector, the response must come from the providers at the intermediate levels, i.e. at secondary school, and secondary specialised institutions. Kitaev (1993:29) says that

“... the issues of preparing youth for a market economy have not yet been comprehensively addressed by the public and local educational authorities; ... the links of higher education institutions with local and national private business, industry, and commerce are incidental, largely viewed as charity and not as a serious channel of communications and transfer of competence”.

(e) Discussion

Institutions of higher education will always be an essential part of the future development of any country. The critical issue, however, are the links with the business and industrial community, and with other levels of educational provision. The emerging entrepreneurial class of Russia rejected formal education of the former socialist era, however, the future direction of the Russian market orientated economy depends on the responsiveness of the schools and colleges at the mid-level of provision to respond with relevance. The development of entrepreneurial skills, management skills, financial and investment skills, at the appropriate level may include adult re-training, but primarily the critical issue will be to address the role of educational provision in relation to the markets at all levels. The data on relevance and educational provision in Russia demonstrates this conclusion beyond dispute (cf Zavarykin 1994:84 – 91).

The Communist Party is still active in Russia, with a strong support base. Albeit in a society committed to democratic principles, socialist thinking continues to influence and shape policy-directions and reform. The genuineness of reform, is critical for the future of Russia, and particularly in

the area of the provision of general and vocational education. Critical issues may further inhibit economic recovery and negatively influence educational relevance. Political stability, economic growth and the development of the markets are critical for the future development of educational provision in Russia. Educational institutions, particularly at the mid and lower levels of provision, will have to attract foreign funding in order to survive.

(f) Conclusion

The legacy of communism was concluded to be a critical factor. The post-communist dispensation would have to address these critical issues for many decades to come. The critical issues in the Russian country data demonstrated further the close link between relevance in educational provision and the problems of economic growth in society. Education and work are integrally related. Relevance in education implies relevance to something. The Russian youth's reaction to irrelevant education was profound. The conclusion reached is that education must remain responsive to the demands of society, at the personal and the societal level of provision. If not addressed, the critical issues could result in further deterioration of the quality of life in a society already beleaguered by poverty, illiteracy and the depletion of basic human needs.

4.2.5.4 Reforms and future developments in the Russian Federation

(a) Introduction

The reforms of the former-Soviet Union and post-communist Russia have been discussed at length. This paragraph will conclude the examination of the Russian system of educational provision by making reference again to the problems associated with linking aims in education to an ideology. This concluding paragraph will however, make reference to Pastuovic's Theory to project possible future developments in educational provision in post-communist Russia.

(b) Review of data

The reforms that were a feature of educational provision in the former Soviet Union have been discussed at length. The momentum of educational reform seemed to accelerate during the late 1980s and the early 1990s. Kuebart (1992:131) used the term “the reform of the reform” of *perestroika*. By this time it had already become obvious that Soviet “reforms” were not reforms in the literal sense of the word. Pastuovic (1993:406 & 407) questions the so-called reforms and suggests that terms such as “changes” “patched-up” or “innovations” more accurately describe the Soviet educational reforms. This argument is based primarily on the fact that no structural changes took place in the educational system of the Soviet political structure. The problems of Tsarist Russia, the former Soviet Union, and post-communist Russia are the same:

- the provision of education to a vast population that covers the largest surface area in the world;
- how to feed and clothe the nation.

Relevance, in educational provision, according to the conclusion reached in Chapter 2 will accrue at the personal and at the social levels of society. Basic human needs must be met, and the quality of human life improved. Pastuovic's Theory provides some perspective on the dilemma of providing relevant education at the personal and social levels in the aftermath of seventy years of Soviet administration.

(c) The Pastuovic Theory

The Pastuovic Theory is used as an aid in understanding the problem of educational reform in the former Soviet Union, and its educational legacy to present-day Russia. Pastuovic's Theory is a conception of the interaction of educational goals with the political, economic and psychological goals of society. The outcomes of this theoretical interaction will, according to Pastuovic (1993:411) determine to what extent meaningful educational reform is possible in a society. Pastuovic (1993:400-412) argues from a sociological

point of view that the educational theory of "socialist pedagogy" in fact concealed the true goals of "socialist education". According to this theory in "socialist pedagogy there is only one educational goal, i.e. the "comprehensively developed personality" which is socialist jargon for "the creation of a new socialist man" (Pastuovic 1993:410). These monistic educational goals thrive in totalitarian societies where a non-market economy is practised. In socialist systems the actual goal is a political (ideological) – educational goal aiming at a homogenous communist population. The proclaimed goal is a psychological – educational goal, i.e. the so-called happy socialist person. Economic goals, in relation to education, are absent, at the proclaimed and the actual level in the communist system (Pastuovic 1993:411). The goals appeared to be unclear because they were dominated by political and moral goals.

Pastuovic (1993:450) holds that in a totalitarian system with a non-market economy "re-ideologization of education" is not enough, true reform will only be achieved "by the establishment of democratic institutions and the market economy, which will in turn influence socialization" (Pastuovic 1993:410). Reform of the political apparatus of the Soviet Union has taken place, the question arises then of a greater degree of relevance emerging in educational provision. Opinions tend to be pessimistic about relevance in future educational developments in post-communist Russia.

(d) Future developments

Holmes *et al* (1995) shares Pastuovic's scepticism. Writing during a two-year period immediately after the dismantling of the Soviet Union the authors conclude on a fairly sceptical note:

"The deepening economic crisis and the instability of the political situation have marginalized the liberal reformist leadership ... continued educational reform in Russia and the scope of future innovative initiatives no doubt will depend upon the extent to which Yeltsin is able to retain popular support as a person and advance his political and economic reforms. The final shape that

the Russian educational system will take and the goals to which it will be committed are far from certain”.

(Holmes *et al* 1995:342-343)

It may appear, certainly from the literature that emanated during the early 1990s, that theories such as the Pastuovic Theory reflected accurately the realities of post-communist societies.

Grant (1992:69; 71) is similarly pessimistic. He holds that clean breaks with the past are extremely rare in human events. This kind of observation does not hold out much hope for relevant educational reform, particularly in the context of an economy that was near to collapse largely as a result of the failure of an ideological system. The rapid transition of Russian society may have taken place, and the new Russian economy is beginning to work. Whether the transition in the political and economic sectors of Russian society has penetrated all levels of Russian society in order to adapt fully to the emergent needs of all the people of Russia is unclear. Some scholars are inclined to conclude on a sceptical and pessimistic note (Grant 1992:78; Evans & Birch 1995:169).

4.2.6 Conclusions

4.2.6.1 Introduction

Factors of relevance for the Soviet-Russian system will be concluded in historico-legal data, socio-economic, structure of education data, and in the material that emerges from the trends, reforms and critical issues of provision of education in the former Soviet and present Russian system of education. Barriers to relevance will also be indicated.

4.2.6.2 Historico-Legal Factors

The former Soviet Union country data indicated that structural changes in society had to occur as a pre-requisite to lasting relevance in educational provision (para 4.2.2.4). Successive Soviet leaders tried to reform education; however, the desired relevance was never optimally realised. The

polytechnical principle, theoretically attractive to its protagonists, remained practically elusive (cf 4.2.2.3 (d)). The ideological base of Soviet society emerged as an inhibiting factor to economic development and relevance in education. The modernisation of the Soviet economy under Gorbachev included for the first time a critical appraisal of the needs of society in relation to the relevance of Soviet educational provision (para 4.2.2.3 (f)). The data indicated clearly that while the dismantling of Communism removed the inhibiting structures the normalisation of Russian society did not take place in the short-term (para 4.2.2.4 ((d)). The legacy of problems in education was inextricably linked to the wider problems of Russian society. Political and economic problems of major constitutional proportions were found to be barriers to relevance in education (para 4.2.2.2; 4.2.2.3 (a)-(e)).

4.2.6.3 Socio-Economic Factors

The Soviet-Russian data indicated that education cannot solve all the problems of society. The Soviet-Russian country data indicated that demographic factors tend to set the parameters within which educational provision takes place. In this respect the Soviet-Russian demography presented their national authorities with vast problems and challenges (para 4.2.3.1: 4.2.3.2 (a) & (c)). Demographic factors cannot be easily changed. The socio-economic data indicated poor levels of human development, negative economic growth rates, and a very high external debt. The Russian gross national product (GNP) placed the former super-power in the middle-low-income economic category (para 4.2.3.2 (c) (d) (e) (f)). This conclusion became one of the recurring themes of the Soviet-Russian country data, viz a former super-power, and potentially one the world's richest nations in terms of its natural resources, yet struggling with the critical problems of spreading illiteracy and poverty (para 4.2.3.3; cf para 4.2.5.3 (c)). The Gini Co-efficient of 49,6 corroborated the argument of this paragraph (para 4.2.3.2 (g)). The distribution of wealth in the Russian Federation for individuals and households deviated markedly from perfect equality. The conclusion was reached that education can interact with the workplace, *vis-à-vis* the vocational programmes of educational institutions, but the programmes *per se* cannot create jobs, or solve the problems of unemployment. The Soviet-Russian

country data demonstrated the fallacy of Marxist theory in respect of the polytechnisation of education in pursuit of ideological goals in society (cf para 4.2.2.3 (a)(b)(d)(f) & 4.2.2.4 (a)-(d)). The principles of supply and demand were absent in the command economy of the Soviet era. The problems of relevance in education tended to persist during this era. The post-communist market-orientated economy had to demonstrate positive signs of growth, before relevance in the educational programmes became evident (para 4.2.5.4 (a) – (d)).

4.2.6.4 Structure of Education Factors

The size of the Russian population and surface area covered by one of the biggest countries in the world emerged as a significant factor in the provision of relevant education in Russia. Specialist achievements in many fields bore testimony to the quality of Soviet education. However, this quality was not evenly distributed through-out the population. The Soviet-Russian country data indicated growth in the pre-primary phase (para 4.2.4.2) with several options available to learners in post-compulsory phases of learning (para 4.2.4.4). The Soviet-Russian system provided for the early selection of learners into vocational learning programmes (para 4.2.4.4). No barriers to relevance were discerned in the Soviet-Russian structure of education *per se*, however, the learning programmes were found to be problematic (cf Illustrations 4.1; 4.2 & 4.3). The authoritarian style of the Soviet educational system emerged as a significant barrier to relevance. The Communist system placed little or no emphasis on critical thinking, and freedom in subject choices appeared not to exist. In the post-secondary institutions the providers did not possess knowledge or skills relevant to the economic sector. The learning programmes became irrelevant even before the dismantling of the Soviet Union (para 4.2.4.3 (c)(d) & 4.2.4.4 (a)).

4.2.6.5 Trends, Reforms and Critical Issues as Factors of Relevance

(a) Introduction

Criteria identified above as factors of relevance may be repeated in this paragraph as they impinge on the evaluation of trends, reforms and critical issues.

(b) Trends

Trends in educational provision in post-communist Russia were overshadowed by the democratisation of Russian society and the return to a market economy. The problem of declining standards in education emerged as a critical barrier to relevance in education. The Russian education budget was identified as a major inhibiting factor to relevance in educational provision (para 4.2.5.2 (a) & (b)). The trend of democratisation of education was associated with the rejection by the modern Russian youth of formal education. This rejection implied a perception of irrelevance in education. The trend manifested itself particularly in the emergence of the young entrepreneurial sector of post-communist society. The knowledge-based learning programmes of senior secondary and vocational institutions were perceived to hold no relevance (para 4.2.5.2 (c)).

Factors of relevance were identified in the new trends towards teaching and learning adopted by the post-communist Russian schools. The provision of education in a market economy provided new opportunities for educators; however, this new commodity in the education market tended to widen the knowledge gap in Russian society. Privately financed schools tended to be costly and out of reach of the ordinary citizens of society. Inequitable provision of education in post-communist Russia became a feature of the new society (para 4.2.5.2 (d)).

Scepticism towards the transition in Russian society was evident in the writings of the older generation of professionals. The influence of the new market economy on relevance in educational provision was unavoidable (para

4.2.5.2 (d)). The relevance of the polytechnical system of vocational education, once the cornerstone of the Soviet system was called into question. Trends in the over-supply of engineering and technical specialists emerged, but an under-supply of specialists in the fields of economics, law and ecology (para 4.2.5.2 (g)). A problematic imbalance of graduates from the higher and tertiary educational sectors of education became a trend. This trend was associated with what was described in the Soviet country data as a shortage in mid-level specialists (para 4.2.5.2 (e)). The conclusion was reached that post-communist Russia was not prepared for entry to the world markets in respect of a poor skills profile, and the poor general education levels (para 4.2.5.2 (f) (g)).

(c) Critical Issues

The legacy of communism was identified as a critical factor in the provision of relevant education. A clean break with the past was identified as a factor of potential relevance (para 4.2.5.3 (a) & (b); cf para 4.2.5.4 (d)). The emergent culture of poverty and growing illiteracy was identified as another critical issue that had to be addressed by the Russian authorities.. The lack of economic growth resulted in a lack of funding for educational institutions and the problems of outdated equipment and technology (para 4.2.5.3 (c)). Serious problems in educational provision emerged from the Soviet-Russian country data, reminiscent of educational provision in other emerging economies. The decline of Russia from a former high-income super-power to a mid-low-income economy emerged from the Soviet-Russian country data (para 4.2.5.3(c)). The problems of youth unemployment, work, and a rejection of traditional forms of training for the workplace came in for critical scrutiny by the post-communist Russian youth (para 4.2.5.3 (d)). This critical scrutiny included the learning programmes of the traditional technical education and vocational education institutions. Re-entry to the world community presented the Russian system of education with critical challenges. The Soviet-Russian country data indicated that if the critical issues were not addressed first barriers to relevance in educational provision would grow (para 4.2.5.3 (e)).

(d) Reforms and Future Developments

The societal problems of the Russian Federation are primarily the provision of basic human needs. The quality of human life depends on *inter alia* the provision of a relevant system of education to a vast nation (para 4.2.5.4). The Marxist experience of the Soviet era linked the aims in education to an ideology that was not able to meet basic human needs. The needs of the state were prioritised in the socialist system (para 4.2.5.4 (c)). Factors of social and personal relevance appear to emerge in the Russian country data (para 4.2.5.4. (b) & (c)). Theorists like Pastuovic were pessimistic about the accrual of relevance in educational provision in post-communist society. However, the material did yield a degree of optimism. The two interviews conducted yielded cautiously positive data in respect of future developments. The key however, to relevance in the Russian country data, emerged in a national commitment to the principles of democracy. Failing which the potential factors of relevance may never accrue (para 4.2.5.4 (c)).

4.3 THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN THE PALESTINIAN-ISRAELI REGION

4.3.1 Introduction

Israel and Palestine share a common history. The historico-legal factors will therefore be examined jointly, one sub-paragraph will however, be allocated to the historico-legal data pertinent to each of the individual nations. Similarly, it seemed logical to examine certain aspects of the socio-economic data jointly. Differences were examined in separate sub-paragraphs. The structure of education in the Israeli state will be examined followed by an examination of the trends, critical issues, future developments and conclusions. The provision of education in the Palestinian Authority will be examined using the same analytical format.

Vos and Brits (1990:14) state that an integrated study of national education systems is aimed at the evaluation of these national systems and their education problems in the light of their relationship to all historical, cultural, economical, geographical and religious forces and factors. This statement is particularly relevant in the case of the Palestinian-Israeli region where most of

these forces and factors have influenced the development of twentieth century educational systems in the region.

4.3.2 Historico-Legal Data

4.3.2.1 Ancient origins

Throughout history many groups, tribes or nations have either migrated to, or settled in, or conquered Palestine (Bleckman 1971:27). It is also true to say that the many struggles that have taken place for the Holy Land have had religious underpinnings. Palestine is regarded as holding very special religious significance for three major world religions. For the Jews, Christians and Muslims the origins of their faith can be traced back to religious events that took place in Palestine, and hence the importance attributed to the preservation of the holy sites linked to all three faiths. Political and military struggles were waged in history for access to these holy sites. Cognisance must also be taken of minority religious groups that continue to practise their faith in the Palestinian-Israeli region, e.g. the Samaritans, the Druze, the B'hai and the Kara'ites (Jacobs 1998: xi & 501). These minority groups contribute not only towards the complexity of the composition of the population, but present the educational systems with special challenges in respect of relevance.

During his term of office (1977 – 1985) former Israeli Prime Minister Menachem Begin frequently referred to the ancient Biblical origins of Israel. Begin believed that the whole of Biblical Palestine (including Transjordan) belonged to the Jews for historical reasons (Regan 1984:41). The ancient history of the Jews up to c134 AD forms the historical foundation to the upsurge in Jewish politico-religious orthodoxy of the late nineteenth and early twentieth century. Zionism was inspired by a drive to re-possess the land God gave to Abraham.

Arab interest in the Palestinian-Israeli region can be traced back to ancient times as well. The familial relationship of Arabs and Jews is frequently assigned to the sibling rivalry between Jacob and Esau (Genesis 27) and to

the historical role of the Philistines in the region during the time of the Israelite kings Saul and David (1 Samuel 14 & 2 Samuel 8).

It was however, the religious fervour of the Prophet Mohammad that dominated the affairs of the region for many centuries. He was determined that Islam should venture out of Arabia. His determination was based on the conditions he had created for a universal brotherhood on the basis of faith, a principle which he vigorously substituted for the old blood-ties and tribal loyalties of the Arabs. Mohammad's religious fervour was bequeathed to the *umma muslima* (Muslim Community) after his death. The Christian leaders of Western Europe feared the Arab occupation of Palestine, and despite the vacillation of foreign occupation over the years the religious link between Western Europe and Palestine remained intact over the centuries (Rahman 1979:25).

4.3.2.2. Zionism and Arab Nationalism

At the beginning of the twentieth century the Ottomans were the rulers of much of the Middle East, including Palestine. Apart from a nine year period of Egyptian occupation (1831-1840) in Palestine, the Ottoman rule was reasonably prosperous, particularly during the 16th century. After the expulsion of the Egyptians in 1840 Palestine experienced an increase in foreign interest. Faris and Ochsenwald (1991, in *New Encyclopaedia Britannica* 1991:417) note that the French, Russians and the Germans established settlements and colonies in Palestine. The same authors also comment on the presence in Palestine of the Zionist agricultural settlements, the beginning of future Zionist endeavours in Palestine to establish a Jewish national state.

During the early 1800s the first wave (*aliyah*) of Jewish emigration from Europe took place. A group of young Russian Jews calling themselves *Hovevei Zion* (Lovers of Zion), formed a movement to promote the return of Jews to *Eretz-Israel* (Bentwich 1965:1). This movement was the probable beginning of practical Zionism. Theodor Herzl, the Austrian journalist, generally regarded as being the "father of the state of Israel", founded the World Zionist Organisation, the political wing of Zionism that worked for the

political recognition of the Jewish claim to a Palestinian homeland (Meier 1975:10; Regan 1984:8-9).

The Arab population of early twentieth century Palestine also experienced a "general Arab renaissance" (Khalidi & Ochsenswald 1991, in New Encyclopaedia Britannica 1991:417). A revival of interest in Arabic language and literature took place, and the establishment of Arabic schools (Graham-Brown 1984:16). The Arab intelligentsia also demonstrated early twentieth century Arab nationalism in the strong opposition to Zionism. The events of World War I in the Middle East and the expulsion of the Turks from Palestine further fuelled the cause of Arab nationalism (Khalidi & Ochsenswald 1991:417).

A major stimulus to the emergence of Arab nationalism came in the form of the Balfour Declaration of 1917. This British-led declaration was made as a result of mounting pressure from the Zionist leaders and with the support of Britain's leading political parties. Garraty and Gay (1985:1049) point to the irony of the Balfour Declaration. Britain, who was the principal patron of Arab independence, had been persuaded to support the creation of a national home for the Jews in the heart of the Arab world. Arab nationalism would become an explosive force in the region during the twentieth century. However, the Arabs were "as yet ill-organized ... and failed to make their opposition felt" (Jacobs 1998:491) when the world leaders commenced with their plans to internationalise Palestine following the break-up of the Ottoman Empire. Graham-Brown (1984:14) concurs, describing Arab opposition as "incoherent". Political tensions between the Arabs and the Jews increased and anti-Zionist riots took place in Palestine in 1920, and though a commission of inquiry found that the riots were the result of Arab disappointment and future fears of Zionist domination, the political leaders and the Zionists worked for the Balfour Declaration to be incorporated into declaring Palestine to be a mandated territory of Britain (1920) (Hoade 1973:75; Khalidi & Ochsenswald 1991:418; Jacobs 1998:490-492).

The twentieth century commenced with the politico-religious Zionist movement preparing to "Return to Zion" (Meier 1975:70). The Christian nations of the

west eventually supported the creation of a Jewish homeland. The political agenda had been set for one of the most protracted conflicts of the twentieth century. The relevance of educational provision in the region, was destined to become a political issue. The future of Jewish education was developed on the *kibbutzim* and *yeshuva* (Meier 1975:56-76; personal interview Iris Colyn, acting-director ORT-South Africa, 13 December 1999). The twentieth century pattern for the provision of education in the Palestinian-Israeli region emerged during the period of the British Mandate.

The Jewish school system in Palestine was initially administered by a Jewish Board of Education, and from 1932 by the *Va'ad Le'ummi* (National Council). From 1948 onwards the Israeli Ministry of Education assumed control of the provision of education, primarily for citizens of the Israeli state. Modern Hebrew became the medium of instruction in Jewish schools. By the end of the Mandate the *Va'ad Le'ummi* network of schools had expanded and the structure of the future Israeli system of education had been established (Kurian 1988, in Kurian (ed) 1988:638). The post-1948 political dispensation may have been turbulent, but the firm foundation of the inherited system made it possible for the Israeli state to develop a relationship of reciprocal relevance with the education system, i.e. working together for the common interests of the Israeli state. The details of this structure and the responsiveness between education and the socio-economic sector will be further examined in the paragraph on Structure of Education.

Arab education in the region became the concern of Christian missionary societies. "The Arab schools under the Turks were very few in number ... in none of the Arab schools was Arabic the language of instruction ... the Arab system of education before 1920 was badly organized and hardly effective ... education for girls was almost non-existent" (Nardi 1945:20-21).

4.3.2.3 Arab resistance to Zionism, the establishment of the Jewish state and educational fragmentation

At this stage of their history some Palestinians were employed in the service of the Ottoman Empire a number of Palestinian deputies were members of the

Ottoman parliament of 1908. Several Arabic newspapers appeared in the country before 1914. They showed in their pages that Arab nationalism and opposition to Zionism were strong among sections of the intelligentsia even before World War I. The Arabs sought an end to Jewish immigration and to land purchases by Zionists. The number of Zionist colonies, however, mostly subsidised by Baron Edmond de Rothschild, rose from 22 in 1900 to 47 in 1918, even though the majority of the Jews were town-dwelling. The population of Palestine, predominantly agricultural, was about 690 000 in 1914 (535 000 Muslims; 70 000 Christians, most of whom were Arabs; and 85 000 Jews) (Khalidi & Ochsenswald 1991: 417 & 418).

Arab resentment to Zionist immigration grew. Particularly in view of the fact that Britain had supported the Arabs against the Turks during World War I (Regan 1984:5-7). The declaration of the British Mandate in 1920, which supported a Jewish national homeland, was viewed by the Arabs as a sell-out (Khalidi & Ochsenswald 1991:418). Arab opposition to the Mandate continued unabated during this period (1920-1948). Their response found expression in waves of rioting and attacks on Jews, firstly in 1920, and subsequently in 1921, 1929 and 1933 (Jacobs 1998:491). In November 1938 a British Royal Commission of Inquiry recommended the partition of Palestine. It found that it was impossible to reconcile the interests of the Jews and the Arabs. The Peel Report referred to the "irrepressible conflict" between the Arabs and the Jews, and declared the mandate to be unworkable (Regan 1984:15 & 16; Khalidi & Ochsenswald 1991:419; Jacobs 1998:492).

The next major legislative document to appear was the British White Paper of 1939. This document, according to Bleckman (1971:32) stated that "a Jewish national home had already been established", the author further states that the White Paper assured the Arabs that they would remain in the majority in Palestine, and that Jewish immigration would be limited. A cessation of Arab violence took place, but the White Paper saw the commencement of anti-British violence from the Jewish population in Palestine. The Holocaust of World War II however, resulted in the dramatic increase of Jewish immigrants to Israel, most of them refugees. Jacobs cites a figure of 18 000 immigrants *per annum*, despite the ban on immigration.

A special United Nations investigative committee for Palestine (UNSCOP) was appointed in 1947. Bleckman (1971:33) briefly summarises the rapid development of events from September 1947 when UNSCOP recommended the partitioning of Palestine to May 14, 1948 when the state of Israel was officially proclaimed.

The committee recommended partitioning Palestine into separate Arab and Jewish states. The two states would have democratic governments and co-operate with each other economically. The committee recommended the creation of an international zone for Jerusalem; however, the British refused entry until April, 1948 to the five-nation United Nations commission that was appointed to supervise partition. On May 14, 1948 the last British troops left Palestine, the State of Israel was proclaimed, and a provisional government was set up. Israel was accepted as a member of the United Nations.

Ochsenwald (1991, in *New Encyclopaedia Britannica* 1991:421) writes that the violent birth of Israel led to a mass exodus of Palestine Arabs. The author states that between December 1947 and January 1949 some 700 000 refugees took refuge in neighbouring Arab countries. The PNA (Palestinian National Authority) (1999:1 & 8) cites a figure of 949 000 Palestinians displaced after the declaration of the state of Israel in 1948. Three different locations were to be "home" for the Palestinian Arabs until 1993. Most of the refugees lived in nearby Arab countries, as stateless citizens; a minority lived in Israel as citizens of the new state. This minority took refuge in the West Bank and in Gaza (PNA 1999:8). The third group moved to the states of the Persian Gulf. The Palestinian Diaspora had severe implications for the provision of education for the Palestinian people. Fragmentation of educational provision in Israeli occupied territories and the reliance on the national education systems of host countries resulted. The educational provision of the United Nations (in the form of UNRWA) further fragmented educational provision for the Palestinian people in the region.

4.3.2.4 Israel, the modern era and the origins of educational provision of Israel

From 1948 to the present time the point of departure for Israel's foreign policy has been to ensure an independent existence in the region. This policy implied the safeguarding of her national borders. Arab hostility meant that Israeli technology in the field of military science had to be highly sophisticated. The future of the state depended on superior technology. Israel had to defend her borders, and her entire existence during the wars of 1948, 1956, 1967 and in 1973. The crisis in Lebanon resulted in Israeli military intervention. The urban terrorist attacks designed to destabilise the state required sophisticated investigative technology, as well as superior education and training for every echelon of the military. Provision of education in Israel in the post-1948 era had to remain technologically responsive to the critical needs of the nation's safety and security, while at the same time ensuring that the agricultural, production, and service sectors developed according to the national demands. A major contributory influence in the early provision of education in the region was provided by ORT, an international non-government education and training organisation. ORT is a non-political, non-sectarian and non-profit making organisation, and therefore it can "easily co-operate with religious groups, municipalities, the Israeli Defence Force, Government Departments, *kibbutzim*, industries, etc. in establishing and running technical and vocational institutions ORT (Organisation for Rehabilitation Through Training) was established in St. Petersburg, Russia, in 1880 by a group of wealthy and influential Jews. The aim of the organisation was to assist less fortunate Jews who had suffered economic ruin at the hands of the Russians (Rautenbach 1979:8).

During World War II ORT assisted the Jewish survivors of the Nazi holocaust. Initially ORT operated within the context of the Jewish communities of Europe, endeavouring to rehabilitate the survivors of the Nazi concentration camps. However, once the magnitude of the Nazi atrocity became evident the activities of ORT became focused on the massive post-war Jewish refugee problem. ORT identified with the waves of immigration which took place during the early years of the Israeli State. The ORT-initiative in Israel made a significant and lasting contribution towards the process of nation building.

Rautenbach (1979:2) described the activities of ORT in Israel as one of "the main contributing factors not only to the rapid growth of formal education of Oriental Jews in Israel but also to the drastic change in the educational values of Western Jews".

One of the major challenges that the new State of Israel had to address was the issue of the socio-economic gap created by the various waves of immigration. Before 1948 90% of Jewish immigrants came from Europe, whereas after 1948 more than half of the immigrants came from the oriental countries of the Middle East and African countries north of the Sahara. "Orientalisation", according Iram (1986:259) became a critical issue for Israel as the oriental immigrants were poor, and usually did not have any formal education or work-related skills. This resulted in a socio-economic gap, between Oriental Jews and Western Jews.

ORT played a significant role in the early years of its history in aiding and assisting disadvantaged groups. The focus of ORT was always on providing training in basic skills and trades with the aim of restoring dignity and independence in the face of oppression. ORT's commitment to technology formed part of Europe's post war recovery, giving hope to the displaced and dispossessed. As "the organisation expanded and grew, the focus of its expertise became more technological in nature, for this reason, in recent years the name has been adapted, retaining the same original letters applied to the organisation almost 120 years ago in Russia, to be the Organisation for Educational Resources and Technological Training" (Correspondence: Glazerson, ORT-South Africa: 1999). According to Colyn (1999) "in the beginning ORT was for disadvantaged groups, today it is one of the best providers in the field of education, its curriculum is growing in stature, its activities have been endorsed by the Israeli government and the defence force and there is on-going dialogue between ORT and the Israeli Ministry of Education".

The number of students in ORT Israel schools and colleges has continued to increase (cf World ORT 1998:5). In 1997, ORT Israel junior high schools enrolled 17 227 students and the number of students studying in ORT Israel

colleges reached 6 107 in the same year. The entire ORT student body in Israel totalling 83 000. Reference will be made to some of the learning areas of ORT schools and colleges in Israel in the paragraph on Structure of Education below.

4.3.2.5 Palestine, the modern era and education, and the origin of educational provision in the Palestinian National Authority

The provision of Arabic education in the Palestinian-Israeli region during the first half of the twentieth century did not assume a clearly defined character. The Turkish Ministry of Education before 1920 administered Arab schools. Turkish was the medium of instruction in all Arab schools. Nardi (1945:20-21), points out that the Arab system of education before 1920 was badly organised, and hardly effective. Education for girls was almost non-existent. The British government took over the administration of Arab education in 1920. Bleckman (1971:44) states that during this period about 25% of the Moslem school-going population attended schools, compared to 90% of Christian and Jewish children of school-going age. According to this author Arab children attended primary school for about four years during this period in history. Graham-Brown (1984:21) states that the end of the British Mandate was also effectively the end of Palestinian society as it had existed until that time. The standard of education for Arabs (Palestinians) at this time left a good deal to be desired, however, the author holds that they were probably slightly better educated than their neighbours. By 1948 the idea had already become implanted in the minds of the Arab-Palestinians that education was a universal solution, for individual advancement and cultural development.

After the establishment of the state of Israel in 1948 the provision of education for the Palestinians became even more fragmented. The Egyptian Education Department provided education for the Palestinians of the Gaza Strip, the Jordanian Education Department for the Palestinian citizens of the West Bank. The Palestinians residing in foreign countries were educated by the education departments of their host countries, those living within the borders of the state of Israel from the Israeli Education Department, and those Palestinians living in refugee camps from UNRWA (United Nations Relief and Works Agency)(cf

personal interview, Hamdi Abu-Ali, first secretary Palestinian Embassy, Pretoria, 13 December 1999; Mahshi 1999:5; Palestinian National Authority (PNA) 1999:1). By the end of the decade the fragmented provision of education in the regions controlled by the PNA had been unified into one Palestinian Ministry of Education, however, Palestinians living in refugee camps were still being educated by UNRWA (Graham-Brown 1988:27-30; Abu-Ali 1999). The political upheavals in the Palestinian-Israeli region did not benefit the Palestinian population, and they ended the decade, and the century, with a situation of educational emergency (PNA 1999:10-12) and a long list of educational problems (Mahshi 1999:7-8).

The long history of conflict in the region, characterised by numerous religious, cultural and political factors, resulted in two societies and more than two education systems existing in the Palestinian-Israeli region. The Israeli economic-community can write of outstanding economic achievements after fifty years of statehood (Felber 1998, in *Israel: Economic News*, 1998:1). This implies a system of education that is relevant to the needs of its society. The Palestinian representative I spoke to spoke only of poverty, unemployment and economic frustration (Abu-Ali 1999). The conflict created resulted in an inequitable system of educational provision in the region.

The Palestinian National Authority was established in May 1994 (PNA 1999:7). The Ministry of Education and Higher Education "was created from scratch in August 1994" (PNA 1999:9). In 1996 the responsibilities of the newly created department was divided: the Ministry of Higher Education would assume responsibility for post secondary education, while the Ministry of Education would administer education at all other levels (PNA 1999:9).

International agreements influence the provision of education to the people of national states. International agreements (or the absence of international agreements) can influence relevance in educational provision either positively or negatively. In the case of the PNA international agreements resulted in the establishment of a legal framework that made it possible for the Palestinians to address the issue of an inherited system of education:

- *13 September 1993 Declaration of Principles on Interim Self-Government Arrangements*

This agreement put an end to decades of regional conflict between Israel and the Palestinians. The agreement further provided for the establishment of a Palestinian Interim Self-Government Authority and the election of a legislative council for the Palestinian people of the West Bank and Gaza.

- *4 May 1994 Agreement on the Gaza Strip and Jericho*

This agreement dealt with the phased withdrawal of Israeli military from the areas mentioned in the agreement, the establishment of the Palestinian National Authority, its structure, composition, the scope of its powers.

- *28 August 1994 Agreement on Preparatory Transfer of Powers and Responsibilities*

This agreement covered the transfer of authority from the Israelis to the Palestinian Authority in the fields of, *inter alia*, education, culture, health, social welfare, etc.

- *24 August 1994 Authority granted for the establishment of the Palestinian Ministry of Education and Higher Education*

This Ministry had responsibility for the provision of education in the entire education sector, i.e. state, private and UNRWA schools. Furthermore it had responsibility for the provision of all levels of education, from the kindergarten to higher education. Its responsibilities included general, vocational and technical education.

(Mahshi 1999: 3-4; PNA 1999:9)

International agreements made it possible for the Palestinians to commence with the process of educational reform. For the first time a single system of education would be established for all Palestinians. The problems of

relevance would be addressed in all learning programmes (Embassy 1999:25-29; 107-154).

4.3.2.6 Conclusion

The integration of historical, religious and cultural factors were considered in the evaluation of the relevance of the national systems of education in the Palestinian-Israeli region. The common historical origins of the Palestinians and the Israelis influenced the flow of events in the region for many centuries. The historico-legal data of the Palestinian-Israeli region further demonstrated the decisive influence of Jewish Zionism and Arab Nationalism on political developments in the region. The intervention of the Western and Middle Eastern nations to resolve political deadlocks cannot be overlooked as a major factor of relevance in the region. International agreements during the twentieth century resulted in statehood for both Israel and the Palestinian Authority. In both cases international peace brokered agreements resulted in the establishment of Ministries of Education and the structuring of educational provision in order to meet the specific needs of the people. The historico-legal data indicated that relevance in educational provision was not possible before international political credibility and statehood had been achieved.

4.3.3 Socio-Economic Data

4.3.3.1 Introduction

This paragraph will indicate that decades of conflict have created a situation of emergency in the provision of basic human needs in Palestine. These paragraphs will demonstrate that more favourable socio-economic conditions exist in Israel. The socio-economic data will commence with a note on the geographical location of the respective regions, to be followed by a few basic economic indicators. The human development indicators will provide further insights into the economic development of the region.

4.3.3.2 Location

(a) Region

The Palestinian-Israeli region as understood in this chapter is the land that is situated at the eastern end of the Mediterranean Sea, and that is bounded in the north by Lebanon, in the north-east by Syria, to the east by Jordan and the south-west by Egypt (Elath & Ochsenwald 1991, in the *New Encyclopaedia Britannica* 1991:133). The River Jordan has traditionally been the eastern boundary of Palestine. The Palestinian-Israeli region is long and narrow, i.e. from Mount Hermon in the north to Eilat in the south is about 470 km, and from its western border with Egypt to the Jordan River in the east is about 135 km at its widest point (Felber 1998:1). Almost entirely surrounded by Israel within this region are the territories that have been handed over by Israel to the Palestinian Authority for administration. These territories include the Gaza Strip, south of Tel Aviv (365 km²) and the West Bank (5800 km²). The political status of Jerusalem is currently being negotiated (Jacobs 1998:390; Embassy 1999:35-37).

(b) The Palestinian Homeland and the People

Palestinians do not all live within the borders of Palestine. Palestinians living in the *diaspora* constitute more than half of the total population. This is illustrated in Table 4.1 below.

Table 4.1
Palestinians in Palestine and the Diaspora

West Bank	1 707 000	Jordan	2 225 000
Gaza	1 054 000	Lebanon	350 000
Occupied Territories	950 000	Syria	340 000
		Egypt	100 000
		Saudi Arabia and the Gulf	450 000
		Libya	25 000
		Iraq	40 000
		North and South America	480 000
		Europe	150 000
		Other	50 000
Total inside	3 711 000	<i>Total outside</i>	4 210 000
World-wide population	7 921 000		

(Source: Embassy 1999:46)

Palestinians living outside of the homeland are subject to the educational provision of their host countries and do not impact on this study (cf Lesch 1991: 42-54; Doan 1992:27-38; Suleiman 1997: 378-410). Palestinians living in the Occupied Territories benefit from Israeli educational facilities (Abu-Rabia 1998:331-333; personal interview, Tal Forber, youth recruitment officer, Zionist Council of KwaZulu-Natal, 30 September 1999). This is covered in the section on educational provision in Israel. Furthermore, a substantial number of Palestinians continue to live in refugee camps (Embassy 1999:55-61). These citizens are subject primarily to the educational provision of UNRWA, and are not of direct concern to the study either. The only areas to be included in the study are the areas controlled by the PNA as defined by the Oslo Agreement (28 September 1995).

4.3.3.3 Israeli Economy

(a) Origins of the Israeli economic problem

When the modern state of Israel was established in 1948 it was the first Jewish state to be established in 2000 years. The population of Israel then, and now, is a result of mass immigration from Europe, Africa and Asia. The new Israeli society was built on neglected agricultural lands. The economy

grew from the efforts of the immigrants in the hostile environment of the Palestinian-Israeli region occupied by the new immigrants as well as the Palestinian Arabs, and other minority groups. The economy was developed out of Israel's determination to survive in the Middle East. The state's future depended on developing all sectors of the economy, and most importantly, the overall technological profile of the state (Elath & Ochsenwald 1991:133).

(b) Economic problems and the goals

The economic problems include:

- rapid increase in the population;
- boycott and blockade by neighbouring countries (Egypt excepted after 1979);
- heavy defence expenditure;
- scarcity of natural resources;
- high standard of living;
- inflation; and
- a restricted home market.

(Elath & Ochsenwald 1991:137)

Elath and Ochsenwald (1991:136 - 137) state that Israel's economic goals are:

- continued economic growth;
- re-enforcement of a competitive capacity;
- further integration of Israel's economy with the world economy.

According to the Israeli Ministry of Foreign Affairs (MFA) Website (1999) the agricultural share of the Israeli GNP dropped from 11% to 1.8% between 1950 and 1997. The report holds that this decline was due, *inter alia*, to the introduction of innovative farming methods and export-orientated farming. Israeli society has become less rural; the actual proportion of the population living in the rural areas has dropped from 12% to less than 6%. Felber (1998:1) makes a similar statement when he comments that Israel has developed the most advanced agriculture in the world, in terms of, e.g. yield

per acre, use of sophisticated irrigation systems and the application of innovative research and technology in agriculture.

(c) Economic achievements

The same author cites, *inter alia*, the following economic achievements:

- world leaders in economic growth, averaging 5% annually in the 1990s.
- one of the top 20 highest per capita income countries in the world.
- maintaining in most years, close to full employment, while absorbing 2.6 million immigrants.

(Felber 1998:1)

These statistics are corroborated by data from the World Bank (1997:215):

- Israel's world classification ranking in respect of GNP per capita (1995) is 113th out of 144 nations which places her in 20th position.
- Average annual growth (1985 – 1995): 2.5%.
- Average annual growth rate of the population (1990 – 1995), 3,5% which is one of the highest population growth rates in the world (World Bank 1997:221; cf Colyn (1999)).

(d) Israel: economic anomalies

The Israeli economic success story is inextricably linked to the historical data. The historical background provided an in-depth understanding of the importance of historical factors in shaping modern Israeli perspectives on the economy and the role of education in attaining the socio-economic goals of the state. The problem of relevance in education in Israel will therefore examine the relevance of education in a *previously* low-income economy, and the role of education in the transition made by Israel to a high-income economy (World Bank 1997:215). In a footnote to this same reference the World Bank notes that Israel is classified by the United Nations, and the Israeli government as a “developing” nation. This reference undoubtedly makes reference to anomalies in the Israeli economy that stems from the political

instability of the region. This study will view Israel as a low-middle-income economy in historical context.

4.3.3.4 Palestinian Economy

(a) Demographic indicators and the origins of the Palestinian economic problem

A sampling of the main demographic indicators for the Palestinian Authority will provide the social context for this region. The demographic data in Table 4.2 below sketches a picture of a nation with low population statistics. Almost more than half of the population is under 15 years of age. Palestinians appear to have large households. The Gaza region is a very densely populated region. There are high refugee statistics for both the West Bank and Gaza.

Table 4.2
Sampling of demographic indicators: Palestine

	Total	West Bank	Gaza
Population	2 761 000	1 707 000	1 054 000
Population (under 15 years %)	46,5	44,6	50,3
Median Age (years)	16	17	14
Infant mortality (per 1000 births)	30	27	33
Life expectancy	71,8	-	-
Average household size (persons)	6,95	6,58	7,81
Population density (p/km ²)	448	295	2 888
Registered Refugees (% of population)	39,7	27,4	63,7

(Source: *Palestinian Central Bureau of Statistics (PCBS) Website 1999*)

(b) Literacy

Literacy rates are fairly good. Learners tend to remain at school, but that they do not complete a secondary education (school enrolment rate 6 – 17 years → 85%; highest qualification is secondary school → 13%). Factors of historical disadvantage have resulted in this situation.

Based on the findings of a Demographic Survey of the West Bank and Gaza Strip (April 29 – July 23, 1995), the literacy rate for persons 15 years and older was 84,3%. Very little difference was noted between the two regions. However, the literacy rate between males (91,5%) and females (77,0%) indicated a significant gap. Literacy is highest in the cities (87,2%) and lowest in the villages (81,6%).

Literacy rates peaked in the 15 – 19 year age group for both regions (97%) and tapered off steadily. The weakest age-group being the 65+ age group for females in Gaza, which recorded a 9,8% literacy rate. Literacy rates were generally lower in Gaza, for all persons, and most age groups (PCBS Website 1999).

(c) Economic indicators

Data provided by the Economist show that Israel's economy is much healthier than that of Palestine, or Jordan (*Economist*, 11 September 1993).

- *GDP per head (1991)*

– Israel	\$ 59,1 bn
– Jordan	\$ 4,1 bn
– West Bank	\$ 1,7 bn
– Gaza	\$ 0,6 bn

- *GDP by sector*

Agriculture makes up about a quarter of the Palestinian GDP in 1991. In Israel agriculture contributes minimally to the GDP.

- *Industrial sector*

Four out of ten workers are employed in textiles, clothing or leather products.

- *Trade*

Imports exceed exports in all three of the regions, Israeli exports slightly exceeding those of the other regions.

- *Unemployment and poverty*

The unemployment rate is high, probably in excess of 25% in 1991. This is related to the closure of the Israeli labour markets to Palestinians. Job opportunities are not as readily available in Palestinian territories. According to Abu-Ali (1999) approximately 60 – 70% of people live below the bread line.

- *Labour*

One in three Palestinians commute daily to Israel to work in low-paid jobs. They contribute a large proportion of the Israeli farming and building workforce. This policy has been a contentious issue for a long time (Abu-Ali 1999).

- *Skills*

Education was seriously disrupted during the *Intifada* when schools and universities were closed by the Israelis (Gray 1990:13-16; Yair & Khatab 1995:99-115). This has resulted in poorly qualified strata in society that do not have adequate training in skills.

4.3.3.5 Discussion

Decades of conflict have created a situation of emergency in the provision of basic human needs in the region. In Palestine the poor socio-economic conditions have had a negative affect on educational provision. Infant mortality rates, population density (Gaza), and average persons per household are all high. Sanitation in schools and households may be concluded to be sub-standard in many areas. Weekly water cut-offs and no public sewage system is common.

Living conditions are crowded; the extended family is still a common feature in Palestinian society. This applies to citizens living in and out of refugee camps. Practice of cousin and clan marriages is still in vogue. The majority of learners are at school; however, they are not all at school during the same hours. There is a critical shortage of classrooms. A slight trend towards better educational learning environments exists in the West Bank (PCBS Website 1999; Embassy 1999:44).

The people of Palestine are very poor. While the Palestinians have a high regard for education, former refugees were not able to complete a secondary education while living in the camps. Education was seriously disrupted during the *Intifada*, when the Israelis closed schools and universities (Gray 1990:13-16; Yair & Khatab 1995:99-115). This resulted in an unqualified stratum of society that does not have adequate education, and training in skills. According to Abu-Ali (1999) approximately 60 –70% of people live below the bread line. The challenge for the fledgling Palestinian Authority will be to improve the quality of life for the people of Palestine. The socio-economic context of the Palestinian region is one of poverty and economic stringency, and many challenges. The influence of this situation on the relevance in educational provision will be further developed in this chapter.

4.3.4 Israeli Structure of Education Data

4.3.4.1 Introduction

(a) Overview

This paragraph will provide the reader with an overview of the organisation of educational provision in Israel. The introductory remarks will prepare the reader for the more in-depth discussion of the structure of education in Israel.

(b) School attendance

School attendance is compulsory between the ages of 6 and sixteen years. Education is theoretically free up to the age of 18 (Ministry of Foreign Affairs (MFA) Website 1999) however, school fees are levied at most Israeli schools (cf Forber 1999). Pre-primary education is optional, but highly recommended. Formal education commences in the primary school (Grades 1-6), followed by the intermediate school (Grades 7-9), and the secondary school (Grades 10-12). A variety of vocational education options exist. The MFA Website (1999) states further that most subjects on the time-table in the Israeli school system are compulsory academic studies, the aim being to enhance pupils' understanding of their society.

(c) State and Private Education

Colyn (1999) holds that the difference between state and private education is not as marked as in South Africa. The MFA Website (1999) states that as a result of “the multi-cultural nature of Israel’s society” four groups of schools provide education for the Israeli population”:

- state schools
- state religious schools
- Arab and Druze schools
- private schools (*haredi*)

In respect of the private school sector the following statement has been made:

“In recent years, with the growing concern of parents over the orientation of their children’s education, some new schools have been founded, which reflect the philosophies and beliefs of specific groups of parents and educators”.

(Israel Information Centre (ILL) 1991:5)

(d) Language of Instruction

Israeli education is a bilingual system with 85% of the population in 1988 being Hebrew-speaking, and the remaining 15% Arab-speaking. Hebrew is the language of instruction in Israeli schools, and Arabic in the Arab schools. According to Kurian (1988:639) Arabic is optional in Jewish schools, but Hebrew is compulsory in Arab schools from the third grade onwards.

(e) Administration

An interesting feature of Israeli school administration is the shared responsibility for educational funding between the Ministry of Education, local authorities and other sources of income. The following extract from the MFA Website (1999) has reference:



The Ministry of Education is responsible for school curricula, educational standards, supervision of teaching personnel and construction of school buildings. Local authorities are charged with school maintenance as well as with acquisition of equipment and supplies. Teaching personnel at the kindergarten and primary school level are Ministry employees, while those in the upper grades are employed by local authorities, which receive funding from the Ministry according to the size of the school population. The government finances 72 percent of education, while the rest comes from local authorities and other sources.

The implication of the above administrative structure would imply firstly that the responsibility for ensuring that secondary learners remain at school rests with the school and local authorities, enrolments influence the funding formula of the school. Secondly, this shared responsibility for educational funding, particularly at secondary level implies that local authorities will take a greater interest in the provision of education, while the schools will be obliged to remain responsive to the needs of their communities.

4.3.4.2 Pre-primary education

Greenwood (1999:129) states that the Knesset passed an amendment to the Compulsory Education Law in 1984 in which free pre-schooling would be provided for children aged 3 and 4. However, implementation of this amendment has been postponed each year. The same source states that at this level enrolment rates have fallen far short of 100%. Where tuition fees are charged the enrolments drop, conversely where no charges are levied enrolments approach 100%. Colyn (1999) states that the basis for the Israeli pre-primary tradition was firmly established on the *kibbutzim*. A *kibbutz*-education was required to provide a qualitative education at every level, and in the case of pre-school education this implied care and education almost from the day the child was born. Pre-primary education became well-entrenched into the historical traditions of Israeli education. The pre-primary (or day care centres plus pre-primary schools) are usually sponsored by local authorities ... most are run by women's organisations, while others are privately owned (IIC

1991:3; Theron 1992:2). These *haredi* pre-schools are the responsibilities of the Ministry of Labor and Social Affairs (Greenwood 1999:130).

4.3.4.3 The primary school

Before 1969 primary schooling was eight years in duration. In 1969 the *Knesset* approved a structural change which reduced a learner's primary schooling to six years (Kurian 1988:641). Kleinberger (1988, in Postlethwaite (ed) 1988:381) notes however, that because of financial constraints this structural reform has only been implemented partially. Both school structures (viz 8+4 and 6+3+3) operate concurrently in the Israeli system.

Methods of instruction in the primary schools are traditional (Kurian 1988: 641), there are however, more progressive movements within the Ministry of Education, e.g. assessment by teacher observation supplemented by occasional oral or written tests (Kurian 1988:641); national themes aimed at enhancing understanding and appreciation of Israeli society are taught in all schools and grades in depth (IIC 1991:5); the programme "a computer for every child" endeavoured to computerise all public schools in the country including the placement of 10 000 computers in the homes of disadvantaged children (1977-1998) (MFA Website 1999, Greenwood 1999:128 & 129). The computer programme was aimed at primary as well as the secondary level of education.

State-secular primary school enrolment statistics still exceed those of the other providers of primary education, e.g. 65.9% of Grade 1-6 enrolments in the 1997/98 school year. However, a clear tendency towards *haredi* education has been discerned. From 1996/97 to 1997/98 the *Shas*-sponsored Ma'ayan enrolment increased by 17%. In actual figures this amounted to 30 000 learners, 5.5% of the entire primary enrolment (Greenwood 1999:130).

4.3.4.4 Secondary school

(a) Introduction

The secondary school structure was reformed during the 1970s. The junior secondary schools offer a combined academic and vocational curriculum. The upper secondary school is based on a "tracking" system.

(b) Junior Secondary School

The curricula of the junior secondary schools are compiled regionally, and include the main languages (Hebrew, Arabic or English), religious studies, mathematics, a second or a third language, natural science, history, geography, and the usual non-examination subjects. Furthermore, a variety of technological courses as well as agriculture are included in the curriculum. Teaching takes place in large groups as well as smaller groups where the development of skills may be carefully monitored (Kurian 1988:640).

(c) The Senior Secondary School

The MFA Website (1999) states that the majority of secondary schools offer an academic (or general) curriculum for learners preparing for the matriculation (*bagrut*) certificate. However, certain senior secondary schools offer a more specialised curriculum which also prepares learners for a matriculation certificate. These programmes are geared towards specific occupations or orientations (cf IIC 1991:6).

- Technological Schools: These schools train technicians and practical engineers on three levels. Learners are prepared for a practical orientation in the workplace or for further education at institutions of higher education.
- Agricultural and Kibbutzim Schools: These schools include agricultural subjects in addition to the basic subjects required for the Israeli *bagrut* examination. Learners qualify for a school leaving certificate. Admission to a technical institute or a university is possible.
- Military Preparatory Schools: These schools train learners for a specific career in the Israeli Defence Force. The learning programmes vary from

general defence career orientation to specific training in defence technology.

- Yeshiva High Schools: These schools supplement the basic secular curriculum with intensive religious studies. The aim of these schools is to promote the observance of tradition and the Jewish way of life.
- Comprehensive High Schools: Learners may elect to study a variety of general education subjects as well as a range of vocational subjects (cf Kurian 1988:642; IIC 1991:6; MFA Website 1999).
- Other providers in the vocational school field include ORT, the Amal Network of the *Histadrut* and the WIZO (Women's International Zionist Organisation). Of these providers the ORT Network of schools with technical vocational orientation require specific attention. The following illustrations will demonstrate the initiatives adopted by a sampling of ORT schools to introduce relevant specific learning programmes for secondary learners.

Illustration 4.4 below demonstrates a departure from traditional learning programmes. Factors of relevance that emerge from include:

- an emphasis on the variety of specific learning programmes;
- an emphasis on technological, entrepreneurial and mechanical orientations;
- the combination of vocational with academic studies in the Hatzor programme;
- the inclusion of Grade 9 into the vocational programmes in the Zrifren programmes;
- the inclusion of apprenticeships into the senior secondary school programme of the Jerusalem Kennedy Technical High School;
- the relatively low enrolments at all the institutions cited; low enrolments enhance individual technological development.

Illustration 4.4

Senior Secondary Vocational Programmes

- ORT Jerusalem Kennedy Technological High School – Grades 10, 11 and 12
 - Administration
 - Apprenticeships
 - Automotive Studies
 - Beautician
 - Electronics and Electro-technics
 - Projects (practical)
 - Total enrolment: 213.(Source: ORT Website 1999)

- ORT Hatzor Everett Comprehensive School – Grades 10, 11 and 12
 - Academic Studies
 - Electronics and Electrotechnics
 - Fashion Design
 - Mechanics
 - Secretarial Studies
 - Total enrolment: 210(Source: ORT Website 1999)

- ORT Zrifin Automotive Industrial School - Grades 9, 10 11 and 12.
 - Automotive Studies
 - General Technology
 - Total enrolment: 247(Source: ORT Website 1999)

Illustration 4.5

ORT Braude International Institute of Technology, Karmiel

The ORT technical secondary schools provide an international network from which the ORT colleges can draw their students for studies in science-based courses. The Braude ORT Institute was planned as a post-secondary college that provided training in practical engineering (World ORT Braude 1990:4).

The subjects offered by the Braude ORT Institute are in response to the needs of industry. Four departments administer the institute's curriculum:

- bio-technology
- electronics
- automation and control
- management studies

Students are able to accumulate credit points towards a degree in Practical Engineering. Degrees awarded are comparable to the two-year college degrees offered in the USA, France, Switzerland and the UK (World ORT Braude 1990:4). All departments offer two-year full-time diploma courses. All courses have a strong orientation towards application of science and technological subjects to the practical work-environment.

(Source:World ORT Braude 1990:11, 12, 13 & 14)

Illustration 4.5 demonstrates the critical relevance of links between senior secondary specific learning programmes, specialisation and the work-place, and the demands of world competitiveness. Specific factors of relevance that emerged include:

- the links between the ORT secondary schools and the ORT colleges;
- the emphasis on practical engineering; i.e. the generation of more attainable intermediate and high-level qualifications at colleges, instead of at universities;
- the credit point system in respect of practical engineering and the responsiveness of college-based education to the needs of the work-place.

(d) Conclusion

The relevance of the Israeli system of education in respect of the technological development of the Israeli society is at the upper secondary level. This applies to the ORT-providers, as well as state and other providers. Hence the introduction of learners to technology education is at an earlier age, i.e. Grade 9. The following paragraphs will further develop the Israeli vocational

emphasis, i.e. compulsory transition to the Ministry of Labour programmes and the contribution of Higher Education to high-skilled technological development.

4.3.4.5 School-leavers not attending colleges or university

The MFA Website (1999) makes a significant statement: "Youth not attending one of the schools mentioned above are subject to the Apprenticeship Law, requiring them to study for a trade at an approved vocational school. Apprenticeship programs are provided by the Ministry of Labor in schools affiliated with vocational networks".

The Israeli Ministry of Labour views vocational education as a function of the labour force policy. Iram (1986:263) states that the aim of this Ministry is to find unemployed youngsters and rehabilitate them by social, vocational and employment means.

Three types of programmes are available:

- apprenticeships: this vocational programme includes 5 days per week of training in a factory or a workshop, and one day in a school;
- industrial schools: the training includes 3 days of practical training in the work place and 3 days of general education at the school, per week;
- vocational training centres: short training courses are provided for 16-17 year olds, who often have poor language skills and who may be drop-outs from other more advanced programmes.

(Iram 1986:265-266)

4.3.4.6 Higher education

The Greenwood (1999:132) states that post-secondary and higher education is the fastest growing segment in the Israeli system of education. In the same reference the author refers to the rising number of occupations that require a certificate or an academic qualification. The universities and regional colleges have not been able to keep up with the demand for qualifications. Satellite campuses of overseas universities have mushroomed in Israel. Courses offered by these universities have been in demand "because they avoid the

local institutions” rigidities and offset their higher tuition with shorter degree programs that have less rigorous requirements and offer credit for practical experience”. These qualifications are recognised by the Israeli government for wage and promotion purposes. Greenwood (1999:133) makes a further significant statement that reflects a clear trend in Israeli society:

“the higher-education system is gradually sorting itself into elite (university) and grassroots (college) echelons”.

This implies a shift away from universities towards a college-type of post-secondary education.

Table 4.3 below gives a fairly clear indication of the increase in enrolment at post-secondary institutions, but with a preference for college qualifications.

Table 4.3
Enrolment in Accredited Institutions of Higher Education

	1985	1990	1995	1997	1998	Average annual change, 1985-1998
Total	76 120	89 063	140 015	164 994	180 551	7%
Universities	61 205	67 779	97 250	104 900	108 880	5%
Colleges	2881	8 286	19 402	31 616	41 198	23%
Teachers' colleges	1 033	4 618	10 127	14 257	17 735	24%
Other colleges	1 848	3 668	9 275	17 359	23 463	22%
Open University	12 034	13 007	23 363	28 478	30 473	7%

(The non-university enrolment figures are substantially downward-skewed because they cannot take account of the thousands of students who attend extensions of foreign universities that award academic degrees)

(Source: Greenwood 1999:133)

Higher Education has become more career-orientated, with more students enrolling for the wide range of professional studies available. More than half of the Israeli 20-24 year age group is enrolled in a post-secondary or higher education institution (MFA Website 1999:4; IIC 1991:16).

Two of Israel's universities, i.e. the Technion (Israel Institute of Technology) and the Weizmann Institute of Science focus specifically on providing

graduates in the fields of engineering, science and medicine. These two institutions serve as centres of basic and applied research for industry and science-based enterprises (IIC 1991:11 & 12; MFA Website 1999:7). However, most students still prefer the Social Sciences (33%) and the Humanities (29%) (MFA Website 1999:4). Changes in statistics in respect of fields of study since 1991 are marginal.

4.3.4.7 Conclusion

The answer to Israeli's socio-economic problems was in the value attributed to relevant education. Bleckman (1971:xvi) in the opening paragraph to her dissertation abstract states categorically that "Israel is a developing nation, with strategic geographical position, which must industrialise in order to gain the economic position necessary to survival". Her dissertation title is clearly illustrative of this point, viz "Vocational Education in a Developing Nation: Israel". Colyn (1999) was quite emphatic that Israel was a "developed nation", this would certainly agree with the World Bank's 1997 classification of Israel as a high-income economy (World Bank 1997:215). The conclusion reached is that Israel made the transition from the "developing nation" to "developed nation" at some stage after 1971, and that the provision of relevant education, as examined in the paragraphs above, contributed significantly to this transition. The problems associated with "economic anomalies", as discussed earlier, must however, not be overlooked.

4.3.5 Trends, Critical Issues and Future Developments in Israel

4.3.5.1 Trends

(a) Introduction

If we view the transition of the new state of Israel in 1948 from a low-income economy in the 1970s, to a high-income economy by 1997 (Bleckman 1971:xvi; Neuman & Ziderman 1991:1 & 2; World Bank 1997:215) as one of the most significant developments in modern Israeli history, then two further questions must be asked: firstly, what were the trends in Israeli society that

contributed to this transition, and secondly, to what extent has the contribution of the educational sector been relevant to this transition? Three trends in education have been identified and will be examined in respect of relevance. Firstly, the historical and present-day relevance of a *kibbutz* education. Secondly, the unique Israeli emphasis on science, technology and skills development, and finally, the relevance of the Israeli senior secondary vocational learning programmes. The research, writings and memoirs of scholars, educational managers, and politicians will be used to provide the factual data for a critical analysis of issues and conclusions.

(b) The relevance of kibbutz education to the development of Israeli society

- Introduction

The word "*kibbutz*" is synonymous with Israel. Jacobs (1998:62) states that the Israeli *kibbutz* is the world's most famous communal society. Socialist-Zionist in its origins the *kibbutzim* are closely associated with the building of the Jewish homeland in Palestine at the beginning of the twentieth century. Defined by Jacobs (1998:62) as a collective agricultural settlement, these communities were first established in 1910. In 1998 there were a total of 250 *kibbutzim* in Israel, the occupied territories and the Golan Heights.

The *moshav*, is defined by Jacobs (1998:62) as an agricultural small-holder's co-operative village, on state-owned land and centred around the family unit. In 1998 there were 400 *moshavim*. Colyn (1999) states that the main difference between the *kibbutzim* and the *moshavim* lies in the degree of sharing that takes place in the community.

The discussion that follows will show how the *kibbutz* movement contributed to relevance in Israeli education *vis-à-vis* the communal life of the *kibbutzim*.

☐ Relevance in work, the Bar-Lev/Dror studies

- **Bar- Lev & Dror** (1992) compared the uniqueness of the Israeli interpretation of "Education for Work" as implemented on religious and secular *kibbutzim*. A comparison of the learning programmes was carried

out on two parallel levels, viz between the educational and social systems on the religious and secular *kibbutzim* in Israel, and between the same two systems on the religious *kibbutz* and the *yeshiva* world (i.e. religious Israeli society) (Dror & Bar-Lev 1992:19).

The findings of the authors pointed to the centrality of work in *kibbutz* education. Citing the Socialist-Zionist religious base for the Israeli attitude towards work the authors refer to the reversal of the Israeli *diaspora* pyramid of occupations at the head of which appears the white collar worker (Bar-Lev & Dror 1992:38). The principle of the equal value of work became integrated into the education for work paradigm on the *kibbutzim*, and influenced the wider Israeli society. Bar-Lev and Dror (1992:39) conclude relevance in education on the *kibbutzim* in respect of attitudes, underscored by strong value perspectives in the *kibbutz* experience of children. The natural progression from attitude development, to skills development, to the integration into the workplace takes place *vis-à-vis* the community, the family and education. The *kibbutz*-system embraces all three of these critical components.

- In another 1992 study (Dror & Bar-Lev 1992) used a closed structured questionnaire to examine the attitudes of *kibbutz* youth to work. More particularly the authors studied the interconnection between the education system and the world of work according to (*inter alia*) the attitudes of younger (Grade 9) and older (Grade 12) students. Similar findings to the Bar-Lev and Dror 1992-study emerged. The uniqueness of *kibbutz* education for work became evident by the manner in which the 451 *kibbutz* youth included in the study expressed their attitudes towards work (Dror & Bar-Lev 1992:51).

The Dror and Bar-Lev (1992) study examined the influence of education for work on the *kibbutz* during their high school years. The conclusions found that a difference existed between the influence of education for work in the attitudinal responses of Grade 9 and 12 learners (Dror & Bar-Lev 1992:56). The authors were able to establish a difference in attitudes towards work and career choices in the reasons advanced for making choices.

Occupations involving production, particularly agricultural production, were considered more prestigious on the *kibbutz*. Academic, white collar positions that involved the accumulation of knowledge and expertise were not prestigious at all (Dror & Bar-Lev 1992:56 & 57).

The uniqueness of the Israeli *kibbutz* system was discerned in a behavioural and values approach to learning, "all children work on a regular basis ... work is an integral part of the educational process ... the practical work experience is essential in the area of education for work" (Dror & Bar-Lev 1992:60). The values which emerge are in respect of "the personal, intrinsic satisfaction to be found in the challenge of work" (Dror & Bar-Lev 1992:61) rather than the view of work merely for extrinsic, economic gain. The authors concluded that education can make a difference in changing opinions about work, and especially the intrinsic value of work. Practical experience was found to be particularly valuable in developing healthy attitudes towards work. The role of the community in values formulation and preparation for work (within and beyond the community) held particular advantages to the youth who had experienced a *kibbutz* community education. The emotional tie to their place of work strengthened after the ninth grade. The authors conclude that the relevance of the *kibbutz* "education for work" approach is seen in the attitudes of Israeli youth towards work (Bar-Lev & Dror 1992:60 & 61).

- The **Bar-Lev and Dror** (1995) study was based on the two 1992 studies referred to above as well as five other quantitative and qualitative research projects conducted between 1985 and 1995 (Bar-Lev & Dror 1995:261). Their findings in respect of the attitudes of parents, educators, *kibbutz* children and non-*kibbutz* children to education for work, lends further support to the authors' contention that the centrality of work in an educational system is a unique means towards personal, social and learning fulfilment in society (Bar-Lev & Dror 1995:259).

The development of attitudes and values towards work are parent-based (Bar-Lev & Dror 1995:268), and supported by the educators (Bar-Lev & Dror 1995:267-270). Influential opinion-formulators within the community

can change as well as perpetuate attitudes. Changes in modern technological society have had to be accommodated within the context of the community, and adaptation in respect of the greater demand for general education is accommodated within the prevailing view of the relevance of physical, and practical work experience (Bar-Lev & Dror 1995:270).

❑ Conclusion

The three Bar-Lev/Dror studies used their findings to conclude the superior value of a *kibbutz* education. While admitting to the present-day economic, social and value difficulties on the *kibbutzim* they nevertheless conclude that the secondary school work day remains a significant factor for the community as a whole. Given the historical origins of *kibbutz* education, its religious-ideological base in Socialist-Zionism, and its commitment to work and the advancement of the Israeli community the conclusion is reached that *kibbutz* education and its emphasis on work has been (and continues to be) a relevant trend in the provision of education in Israel. The success of this movement can be attributed to the right attitudes of those who participate in the life of the community.

- (c) The Israeli emphasis on science, technology and skills development as a significant trend in the provision of education, with special reference to the contribution of ORT

❑ Introduction

It is very difficult to separate *kibbutz* education, skills and technological development, vocational education, ORT, etc. in Israel. Each one of these trends in Israeli society has its origins in the unique historical circumstances of the modern state of Israel (before and after 1948). For purposes of clarity these trends have been discussed separately. This paragraph will demonstrate the strong emphasis that was placed on the development of useful skills before the arrival of the new immigrants in Palestine (*Eretz-Israel*) after the Second World War. The inter-relatedness of the various trends in

Israeli skills-development is in fact an integration of a national effort at building a health human resource base in Israel.

□ The historical framework: Meier (1975)

Reflecting on her years as Minister of Labour (1949 – 1956) Meier touches on some of the critical trends in the Israeli emergence as a high-income economy:

"Another of the Ministry of Labour's projects with which I became very involved had to do with vocational training, both for adults and for youngsters. Again, it wasn't a question of waving a wand and turning new immigrants into craftsmen or skilled technicians overnight. It took years to qualify people for new professions or trades, and hundreds of the new immigrants never became fully employable, either because they were already too old, too sick, too psychologically addicted to not working or simply unable to adjust to the demands of modern life. But thousands of other men and women attended vocational schools and courses, learnt to handle machinery, raise poultry, become plumbers and electricians, and I never got tired of watching the transformation take place. Everyone pitched in to make the vocational training programme a success; the Ministry of Labour joined forces with the Ministry of Social Welfare, the Ministry of Education, the army, the *Histadrut* and veteran voluntary organizations such as ORT (Organization for Rehabilitation through Training), *Hadassah* and WIZO (Women's International Zionist Organisation), which were financed by Jews abroad. We pushed and pulled together until we turned out workers who made knitwear, polished industrial diamonds, became part of assembly line teams and drove tractors. And this was quite apart from the really titanic efforts that were required to battle plain ordinary illiteracy and teach Hebrew".

(Meier 1975:228)

These reflections demonstrate clearly the inter-relatedness of the national effort at raising the skills profile of the nation. It also demonstrates how the Ministry of Labour initiated vocational training projects, but that other ministries (including the Ministry of Education) co-operated in these projects. Further, the reflections high-lighted the valuable role of organisations such as ORT in the development of the skills profile of adults as well as children. Meier makes reference to the value placed on literacy in the battle against an unskilled labour force. The problems of a low-income economy are addressed by a national policy that creates the framework for relevance to accrue. Education however, remains a key role player in the national effort to address the problems of relevance in education.

☐ An integrated approach

The unique Israeli emphasis on science, technology and skills development is an integrated approach to human resource development. The approach to skills development included a critical values phenomenon. Rautenbach (1979:2-3) drew attention to this problem of attitude when he stated that one of the main contributing factors in the rapid growth of formal education in Israel included a drastic change in the educational values of all Jews:

- the realisation that Israel could only survive as a nation if its people were willing to undertake all types of work, even the most menial tasks;
- Israelis realised that their main resource was the people themselves, who had to develop a very high degree of technical competence to overcome farming and defence problems and to develop a highly sophisticated science based industry which could hold its own in export markets against developed countries.

☐ A scientific and technological infrastructure

Theodor Herzl (1860-1904) had stated at the beginning of the twentieth century that the modern Land of Israel would not only be a physical home of the Jewish people but also a major spiritual and scientific centre (Ministry of Foreign Affairs Website 2000:1). Most research institutes had already been established in Israel when the modern state was established in 1948. These

scientific and technological infrastructures would be facilitated in the development of future research after 1948 (MFA Website 1999:1).

The development of science and technology did not take place without the assistance of international funding. Support came from a variety international agencies in Europe and North America (World ORT 1999:12). The conclusion reached is that the low-income economies have to rely on foreign funding initially to develop capacity in critical areas such as science, technology and human resource development.

❑ Conclusion

From the above it is concluded that there was a perception during the early years of Israel's modern history that science, technology and skills development was not merely dependent on science *per se* but on the development of a nation's human resource potential in the classrooms. Attitudes towards work and training are primarily formulated in the classrooms. The provision of relevant learning programmes in Israel took place in the classroom, either an indoor, or an outdoor classroom, or in a workshop. The Israeli emphasis on science, technology and skills development acknowledged that skills development *per se* was insufficient. Basic educational provision was critical if science, technology and skills development was to be enhanced in a low-income economy. The importance of general education and the value of vocational education in closing the cultural gap in an immigrant population emerged from the Israeli national experience.

- (d) The relevance of providing vocational education at the senior secondary level

❑ Introduction

In this paragraph the emphasis falls on the Israeli trend to provide vocational education at the secondary high school level. The observations of Reichman (1981) will provide a perspective from a practitioner's point of view. Iram (1986) provides a critical analysis of education for work at the secondary level

from a social policy perspective. The Reichman / Iram insights will provide a starting point for a discussion of the efficiency of vocational schooling in Israel.

- ❑ The growth of senior secondary vocational education: Reichman (1981) and Iram (1986)

Reichman (1981, in Proctor-Sims 1981:56) and Iram (1986:259-261) stress the importance of the conditions which existed in Israel in 1948 as reasons for the development of the unique Israeli system of vocational education.

Reichman (1981:56-57) raises similar points. He refers to the "major conflagration" which broke out after 1948, and the subsequent demand for training large numbers of people in technological skills. The problems encountered in training the quantity and quality of skilled workers required by the new state was not easy to solve. The Israeli solution lay in the establishment of a network of vocational schools designed to train the workers required for industrial development in Israel.

The growth of vocational education in Israel after 1948 was quite staggering (Neuman & Ziderman 1989:151-152). Reichman (1981:60-61) records that from 1969 to 1980 the growth in technical education enrolments increased by 54%, while the enrolments in the field of electronics increased by 300% and if the Grade 12 electronics enrolments are included the growth increases to 400%. This interest represented a distinct move away from the traditional vocational fields such as carpentry and sewing. Reichman (1981:60) refers to the "revolution in attitude towards technical education" which took place in Israel between 1948 and 1980. This can be clearly seen in Reichman's (1981:61) comparison of the growth of technical education in relation to general education from 10% in 1950 to 60% in 1980.

Iram (1986:267) however, questions the reasons for this growth. He holds that this distinctive trend in Israeli education was in fact as a result of a reaction by parents to part-time vocational schools and apprenticeships (cf Neuman & Ziderman 1989:152). The vocational school trend was perceived by the Ministry of Education as being able to provide opportunities for the

lower socio-economic youth (of mainly Oriental origin) to become en-skilled and socially integrated. However, a further consideration in the development of the vocational school movement at the time was that it provided an acceptable avenue to learning. Full-time vocational education provided students with an opportunity to acquire a matriculation certificate, and was thus perceived as being highly relevant in respect of "social and economic upward mobility" (Iram 1986:267). These, and other issues of relevance, were documented by Neuman and Ziderman (1989 and 1991), and Ziderman (1987, 1989a and 1989b). Shavit and Featherman (1988) and Yogev and Ayalon (1991) provide other insights into the relevance of Israeli vocational schooling as a significant trend in the provision of education.

- ❑ The problem of curriculum stratification in the Israeli senior secondary schools: Yogev and Ayalon (1991) and Shavit and Featherman (1988)

Yogev and Ayalon (1991:209) examined the issue of relevance in respect of the curriculum stratification of the Israeli secondary schools. The authors questioned the criteria applied when allocating a curriculum programme to a student. The authors postulated that vocational education contributed to social reproduction by using criteria such as ethnicity, status of origin, and gender. Shavit and Featherman (1988:42 & 49) examined the vocational secondary school relevance in respect of adolescent intelligence. Longitudinal data were examined in order to determine the effects of schooling and tracking on changes in teenage intelligence. Psychometric intelligence of adolescents in the general academic track were found to have been enhanced more by studies in the academic track than in the vocational track, the effect being particularly noticeable in the students' verbal scores. Yogev and Ayalon (1991:209) concluded that the Israeli vocational schools reflected a certain ambivalence in respect of socialisation for work and the provision of equal educational opportunity.

❑ The cost-effectiveness of Israeli senior secondary vocational education:
the findings of the Ziderman-research

Conclusions from the studies described above are not entirely supportive of the relevance of secondary vocational schooling as implemented in Israel, however, the findings of the Ziderman-studies provide relevant insights into the cost-effectiveness factor of Israeli vocational schooling. For Ziderman (and Neuman) relevance in educational provision is linked to the issue of cost-effectiveness. This issue is applied particularly to the vocational education debate in "developing countries" as stimulated by the works of scholars such as Foster (1965), Benavot (1983), Middleton (1988), and Psacharopoulos (1987). Ziderman's (1989a) study focused on vocational schooling in Israel and labour market outcomes of academic and vocational secondary schools. Using 1983 Israeli census data in his study on labour market outcomes Ziderman made the surprising finding that vocational education was more cost-effective than general academic education. The author held that tertiary education did not play a significant role in economic development in developing countries as most post-secondary students did not enter tertiary education. The vocational streams in Israeli secondary schools therefore assumed greater significance (possibly more so than in most other countries) as more than half of the secondary school student population is enrolled in a vocational school Ziderman (1989a:46). In a revision of the Ziderman 1989a paper Neuman and Ziderman (1989) raised a related issue in respect of relevance, i.e. when vocational schools are compared with alternative forms of training for skilled trades, then vocational schools were found to be *not* so cost-effective. The authors included in the phrase "alternative training modes" the traditional apprenticeship, and factory-based training schools. When compared with these alternatives vocational secondary schools were found to be the most expensive skill-training mode. This finding raised the critical question: why has Israeli society not directed training away from the vocational schools? The role of vocational education in the social and cultural integration of immigrants into mainstream Israeli society remains a critical national issue, an issue Israelis are prepared to pay for because of its national importance. Vocational education at secondary school is very much a "second best"

situation, especially when the full range of educational and training programmes available is taken into account (Neuman & Ziderman 1989:161). In another 1989 paper Ziderman (1989b) reports on the results of a longitudinal study on the cost-effectiveness of various training alternatives for Israeli youth. The investigation included follow-up data on earnings, length of course, year of completion, and more specific independent variables such as training trades (electrical, motor mechanic, etc). Comparisons were made with the training providers used by the 1 233 trainees included in the study (Ziderman 1989b:246-252). The training alternatives used were the Israeli vocational secondary school, the traditional apprenticeship, industrial schools, and the intensive one-year courses for adolescent school-leavers (Ziderman 1989b:243; 244-246). The majority of skilled workers who had trained at a vocational school did not demonstrate a significant earnings advantage over those who qualified in one of the training alternatives (Ziderman 1989b:254). Ziderman (1989b:255) deals once again with the issue of Israeli commitment to a more expensive training system:

- firstly, training alternatives to the vocational secondary school in Israel had a social stigma attached to them; vocational schooling continued to be a dominant provider because of its formal schooling and educative values;
- secondly, Israel lacked the *meister* institution, central to the dual system of Germany, and hence the development of a unique Israeli system of vocational secondary schools;
- thirdly, vocational secondary schools provide more than labour-market skills, the wider social and educational goals are evaluated against the narrower and strictly work-orientated ethics of cost-effectiveness.

These findings re-affirm Israeli commitment to *education*, as distinct from *training*, and also draw attention to the centrality of the embeddedness of a national system in the historical origins of the state. This embeddedness gives rise to unique social and cultural circumstances that determines the structure and direction of educational provision. Relevance therefore is evaluated by taking into account a national system's historical, economic, and socio-cultural determinants.

Similar findings were reported in Neuman and Ziderman (1991). In a World Bank working paper which superseded the Ziderman (1989a) paper the authors argued on the basis of a comparative analysis of the earnings of Israeli workers, but in this paper the authors included the critical dimension of vocational curriculum content and the effect of content on labour market outcomes (Neuman & Ziderman 1991:2). The authors reported that the outcome of their analysis was positive for vocational schooling. However, some of their findings were similar to those of earlier studies: relevance in the Israeli context was perceived to be in respect of the cost-effectiveness of the vocational / academic secondary schools. The authors re-iterated some of their earlier conclusions, viz that in Israel vocational secondary students were of lesser academic ability, came from lower socio-economic backgrounds, and more likely to be of Oriental origin and had impoverished educational backgrounds. However, in Israel "attendance at a secondary school results in a closing of this earnings gap between the two groups" (Neuman & Ziderman 1991:16). The authors further stated in their conclusions that the Israeli secondary schooling balance "offers a satisfactory return on societal investment in terminal secondary schooling ... those who attended the more costly vocational schools do not work in occupations matching the courses of study pursued at school, nor do the latter benefit from an earnings advantage over their academic school counterparts" (Neuman & Ziderman 1991:16). The authors were not persuaded that their results suggested a re-distribution of vocational secondary school places in favour of academic schools, as there was no reason to believe that vocational school students generally were in fact suitable for the more demanding academic secondary education stream. The authors once again raised the issue of social policy in Israel. Vocational education is subject to national social policy, from this point of view it has continued to be a critical issue in Israel (Iram 1986:268 & 269).

(e) Conclusion

The preceding paragraphs have demonstrated the rapid growth of the Israeli system in secondary school vocational education. This growth attracted interest among scholars and researchers. The relevance of the Israeli system was investigated from various perspectives. The cost-effective factor of

vocational education attracted particular interest among scholars. The important role of general education in the broader educational curriculum in the Israeli choice of more expensive “second best” option emerged from these studies. A formal school-leaving certificate was viewed by parents as being an essential qualification that would ensure future success and upward social mobility in the labour market.

Israel made the transition from a low-income economy to a high-income economy over a period of approximately 50 years. The contribution of the *kibbutz* movement was identified as a factor of relevance in the development of Israeli society. Related to *kibbutz* education is the value attributed to science, technology and skills development in Israel. Attitudinal development was found to be a critical issue in this respect. Healthy attitudes towards skilled work have been a characteristic of Israeli society that pre-dates the modern state. The third trend examined the secondary vocational model as a unique Israeli approach to education and skills development. The conclusion reached was that all three trends were highly relevant to the provision of education in Israel. Cognisance must however, be taken of the historical reasons for the development of the Israeli system, and the social policy that has evolved alongside educational provision. Reference was made to the social policy of the integration of immigrants into mainstream Israeli society. The following paragraph will examine *Misug-Galuyot* as a critical national issue and its implications for educational relevance.

4.3.5.2 Critical issues

(a) Introduction

In this paragraph *Misug-Galuyot* will be described as a critical issue in respect of its wider social implications for the Israeli state. Relevance in educational provision is measured against the social policy of *Misug-Galuyot*, and the wider issues of national survival in a region hostile to the existence of Israel.

(b) The relevance of *Misug-Galuyot* for Israeli survival

The policy of fusion (or narrowing the gap between the advantaged and disadvantaged sectors of the population) is not a racial policy. Social and educational policies towards the Arabs and the Druze (and other minorities) are separate issues. The policy of *Misug-Galuyot* is focused on narrowing the social, cultural, educational and economic gap, which exist between the *Sephardim* (Jews of oriental origin) and the *Ashkenazim* (Jews of western origin). The policy remains critical because it is focused on intra-Jewish relations that has a critical influence on the internal unity of the Jewish state (Peled 1981:193-195; Iram 1986:259-261; Bash 1997:130).

Initially the disadvantaged sector was in the minority, but gradually the immigration policy of Israel changed the equilibrium and the disadvantaged sector increased to almost 50%. The focus was chiefly on bridging the gap between the advantaged and disadvantaged regions and groups and breaking the close correlation between ethnic origin and socio-economic inequality (Peled 1981:380).

(c) Forms of relevance in *Misug-Galuyot*

Misug-Galuyot has been implemented in different forms over the years since the declaration of the state of Israel in 1948. Two broad approaches were used, firstly the compensatory education programmes, introduced mainly at primary school level, and secondly, the secondary school programmes that is aimed at diminishing the drop out rates. These secondary school programmes have included various types of secondary vocational schooling (Chazan 1973:6-7; Iram 1986:261). The changing perspective towards compensatory education in Israel is recorded by Chazan (1973:8). The author makes reference to the post-1948 programmes that were aimed at "equality of treatment for all in school, with some emergency intervention programmes" (Chazan 1973:8). Programmes were somewhat naïve in their expectations, and from 1957 to 1966 special compensatory programmes for the disadvantaged were introduced that were characterised by emergency short-term programmes. These programmes included, *inter alia*, smaller classes for

the disadvantaged, free kindergarten education for the disadvantaged population, extensions of the school day and the school year (Chazan 1973:8). Chazan (1973:9) points out that this policy of differential treatment was severely attacked on the grounds of its discriminatory treatment of certain population groups. Chazan (1973:9) holds, however, that the programmes did achieve a degree of success in narrowing the gap, and some benefit did accrue to the state.

The vocational secondary school programmes were expected to meet all the needs of the disadvantaged groups without running the risk of furthering discriminatory practice in their programmes. Vocational schooling has a social motive, but it also has its educational goals. Peled (1981:222) holds that vocational education is a top priority for the Israeli state. This former low-income economy is an immigrant society, living under the constant threat of war, survival is always on the agenda for this small nation. For its defence the Israelis can only look to its own kind, and relevance, therefore, is in the success of the policies of *Misug-Galuyot*. Education has a critical role to play in ensuring that the cultural gaps have been narrowed (Peled 1981:185-191; 193-195; 213-214; 222-226; Iram 1986: 267-268).

The secondary programmes continued into the 1990s, and beyond. Vocational secondary schooling changed with the times, recent programmes have placed more emphasis on the general educational component within the vocational curriculum. In line with international standards general education remains critical for admission to tertiary and higher educational institutions in the fields of science and technology. The programmes described below have been designed to promote the disadvantaged sectors of Israeli society.

(d) Secondary Programmes

The following illustrations highlight some of the initiatives by the Israeli Ministry of Education to promote opportunities for learning at all levels of society.

Illustration 4.6 below demonstrates a pro-active approach in dealing with the social problems of youth. Compensatory opportunities are offered in the

vocationally orientated programmes for young people who have experienced social and/or learning problems to overcome the set-backs *vis-à-vis* education and training. Factors of relevance are then concluded in compensatory programmes. These pro-active programmes endeavour to pre-empt the widening of a social gap in Israeli society. The problems of youth unemployment, crime and poverty are also indirectly addressed.

Illustration 4.6

Programmes for youth at risk

Programmes include:

- drop-outs (under care of the truant officers);
- alienated youth;
- new immigrant youth at risk.

In 1996 19 500 adolescent boys and girls were under the care of one of these programmes. The programmes aim to prevent dropping-out, and to encourage the completion of primary and secondary education, to prevent alcohol and drug abuse, and to learn skills to cope with violence, etc. Financial rewards are offered to schools who have been successful in preventing dropping-out.

(Source: Ministry of Education (Israel) (MOE) 1996:16)

The Israeli immigrant society is constantly confronted by an influx of educationally disadvantaged immigrants. From the Israeli perspective compensatory programmes are relevant in respect of the critical implications of absorbing immigrants into mainstream Israeli society. Successful absorption has educational implications, and pre-empts the widening of the social gap in Israeli society. Factors of relevance are therefore concluded in specific programmes for youth and young adults.

A further critical issue for the Israeli MOE is the problem of unschooled youth. Table 4.4 below indicates the seriousness of the problem of unschooled children and youth in Israel. The data indicates that there was a drop in the number of unschooled youth, which in turn may indicate the success of Israeli attempts to provide schooling for the entire 6 – 17 year age-group. The data in the table are estimates and apply largely to the Arab and Druze sectors, but the Jewish sector is also represented in these statistics (MOE 1996:14; cf Forber 1999; Colyn 1999).

Table 4.4
Unschooled children and youth (ages 6 – 17)

Year	Percentage	Actual numbers
1992	4,5	52 260
1993	3,6	42 300
1994	3,1	37 000

(Source: MOE 1996:14)

It is difficult to estimate the actual numbers of unschooled learners, however, what is relevant to this study are the relevance of initiatives that have social and economic implications for Israeli society. The question is one of relevance of educational provision once the unschooled youth have enrolled or re-enrolled in schools, hence the suggested relevance of the programmes illustrated in Illustration 4.7 below.

Illustration 4.8

Programmes to aid students preparing for the Israeli *bagrut*

The Israeli Ministry of Education has prepared educational programmes that focus on the disadvantaged and immigrant population groups. Specific programmes for *bagrut* preparation include:

- pre-academic preparatory programmes
- the “Mabar” – move on to matriculation
- Michael Project for Grade 10-11 students
- the “Second Chance” programme

(Source: MOE 1996:11-19; 27-28)

The programmes in Illustration 4.8 above are expected to identify and assist students with potential who wish to complete their *bagrut*; the Michael Project is pro-active as it is designed for students planning for the *bagrut* but who reside in development towns or disadvantaged neighbourhoods, it is anticipated that these programmes will improve the percentage of candidates eligible for the Israeli matriculation certificate still at school (MOE 1996:11; cf Forber 1999; Colyn 1999).

(e) Conclusion

Educational attempts to absorb new immigrants have been, *inter alia*, by providing more classrooms, and more pre-schools as well as the implementation of relevant programmes to facilitate and encourage absorption. The Israeli immigrant policy is thus geared towards immediate absorption and educational integration of new immigrants into main stream Israeli society. Earlier attempts at focusing *Misug-Galuyot* at the primary levels of learning shifted to the secondary school level. Programmes have been implemented to encourage all Israeli citizens to acquire a secondary school qualification. Education is viewed as the agent whereby successful absorption and integration can take place. Relevance in education serves the social policies of the state.

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4.3.5.3 Future developments

(a) Introduction

The Israeli national system of education is not into a structural reform process at present. However, education is not static, and neither is society. In order to remain relevant to the needs of the Israeli community development and future planning is essential. The following paragraph examines some developments envisaged by the Israeli Department of Education for the academic years 1996 – 2000. Educational initiatives referred to in this paragraph are all based on major policy decisions of the Israeli Ministry of Education. These decisions constitute the on-going efforts of the Ministry to remain relevant to changes in Israeli society. Brief reference will be made to the factual context of the 1996 policy decisions to be followed by an outline of three actual decisions that are relevant to the aims of this study. This paragraph will conclude by posing some critical questions of relevance in education and the problems of international relations in the Middle East.

(b) Policy Decisions

The policy decision to provide more funding for Israeli education was based on an Israeli cabinet decision during the 1995 budget year. The regular budget of the Israeli Ministry of Education and Culture grew phenomenally during the 1992 – 1996 budget year (NIS 6.3 billion – 16.4 billion). Successive budgetary cutbacks had severely curtailed development. The decision in 1995 to provide additional funding for development in 1995 made it possible for Israel to move towards the national goals for education, i.e. more economic growth and more equality (from the preface by Prof. Amnon Rubinstein, Minister of Education, Culture and Sport, in MOE 1996: pre-pagination).

(c) Extending the School Day

Between 1979/1980 and 1989/1990 a drop in the average number of classroom hours took place. This was particularly marked at the primary and junior high levels of schooling. The senior high schools experienced an increase in the number of classroom hours. By way of illustration, the average number of classroom hours in the primary schools dropped from 40 hours per week in 1979/1980 to 37.4 in the 1989/1990 academic year and then gradually increased to 47.2 hours per week in the 1995/1996 academic year. By extending the school day the Israeli Ministry of Education anticipated improved educational standards, especially in the fields of science and technology, with an enhancement in the cultural and social enrichment learning areas (MOE 1996:1).

(d) Promoting Scientific and Technological Studies

In order to remain relevant to the rapid changes that take place in the fields of science and technology the following future developments were approved by the Israeli MOE:

- to provide at least one computer for every 10 learners in the primary, junior and senior high school phases;
- to invest in science and technology laboratories in the junior high schools;

- to develop and implement new science and technology learning programmes at all learning levels of compulsory schooling;
- to ensure that the training of mathematics and science teachers increase in terms of the demand, and that the training in the field of computer science remains steady.

(MOE 1996:7-10)

With these future developments in mind the Israeli MOE expected an enhancement in learning as a result of greater contact time with computers; continuity between science and technology studies at different school levels would be improved; the importance of science and technology at all levels of learning would be emphasised; the training of professional staff to remain on a par with the demand in schools. The provision of quality education in the fields of science and technology is a high priority in the provision of education in Israel. The anticipated results of on-going investment in the science/technology area would be of benefit of the entire Israeli society (MOE 1996:7-10; cf Colyn 1999).

(e) Development of Higher Education

The policy decision of the Israeli Ministry of Education included a master plan to expand higher education. An anticipated 16% increase in student enrolment over the 1994/1995 academic year was expected to take place by 2000. The majority of these increases were expected to take place in the college sector. A distinct gap exists in the provision of higher education in Israel between the different ethnic groups. The policy decision in respect of higher education was designed to narrow the gap. This decision was to ensure that regional colleges would absorb an anticipated increase in demand for higher education. By 2000 13 000 first year enrolments were expected to take place in the regional colleges as opposed to the 7 000 in 1996. Seven regional colleges were under the academic supervision of universities in 1996, and three colleges had authority to issue independent academic degrees. Over and above the development of general regional colleges, technological colleges for studies in applied engineering were planned for the future. These colleges would enrol students studying towards a B.Tech. in practical

engineering. Requests by the technological colleges to plan and implement technological curricula under the auspices of a university for the B.Tech. were to be considered (MOE 1996:23-25; cf Forber 1999).

(f) Conclusion

Future development in the provision of relevant education in the Israeli state is critical. The initiatives examined above are relevant and responsive to the needs of Israeli society. Other insights however, provide perspective to the perceived relevance. The economy of Israel is expected to support a demanding defence budget. Security of the state requires technology of the highest order. Much progress has been made towards peace in the Middle East, however, there are issues that have to be resolved between Israel and the Palestinians: the status of Jerusalem, the resolution of the Israeli settlement policy, and the issues of refugees, the nature of the future Palestinian state, the release of prisoners and the matter of water provision. Internal problems within Israeli society have been raised as a stumbling block to a lasting peace settlement with the Palestinians and the Arab world. Ethnic and cultural divisions within Israeli society are organised along religious/secular lines as well as cultural lines. Globalisation has accentuated the rift between the Israeli ethnic groups. The serious nature of societal problems in Israel raises the question of the genuineness of the apparent relevance of educational provision in Israel; this becomes particularly worrisome when politically motivated conflict threatens to abort the peace process of a region on the brink of lasting political settlement.

At the time of writing (16 October 2000) a new wave of violence has erupted in the Palestinian-Israeli region. The Palestinian cities of Ramallah, Jericho and Hebron, as well as the divided city of Jerusalem have experienced more than a week of street battles and military reprisals. World leaders have rallied to attend a summit in Egypt to save the peace process (*Sunday Times* 15 October 2000; *The Mercury* 16 October 2000). Political decisions will be required to bring order to society before future developments in education may aspire to any form of genuine relevance for the society it serves. Education cannot compensate for the problems of society. Political settlements ensure

that national education systems remain relevant to their communities. If political goals dominate the aims of educational provision then the risk of sacrificing relevance becomes greater than the system can cope with. The problems of relevance in education in the context of political instability will be discussed at length in the paragraphs on the provision of education in the emerging Palestinian state (Le Monde Diplomatique Website 2000).

4.3.6 Conclusions to the Israeli Country Data

4.3.6.1 Introduction

Factors of relevance for the Israeli system of education will be concluded in historico-legal, socio-economic, structure of education data, and in the data that emerged from the trends, reforms and critical issues of provision of education. Barriers to relevance will also be indicated.

4.3.6.2 Historico-legal Factors

The Palestinian-Israeli historico-legal data yielded significant influences in respect of the common ancient historical origins of the Jewish and the Arab (para 4.3.2.1). These common cultural, religious and historical influences were foundational to the establishment of the modern Zionist and Arab nationalist movements. Conflicting interests however, had an inhibiting affect on educational relevance in the Palestinian-Israeli region. Relevance in the provision of education was also concluded to be relative in nature. The relevance of the ancient origins lauded by former Israeli Prime Minister Begin was viewed as a factor of relevance for Israel, however, the same factors were construed to be barriers to relevance by the Palestinians, resulting in resistance to Zionism (para 4.3.2.1, 4.3.2.2 & 4.3.2.3).

Relevance for Israel had distinct implications for minority groups in the Palestinian-Israeli region. The new state of Israel precipitated political and economic developments in the region that resulted in positive *and* negative influences on relevance in education for national systems of education in the region. Fragmentation of provision resulted for some of the smaller national

groups. The problems associated with the survival of the new state and the absorption of thousands of Israeli immigrants were further challenges to be addressed by the Israeli Ministry of Education. A highly relevant and sophisticated system of education developed in the Israeli state. Political objectives placed an emphasis on rural development and sophisticated technology. National requirements placed a strong emphasis on the ministry of education to remain relevant to national needs. The historico-legal data demonstrated that a highly relevant system of education was created in the region while a system of inequity developed for the Palestinians. Peace in the Palestinian-Israeli region was concluded as a pre-requisite before equity and relevance could be restored to the provision of relevance for all national groups in the region (para 4.3.2.5).

4.3.6.3 Socio-Economic Factors

Factors of relevance in the socio-economic data emerged in the Israeli country data in respect of economic achievements of the past fifty years. These achievements were concluded from the economic indicators. The origins of the superior technological profile of Israel emerged as a factor of relevance in the socio-economic data. The transition made by Israel from a low-middle-income economy to a high-income economy was viewed as a factor of high relevance (para 4.3.3.3 (c)). Corroboration of the transition was provided in the data on the origins of the Israeli economy. The country data did indicate however, that as a result of anomalies in the Israeli economy the formal economic classification would continue to be that of a “developing nation” (para 4.3.3.3 (d)).

4.3.6.4 Structure of Education Factors

Factors of relevance in the structure of education indicated that provision of education has been made possible for a multi-cultural society. The data indicated four different types of schools in Israel (para 4.3.4.1 (c)). The administration of the schools was perceived to be a particular factor of relevance in respect of the shared responsibility for the administration of the

schools between the ministry of education and the local authorities (para 4.3.4.1(e)).

A particular emphasis of the Israeli system of education was discerned in the system of tracking that commenced in the senior secondary phase. The Israeli vocational high schools offered specialised occupationally orientated learning programmes leading to a vocational *bagrut*. These schools were perceived to hold relevance in the context of the Israeli country experience (para 4.3.4.4 (c)). ORT education emerged as providing a more up-market, but more vocationally orientated and relevant education (cf *Illustrations 4.4; 4.5 & 4.6*). The Israeli structure of education tended to introduce learners to technology at a younger age. Relevance was concluded in the Israeli “safety net”. The Israeli data indicated that critically important measures had to be taken to ensure that school-leavers not proceeding to colleges or universities be transferred by State Law to the Ministry of Labour where an apprenticeship or a programme of learning be assigned to them before they enter the labour market. Potential drop-outs are referred to the Department of Labour in order to implement a system of apprenticeship as governed by the Israeli Apprenticeship Law. This factor was perceived as holding particular relevance for the problems of unemployment (para 4.3.4.5). Unemployment in the Israeli state has been low (cf para 4.3.3.3 (c)). Relevance in the Israeli Higher Education was concluded as a result of the strong focus on science and technology (cf para 4.3.4.6).

4.3.6.5 Trends, Critical Issues and Future Developments

(a) Introduction

Criteria identified above as factors of relevance may be repeated in this paragraph as they impinge on the evaluation of trends, critical issues and future developments.

(b) Trends

Factors of relevance in the trends in the Israeli country data were found to be linked to the transition made by Israel from a low-income to a high-income

economy. Three particular trends were indicated in the Israeli data as being contributory to the transition.

The first factor of relevance was in the relevance of *kibbutz* education. *Kibbutz*-education had its origins in a rural environment. The trend emerged for relevance to be perceived in the value of the education of *kibbutz*-graduates. Specific factors that contributed towards *kibbutz*-relevance was the interaction of the family unit on the agricultural co-operatives. The studies cited in the text indicated that the type of living espoused by the *kibbutzim* (or *moshavim*) tended to develop a particular type of attitude towards work. Co-operative living on the *kibbutzim* fostered the notion of the equal value of work among *kibbutzim* youth. There was a definite trend among *kibbutz*-graduates to hold more positive attitudes towards blue-collar work. This was found to take place *vis-à-vis* the family, education and the community. The *kibbutz* system embraced all three of these critical components, as a holistic approach to educational provision (para 4.3.5.1 (b)).

The second trend unique to Israeli education was concluded in the emphasis on science, technology and skills development. These trends were not divorced from education. The stimulation of an interest in science, technology and skills development is also linked to *kibbutz* education. In a practical environment learners were found to perceive relevance sooner than in a classroom situation. Science and technology institutes and centres of learning at tertiary and higher education levels promote the value of science and technology in Israel. This trend emerged quite early in the history of the state of Israel. International funding for the development of science, technology and skills development emerged as another trend during the early years of Israel's history. The development of science and technology in Israel was not a trend that developed in isolation. Inter-ministerial collaboration facilitated an integrated approach to science, technology and skills development. Education was, however, a key role-player. It was generally acknowledged that the value of science and technology had to build on the quality of education developed in the classrooms of the nation (para 4.3.5.1 (c)).

The third trend in the Israeli system of education was concluded in the vocationalisation of Israeli senior secondary schools. Scholars examined the reasons for the growth in this sector in Israeli education and concluded that it was the unique Israeli historical circumstances that gave rise to the secondary vocational school movement (cf para 4.3.5.1 (d)). Described as a more costly “second best option” the vocational secondary school alternative proved to be relevant in the Israeli national experience. This trend indicated that education responded to the social needs of the state. This factor of social relevance was viewed as a relevant trend within a particular national context. This same factor may however, also be concluded to be a critical issue (para 4.3.5.1).

(c) Critical Issues

Critical issues, or potential barriers to relevance in Israel were perceived in the problems of *Misug-Galuyot*. It was concluded that the social policy of Israel set the goals for relevance in educational provision. Quality in educational provision may not be lowered as a result of poverty and illiteracy. Problems associated with marginalised groups in society must be vigorously addressed (para 4.3.5.2 (a) & (b)).

Various programmes were implemented in Israel to address the critical challenges of *Misug-Galuyot*. The socio-economic disadvantage of the African and Asian immigrants posed a particular challenge to the Israeli state. Vocational education at the secondary school became a key social instrument for integration (para 4.3.5.2 (c)).

The problems associated with secondary school vocational education in Israel emerged as a pivotal factor in educational relevance. Vocational secondary schooling in Israel was concluded to be a factor of high relevance. The more costly “second best option” however, raised questions in respect of long-term relevance. High relevance was also perceived in *all* secondary school projects cited (para 4.3.5.2 (d)). The crises of national survival and the on-going association with the provision of relevant education at secondary school raised critical questions in the Israeli country data (para 4.3.5.2 (e)).

(d) Future developments

It was concluded that future developments in education could not be divorced from the volatile political situation in the Palestinian-Israeli region. Relevance is determined by the availability of funds in the Israeli education budget. Investment in the Israeli human resource base *vis-à-vis* qualitative education was perceived as a factor of relevance. (para 4.3.5.3 (a) – (d)). Relevance is not static. Future developments in educational initiatives are essential to guard against stagnation and irrelevance. Political and military issues contribute to the national concern for relevance. National needs motivate and prompt future developments in education. The motive to remain relevant to the global markets has accentuated Israeli determination to provide education that remained relevant to national needs irrespective of the cost (para 4.3.5.3 (f)).

4.3.7 Structure of Education in the Palestinian Authority

4.3.7.1 Introduction

At the time of writing the Palestinian Ministry of Education had only been in existence for five years, at this point the complete harmonisation of the various education systems operating in the Palestinian territories had not been completed (PNA 1999:11 &12). A 500 item data base search conducted by Karlien de Beer (UNISA, 8 December 1999) on education in Palestine yielded very little material relevant to the aims of this study (Bargal 1992:51-68; El-Helou & Johnson 1994:63-70; Hoffman & Bizman 1996:117-128; Thabet & Vostanis 1999:385-391). No South African studies or articles were indicated. Commenting on this Abu-Ali (1999) said that the dearth of material in South Africa was understandable given the tense relationship that existed between the PLO and the Nationalist Government of South Africa prior to 1994.

4.3.7.2 General principles of the new Palestinian curriculum

The current provision of education in the PNA is based on the desire of the Palestinian people to redress the injustices of the past. The general principles of the new Palestinian Curriculum embrace the philosophy of Palestinian Arab society in which the uniqueness of the Palestinian national identity is affirmed. The uniqueness is firmly rooted in Palestinian faith in Allah, the Almighty, and

in this respect the national identity extends to that of the wider Arab-Islamic community. The general principles include the desire to preserve the values of Palestinian society drawn from Islamic faith, Palestinian national culture, history, traditions and aspirations. The cognitive basis of the new curriculum stems from the essence of Islamic culture and seeks to foster an appreciation of the beauty of the homeland, of all forms of art and literature, and the many fields of knowledge and of science. The new Palestinian Curriculum focuses on building Palestinian society. The value of the individual is however, the central focus of the curriculum. The new curriculum concentrates on producing psychologically and socially balanced citizens for a new Palestinian society (Ministry of Education (MOE) 1996: 5-10).

4.3.7.3 Two Ministries

Two Ministries are concerned with educational provision:

- The Ministry of Education is responsible for all school-based education;
- The Ministry of Higher Education (MOHE) is responsible for all post-secondary education.

4.3.7.4 Pre-School Education (Kindergartens)

The Israeli Government did not provide pre-school education for the Palestinian children living within the Israeli state. Kindergartens were therefore mostly private fee-paying and of a poor standard (Graham-Brown 1984:45). Currently this phase of education rests with the private sector, enrolment at these schools have increased, however, the qualifications of kindergarten staff are very low, 48% have education qualifications at the level of the *Tawjihi* or below. There are no providers for the training of kindergarten teachers (PNA 1999:14).

4.3.7.5 Basic Education: Preparatory education (Grades 1 – 4)

Learning areas (i.e.subjects) include Islamic Education; Arabic Language; English Language; General Science; Mathematics; Social Science and National Education; Arts and Crafts; Physical Education; Free Activities and

Civics. Features of basic education include an increase in the number of weekly classes, from 27 to 30 in the West Bank and Gaza Districts and the introduction of English as a subject in the preparatory stage. The early exposure to English facilitates cross-cultural understanding and will provide access for using a computer. The free activities will include activities such as computers, cultural, scientific and physical activities (MOE 1996:17-20).

4.3.7.6 Basic Education : (Grades 5 –10)

The learning areas for Grades 5 – 9 are same as for the preparatory stage, however, Technology and Applied Sciences are included from Grade 5, and an Elective Subject from Grade 7. Options for the elective include a third language (French, Hebrew or German), Home Economics, or Health and Environmental Sciences. One instructional class at the beginning of the Grade 7-year increases the time allocation. Features of this stage include an emphasis on the importance of Grade 10. This grade is regarded as a preliminary year for the final secondary stage. The learners will choose, according to ability and interest, either an academic or a technical orientation for the final two years of schooling. The learning areas for Grade 10 are as for Grades 5 – 9; however, Vocational Literacy and Technical Subjects replace the Free Activity and Civics classes. Learners select two technical subjects from Agriculture, Industry, Commerce and Administration, and Tourism (MOE 1996: 21-22).

4.3.7.7 Post-basic education : (Grades 11 – 13)

(a) Academic Orientation

The General Secondary Examination is held during the Grade 11 year (i.e. the First Secondary Academic Grade). Equal opportunities are made available in this grade for all learners in order to encourage learners to continue with secondary education beyond Grade 10 (MOE 1996:23).

During the Grade 12-year (i.e. the Second Secondary Academic Grade) the academic studies are continued. Two choices may be made:

- two subjects may be chosen from the scientific electives: Physics, Chemistry and Biology;
- two subjects may be chosen from the literacy electives: Economics and Administration; History and Geography.

The *Tawjihi* or the General Secondary Examination takes place at the conclusion of the Grade 12 year. A school-leaving certificate is issued. A literary or scientific orientation is available for the compilation of the *Tawjihi* curriculum based on the core subjects as selected for the Grade 12 year. The *Tawjihi* makes it possible for a learner to enrol at a community college or a university (MOE 1996:23-25).

(b) Technical Orientation : Vocational Technical Education and Training (VTET)

The Vocational Secondary Schools are part of the formal VTET systems in Palestine. The entrance requirement (as for the academic orientated schools) is the successful completion of Grade 10. VTET will be discussed in greater depth below.

4.3.7.8 VTET Institutions

(a) Introduction

VTET is provided by three types of institutions each being administered by different Ministries of the Palestinian Authority.

- Ministry of Education – Vocational Secondary Schools
- Ministry of Higher Education – Community Colleges
- Ministry of Labour – Vocational Training Centres

The VTET system is not unified. In addition to the three types of institutions above there exist cultural centres, societies and charitable organisations, as well as agricultural and economic development centres. In all there are about

230 institutions in the West Bank and Gaza that provide training programmes of varying duration (PNA 2000:6).

(b) Vocational secondary schools

The objectives of these schools are *inter alia* to prepare students for the work place, and to prepare them for possible enrolment in higher education. The Jordanian vocational secondary school learning programmes are used. Learners can select a learning programme from the industrial, agricultural or the commercial streams. These schools are managed by the Ministry of Education and by private institutions (Ministries of Education, Labour and Higher Education 2000:5).

(c) Community Colleges

The objectives of the Community Colleges are *inter alia* to prepare students with mid-level skills, and to prepare students for possible enrolment in higher education. Jordanian learning programmes are used. Specialisations include technical and academic orientations as well as vocational and academic specialisations (sub-fields include: engineering, administration and finance, arts, social work, etc). The Ministry of Higher Education manages the education in community colleges and acknowledges their certificates. Of the 16 Palestinian community colleges, 5 are government, 3 UNRWA, and the remaining 8 are private and non-government (MOE *et al* 2000:6-7).

(d) Training Centres

The training centres provide training for semi-skilled labourers. Specialisations include metalwork, electricity and electronics, woodwork, blacksmithery, radio and television, carpentry, driving of vehicles, sewing. The Ministry of Labour controls the training centres (MOE *et al* 2000:7-8).

(e) Duration of study and entrance requirements

The duration of study at most VTET institutions is 2 years. The courses at the Ministry of Labour training centres vary from 5 to 14 months. The entrance requirements at the vocational secondary schools is a successful completion of Grade 10, while the Community Colleges require a *Tawjihi* certificate with a 60% average, the training centre entrance requirements vary from one institution to another, and according to course contents (MOE *et al* 2000: 5-8).

4.3.7.9 Higher Education

(a) Introduction

The Ministry of Higher Education was established in 1996 with responsibility for the entire post-secondary sector. A five-year rationalisation plan was prepared to accommodate the 1997-2001 academic period and a Task Force to prepare a plan for the period 2000-2004. The Ministry of Education prepared its own emergency plan for the same periods. Both plans prioritised the creation of a unified national Palestinian system of education as a prime objective. Linkages have been established between the two ministries to facilitate relevance in educational provision (Sanyal 1999: 1-4).

(b) Universities

There are eight Palestinian universities with a total enrolment of 61 748 students for the 1998 -1999 academic year. This total includes enrolments at the Al-Quds Open University, the Palestinian Polytechnic Institute and Community Colleges and a College of Education in Gaza (Sanyal 1999:5-6).

(c) The value of higher education

Higher education qualifications are held in high regard by the Palestinians, good qualifications are common (Abu-Ali 1999). This perception of the value of higher education has persisted. Graham-Brown (1984:101) holds that the technical and vocational training aspect of higher education has been

neglected as a result of the largely unskilled or semi-skilled nature of the work available in Israel. The vocational education dilemma is related to the fixation with prestigious qualifications and high-status professions prevalent among the Palestinians.

An unrealistic situation has arisen:

“Palestinian society is a diploma conscious and seeking society. Nearly 80% of students who passed the *Tawjihi* for the academic year 1998/1999 were accepted in institutions of higher education. The student enrolment for the academic year 1998/1999 approached 59 000 in the universities and 5 000 in vocational/technical colleges. Unfortunately, this rapid increase (approximately 20% annual increase for the period 1994/1995 to 1998/1999) ... [has had] ... a detrimental effect on the quality of education provided. Furthermore, this unchecked enrolment practice has led to the proliferation of graduates who are either unemployed (some estimates put the figure around 30%) or under employed, especially in the humanities. By the same token, the community is seeking qualified graduates in other fields, especially those related to technical skills and knowledge of advanced technology” .

(Ministry of Higher Education (MOHE) 1999:12)

4.3.7.10 Conclusion

The provision of education in Palestine has been rescued from a situation of collapse as a result of international agreements and the intervention of international agencies such as UNESCO and the European Union. The unification of the department of education has not been completed. Formal secondary school education is terminated for learners at the Grade 10 level. This grade is therefore important, as many learners will decide on their scholastic future during this year. Academic orientation electives appear to be limited. On the other hand the vocational orientations appear to have a wider range of electives for consideration.

Palestine has inherited a fragmented system of VTET. The management of VTET includes several ministries, public and religious bodies and international organisation. Co-ordination and supervision of the system is therefore problematic. The training centres have limited resources, equipment and machinery are out of date. Poor articulation between VTET and academic orientation has resulted in a decline in the quality of the level of training in the VTET sector. Having inherited a system designed to train low-skill workers for the Israeli market the Palestinian Authority faces immense challenges to unify the system.

The issues of VTET and higher education are related. The perceptions appear to exist in the low and middle-income economies that relevance in respect of work is only obtainable via higher education institutions. This implies high status in white-collar occupations. The “diploma disease” perceives relevance in pursuing the personal goals of a liberal education. Social goals are seemingly ignored. The international markets are highly competitive. The demand for a highly-skilled labour force with above average general educational attainments are thus not forthcoming in the PNA.

4.3.8 Critical Issues, Trends and Future Developments in the Palestinian Authority

4.3.8.1 Critical issues

(a) Provision of educational basics

The development of a unique Palestinian curriculum was prioritised by the newly established PNA in 1994. Even before the formal transfer of education to the PNA in 1994 conferences were held in preparation for the provision of basic and secondary education in a future Palestinian state (MOE 1996:1). The basic principles of educational provision included the right to education for all children between the ages of 6 and 16. The Ministry of Education in partnership with UNESCO (1994) established the Palestinian Curriculum Development Centre. The General Administration of the Centre, together with various stakeholders and institutions identified the key problem areas in the

provision of education in Palestine. The Comprehensive Plan of the First Palestinian Curriculum for General Education (1996) was implemented during the 1997/1998 academic year. The success of the Palestinian emergency plans to rescue the Palestinian system of education from collapse is therefore a critical issue. The provision of education in the PNA was perceived to be a critical issue in respect of its relevance to the social and economic development of Palestinian society. Several of the critical sub-issues that required attention before relevance in educational basics was possible are the discontinuation of double shifts (MOE 1996:12; PNA 1999:70; Mahshi 1999:7), curtailment of learner early drop-out (MOE 1996:12), provision of equipment, and uniformity in textbook provision (Mahshi 1999: 8; PNA 1999:11), and the up-grading of teacher qualifications (Mahshi 1999: 8; PNA 1999:11). The Five Year Education Development Plan set objectives and targets for the reconstruction of education in order to provide access to education for all learners, to improve the quality of education, to develop formal and non-formal education, to develop management capacity for planning, administration and finance of educational administrators and to develop the human resources of the education system (MOE 1996: 12; PNA 1999:26; Mahshi 1999:10 – 12).

Literacy (especially among the older generation) is to be prioritised. Conflicting reports emerge about Palestinian literacy rates. In reply to my question on Palestinian literacy Mahshi replied: illiteracy is relatively high among the old. The new generation has very high literacy rates. Approximately 86% of Palestinians over 14 years of age is literate. At present, rates of enrolment in basic education are almost comprehensive leading to very low literacy rates among the young (correspondence Mahshi 2000). In the same correspondence Mahshi replied as follows to my question on the model to be adopted for the new Palestinian curriculum:

Question: is it outcomes-based, or a back to basics approach?

Answer: it is not yet outcomes-based.

(b) Conclusion

The PNA prioritised the provision of basic education as a critical issue during the 1994 transfer. It continues to be a critical issue in the development of the Palestinian state. Relevance is perceived in the role that education can play in unifying the divisions within Palestinian society that has resulted from the *diaspora*, the Israeli Occupation and the *Intifada*. It appears that provision of education in the Palestinian Authority is a desperate attempt to provide a basic education for all the Palestinian people at an affordable cost. Outcomes (or any other type of education other than the basics) cannot be afforded by the young state. The issue of economics therefore becomes a critical issue.

(c) Economics

- Introduction

Educational provision cannot be divorced from economics. The PNA inherited a system of education close to collapse. The Palestinian Authority is an emerging state that is still engaged in military conflict with Israel. The inherited educational system cannot be rescued without international assistance.

- The nature of the economic problem

The PNA is in the process of becoming a state. Currently the Palestinian economy is still dependent on the Israeli economy, and to a lesser extent on its Arab neighbours. The problem is one of economic survival. The average Palestinian needs to find work in order to survive. The Palestinian economy cannot provide enough work for its citizens. According to a 1991 Territories Labour Force Survey between 100 000 – 110 000 Palestinians are employed in the Israeli labour market daily. All Palestinian workers must be channelled through the Israeli Employment Service. The same survey identified these workers to be mainly men between the ages of 18 – 64 years of age, (average age 33 years), with an average schooling of between 7,6 and 8,8 years. It was also revealed that between 41% and 50% of Gazans worked in Israel, while between 35% and 41% West Bankers worked in Israel or Jerusalem. The

remaining half (or 59%) were either self-employed or unemployed. The migrant workers are employed in construction (70%), agriculture (20% and manufacturing, mining and other types of employment, including the service sector (i.e. remaining 13 – 17%). A decline in the number of working days was detected during 1988 (22 – 17 days) and (23 – 18 days). The reasons relate to the difficulties of the daily security controls at the border control posts. The Palestinian uprising of 1987 was the immediate cause of more stringent border control checks, and eventual closure (Angrist 1996:425-431; Lewin-Epstein & Semyonov 1994:622-625).

These problems have raised other critical issues experienced by the emerging Palestinian economy in an Israeli dominated economic region. Three such issues have dominated the economic struggle between Israel and Palestine:

- The open market issue

The *Intifada* and in 1991 the Gulf War resulted in Israeli curtailing the migrant worker flow across the borders; the dependency on Israeli economy was redefined as a system of sub-contracting; competition with Israeli firms was disallowed by licensing; agricultural land has been curtailed and the local markets for Palestinian goods were closed (Usher 1994:73-76; Abu-Ali 1999).

- The open borders issue

Related to the above is the issue of an open economy; if the Palestinians are offered the opportunity of alternative markets in Jordan and other Arab countries the emerging class of Palestinian entrepreneurs prefer Israel because of existing business relationships and reliable export markets; Israeli and Palestinian entrepreneurs agree on an open border and an open market policy; whether the Palestinians like it or not, the Israeli economy dominates the region and Palestinian entrepreneurs have to buy and sell at Israeli prices (Usher 1994:77-78).

- The low-skill, cheap labour issue

The dominance of the Israeli economy places the West Bank and Gaza under an economic siege, the reserve pool of cheap labour is sustained; the Palestinian economy, certainly up to 1994, remained unchanged, with an average of 41% structural unemployment, and 60% unemployment in the refugee camps (Usher 1994:78; Yiftachel 1991:163-165).

- Conclusion

The open market and open borders issues are not educational issues. However, the PNA addressed the resultant low-skill-cheap labour issue, the economic problem became an educational issue. The PNA National Strategy for VTET was established to critically address the issues of labour in education.

- (d) The National Strategy for the development of a Palestinian Vocational Technical Education and Training system

- Introduction

The Palestinian VTET system addressed the issues of human development. When the PNA assumed control of the territories it gave precedence to the development of a VTET sector in Palestine.

- Aims and objectives

The aims and objectives of Palestinian VTET were designed to promote economic progress at the individual as well as the community level (PNA 2000:1-4; MOE *et al* 2000:3-4). In order to achieve these aims and objectives the PNA had to address some critical issues in the existing system in order to ensure responsiveness to the requirements of the labour market; to develop the learning programmes to achieve maximum relevance to labour market requirements and to develop articulation with labour markets to secure

optimum participation of stakeholders in planning, management and implementation (PNA 2000:1-4; MOE *et al* 2000:3-4).

VTET in Palestine was designed to provide the community with a skilled-labour force that was capable of participating in all sectors of the economy. VTET would have to adapt to rapid changes in science and technology. It also needed to ensure that learning programmes remain relevant to the vicissitudes of the labour market (PNA 2000:1-4; MOE *et al* 2000:2-3).

The perceived relevance of educational provision as a means towards achieving socio-economic goals is evident in PNA documentation:

“Palestinians are well aware of the fact that education is the basic tool for economic development. Therefore, we should prepare a curriculum that will produce a skilled workforce bearing in mind the priorities of the PNA and its plan to rebuild the nation” (MOE 1996:15).

“Relevance between education and economic development is an important issue for the Palestinians. This has been lacking especially in the area of vocational and technical education ... [the Israeli programmes] ... were obsolete and, hence, were not compatible with societal needs”.

(PNA 1999:11)

“In the future, Palestine will have to compete regionally and globally in an open market as well as co-operate at the regional level on equal footing with the other countries. Education is expected to impart the knowledge, skills, attitudes, and values required in this perspective”.

(PNA 1999:3)

Despite economic crises and personal poverty the President and the cabinet approved the VTET Plan in October 1999 (Technical, Vocational Education and Training (TVET) Website 2000).

- Conclusion

As indicated above an emerging state does not have the financial resources to implement a system of vocational education and training. Viable systems require considerable financial investment. The PNA realised that financial capital was flowing freely around the world, that the international market was dominated by large corporations that decided freely where to invest and create jobs and wealth (TVET Website 2000). The role of international funding became a further critical issue in the provision of relevant education in the emerging Palestinian state.

(e) International Aid to promote relevance in educational provision

- International agreements and international aid

International agreements resulted in the peace process gaining momentum in the Palestinian-Israeli region. These agreements also resulted in a programme of developmental assistance for the West Bank and Gaza. International financial assistance was pledged in 1993 following the Declaration of Principles in Washington, and again in 1995 in the wake of Oslo II in Paris. The PNA, Israel, World Bank, twenty-nine donor states, and ten international organisations agreed in October 1995 to pledge development aid in the form of grants and loans to the West Bank and Gaza. The international assistance programme was a tangible expression of support for the peace process (Brynon 1996:46-47; cf Frisch & Hofnung 1997:1243).

- The Pledges and the Projects

The pledges in aid amounted to \$2,5 billion in 1997 was intended to foster Palestinian economic and social development. Projects benefiting from international aid have not only been TVET programmes. The reconstruction programmes for purposes of rehabilitating general educational facilities received more funding than other categories. Table 4.5 gives an over-view of the priorities of the Palestinian MOE.

Table 4.5
Disbursement of International Aid: MOE programmes

Programme category	Percentage of total external assistance budget
Palestinian Curriculum Development	8,9
Reconstruction and rehabilitation of schools	75,3
Vocational Education Programmes	5,3
Educational Materials and Equipment	0,6
Human Resource Development	7,2
Student Counselling Services	1,3
Miscellaneous education programmes (literacy, adult education, early childhood programmes)	1,2

(Based on PNA 1999: Annexure 10)

(Note: percentages do not add up to 100% as a result of rounding-off)

Table 4.5 demonstrates that the rehabilitation of basic general education precedes the strengthening of VTET. Furthermore, curriculum development receives an allocation in respect of the development of *inter alia*, a Curriculum Development Centre, and the production of textbooks. The Palestinian National Website announced in April 2000 that a multi-purpose training centre would be built in Bietunia (Ramallah). The European Union would sponsor the centre. The centre would provide basic training and re-training in automotive technology, die and tool-making, and office administration. The value of the sponsorship amounted to 4,3 million Euro (TVET Website 2000).

- Conclusion

The solution to the Palestinian economic problem, albeit partial, has been perceived in the rehabilitation of basic general education, followed by the provision of a national system of VTET. International aid has been used to stimulate the social and economic development in Palestine. International aid is a critical factor in the process of emerging statehood; this process includes the development of a self-supporting system of relevant education that can meet the needs of all the Palestinian people.

(a) Introduction

In the Palestinian experience a situation of emergency existed in 1994. Some of the critical issues were examined above. In addition certain trends emerge in the Palestinian data that impact on relevance in educational provision.

- the “diploma disease”;
- community education;
- community colleges.

(b) “The Diploma Disease” and educational relevance

In the period following the PNA take-over of education a perception emerged amongst Palestinian academics that there had been a distinct decline in academic standards. This perception became focused on the quality of the higher education delivery system. One of the causes of the decline in academic standards was identified in the problems caused by the distinct trend towards acquiring diplomas (or degrees). In the global arena the skills acquired *vis-à-vis* these diplomas seemed to be irrelevant. Mahshi and Bush (1989:480) raised this trend. An “education and awareness” project was conducted in a few private schools in the West Bank, the project leaders concluded that education in the West Bank had become “infected with the diploma disease: higher degree awarding has become the most important function of school education while the needs of 90% of the students who never make it to the university are not met”. The recommendations included:

- transforming teaching methods from lecturing to learning by doing;
- making education more relevant to the world of work and production;
- introducing career counselling in the upper secondary grades;
- learning programmes to be relevant to local and regional development needs; and
- strengthening ties between school and community.
(Mahshi & Bush 1989:480-481)

Fashesh (1990: 26) adopts the same theme. He discerns the trend to be evident in the early 1970s when the number of Palestinians studying at universities in proportion to the total population was amongst the highest in the world. The motive of the diploma conscious students was quite clearly the acquiring of a job by means of a degree. In the same reference Fashesh draws attention to the crucial needs of an emerging society. He holds that the needs are related to women's issues and those of organisation, management and communication were ignored in the frenzy of acquiring diplomas for jobs.

In their report for a proposed direction for Palestinian higher education the special task force suggested that in order to improve standards enrolments at Palestinian universities be frozen. Nearly 80% of students who passed the *Tawjihi* during the 1998/1999 academic year were admitted to universities. This amounted to a 20% increase in university enrolment. In actual figures the total university enrolment for the same year was set at 59 000. The authors held that the rapid increase in enrolments resulted in a detrimental affect in the quality of education provided, and an increase in the unemployment rate of graduates (especially in the humanities). The qualifications of the graduates were irrelevant to the needs of the Palestinian community, and hence the task force recommended that further enrolment of institutions of higher education be frozen until greater clarity was obtained on issues of relevance (MOHE 1999:11-13; PNA 1999:16; Abu-Ali 1999).

(c) Community Education

☐ Introduction

During the *Intifada* the Israeli government placed stringent restrictions on educational provision in the occupied territories. Reference has already been made to the prolonged closure of schools and universities. Home schooling was declared to be illegal. The motive was to punish the Palestinian population. The *Intifada* sparked off a determination to resist Israeli occupation and rebuild Palestinian institutions along Palestinian national lines. Emerging from the uprising was a movement variously known as "*Intifada* Education", "Popular Education" or "Community Education". This movement

aimed to introduce relevance into a system that was archaic and irrelevant to the needs and aspirations of the people. This section will use the term “community education” to describe the neighbourhood endeavours at ensuring relevance in Palestinian educational provision. Community Education is described here as a trend, and not a critical issue, because the aim was to bring about change, the spirit of the movement lives on, it is not viewed as a crisis, rather a challenge for the people.

❑ The critical need for relevance in education

Fashesh (1990:28-32) describes the impact of the realities of the *Intifada* on Palestinian educational provision and the resultant trend towards community-based initiatives. Two issues emerged that were upheld as critical to any form of community-based education:

- the denial of the right to education as a result of school closures;
- the school as a site of violence.

The challenges posed by these two events made it necessary to construct learning programmes that would address the problems of basic needs in the community. During the *Intifada* neighbourhood committees were established. The functions of these committees included the provision of basic needs of food and health. Neighbourhood committees organised home schooling programmes during the closures. Gardening and home schooling however, were to be declared illegal by Israeli military order, 18 August 1988 (Fashesh 1990:31). The need for a community-based relevant education could not be quenched, despite military intervention. Inspired by the writings of educationalists like Freire community education ideals lived on in the work of the neighbourhood committees (cf Freire 1972:60-95).

According to Fashesh (1990:32) there was a need for an “education that will not impose obsolete, ready, fixed, or irrelevant mental maps of reality on people, but that will help clarify and develop maps that reflect, as accurately as possible, the world around them and that can help them transform their conditions”. The five roles for education in community transformation were

identified as those roles that were informed by the needs of the community; educational programmes that taught more than mere content; the relevance of education to the building of human resources; networking among communities; and the question of the relevance of people-empowerment strategies (Fashesh 1990:19; 32-35; Fashesh 1995:69-74; Mahshi & Bush 1989:474-479).

❑ Conclusion

It is concluded that the impact of community-based educational provision strengthens the link between school and community. This is reflected in the composition of school governing bodies, the role of community colleges, and the articulation between business, industry and educational providers at senior secondary and college level.

(d) Community Colleges

- Introduction

The word “community” implies a society of people with common rights and interests, living in a common home, with common possessions, and sharing common enjoyment and fellowship (Cassell Pocket English Dictionary 1995:162). Two thoughts emerge from the definition, viz “society” and “common”. It is suggested here that the Palestinian Community Colleges developed from the theory of Community Education. Community Colleges exist in other national contexts as well. It does however, seem appropriate to discuss the Palestinian Community College as a trend in educational provision in the PNA in this context given some of the unique parallels that exist between the two concepts, viz *community* education and *community* college.

- The Palestinian Community College

The “Community College” in Palestine is distinct from the “Vocational / Technical Colleges” and the “Vocational Training Centres” in respect of management and administration. It has already been pointed out that the

provision of VTET in Palestine is fragmented. Technical, Academic General Community Colleges and Training Centres exist, administered jointly by the Ministry of Higher Education, Ministry of Education, Ministry of Labour, Ministry of Welfare and Social Affairs, UNRWA, and a range of NGOs, religious and charitable organisations (PNA 2000: 7). By and large, the management of the Community Colleges appear to be the responsibility of the Ministry of Higher Education (MOE *et al* 2000: 7). These colleges remain responsive to the needs of their respective communities. They do not provide only for the technical and industrial sectors of the community, i.e. the learning programmes are designed to prepare for occupations in the intermediate (or mid)-level labour force. These colleges therefore serve as a link between intermediate and high-level qualifications. Further study at a university is also possible on successful completion of the Community College comprehensive examinations.

The Jordanian learning programmes are currently used in the Community Colleges, however, the ten major learning areas include the traditionally “technical and vocational” programmes as well as general learning programmes. Hence academic studies in education, the arts, and social work exist alongside the engineering, medical, finance, and computer specialisation learning programmes. The distinction between work-orientated relevance of “general education” and “vocational education” becomes less evident in the Palestinian Community College.

- Relevance in modularisation

The proposed VTET system for Palestine is modular in structure. Relevance in modularisation is perceived to be of value in the context of a low-income economy as a modular system is flexible and can be adapted to rapid changes in the national economy and labour force (PNA 2000:9-10). The module is defined as a “learning unit offering employable skills” (MOE *et al* 2000:13). A variety of advantages were perceived, all of which impact positively on educational relevance for the community (PNA 2000:9 – 10; MOE *et al* 2000:13-14).

- Conclusion

Relevance in the low-income economic context of Palestine was perceived in the development of community colleges. These institutions were found to be particularly suited to the needs of specific communities. Furthermore, the modular system was perceived to hold much potential for low-income economies and the emerging markets because of the flexibility of a modular system. The modular system allows for units of learning to match the demand of a specific community. Hence community colleges can remain relevant to the needs of their respective communities.

4.3.8.3 Future developments

(a) Introduction

The thrust of the PNA is the reform of an irrelevant system of education. The entire process since the 1994 take-over of education has been reform-orientated, the heading “future developments” is thus more appropriate. As all issues discussed have been issues of reform and reconstruction this section will therefore be more of a summary of salient issues in the provision of relevant education in the Palestinian Authority.

(b) The implementation of the First Palestinian Curriculum

It would be naïve to presume that the problems of relevance in the development of a national curriculum would be solved in a single decade (or even longer). The design of a curriculum that meets the basic needs of a nation is dependent on numerous factors. The provision of functional school buildings, financing and quality management of education, production and delivery of textbooks, materials, equipment are all issues that impact on the curriculum and its relevance at the point of implementation. The establishment of the Palestinian Curriculum Development Centre is therefore a valuable national acquisition as the development of the Palestinian Curriculum will be an on-going process and future developments can be co-ordinated in a Centre. International role-players, local researchers, and other

essential participants will have to co-ordinate their contributions. A co-ordinated emphasis will ultimately enhance the relevance of the Palestinian Curriculum (Mahshi 1999:8).

(c) The problem of fragmentation

The historical overview for the Palestinian-Israeli region provided the background to the fragmented system of the present time. Apart from the Jordanian and Egyptian educational systems still operative in Palestine, UNRWA schools provide educational services as do a number of private providers (PNA1999:1). Fragmentation of educational provision is not only as a result of historical factors. The Ministry of Education and Higher Education was established in August 1994, post-secondary education became the responsibility of a newly established Ministry of Higher Education in 1996, the Ministry of Education confining itself to school-based education (Sanyal 1999:1). This decision created further fragmentation in an already seriously fragmented system. Both Ministries had their own plans for Palestinian development, subscribing to the common goal of achieving a unified Palestinian education system. The two Ministries enlisted the services of an independent mission from the UNESCO based International Institute for Educational Planning (IIEP). The terms of reference of the IIEP mission included the linkage between the two Ministries in respect of their visions and missions for the future. This applied particularly to the issue of teacher training and the training of administrators (Sanyal 1999:2). In his concluding remarks the author of the IIEP-report stated that linkages between the two Ministries were not merely an issue of teacher and administrator training but an essential issue that affected the entire system of education in Palestine. He recommended immediate steps to "secure constant close association between the actors of the two Ministries" (Sanyal 1999:21). In their response the MOHE task team affirmed the IIEP recommendations to co-ordinate efforts with the MOE, it recommended that a mechanism be instituted to co-ordinate plans, projects, and needs assessments between the two Ministries, as well as other related ministries, e.g. the Ministry of Labour (MOHE 1999:10).

(d) The need for research

The problems of the low-income economies in respect of educational provision are pressing and require stringency in respect of limited financial resources. Research in the field of educational provision is frequently at the bottom of the list of priorities. Activating serious and guided research will enhance relevance in educational provision. This critical need was acknowledged in the MOHE (1999:15), by recommending the establishment of a National Academic Research Council and that accredited national research institutes be set up to carry out specialised research in specific fields. These institutes, according to the recommendation ought to be partially funded by governmental sources and partially by the private sector. On-going, and goal-directed research will aid the process of development in educational provision in low-income economies where basic needs are most acute.

(e) Conclusion

The conclusion reached is that future developments in the PNA are integrally linked to the resolution of the problems of fragmentation, co-ordination of stake-holders in curriculum development and the critical importance of on-going goal-directed research. The problems of fragmentation may not be resolved in the low-income economies the immediate future, hence the conclusion of the institute of research in PNA as a factor of relevance.

4.3.9. Conclusions to the Palestinian Country Data

4.3.9.1 Introduction

Factors of relevance for the Palestinian-Israeli system will be concluded in historico-legal data, socio-economic, structure of education data, and in the material that emerged from the trends, reforms and critical issues of provision of education in the two systems of education. Barriers to relevance will also be indicated.

4.3.9.2 Historico-Legal Factors

Historico-legal factors were identified in the Palestinian-Israeli country data in respect of the influence of the common ancient historical origins of the Jewish and the Arab nations that influenced modern Zionism and Arab Nationalism. The relative nature of relevance was concluded in the Palestinian- Israeli data. The legacy of common historical, religious and cultural origins resulted in two systems of education developing in the Palestinian-Israeli region. One relevant and the other irrelevant to the needs of their respective peoples (para 4.3.2.1; 4.3.2.2 & 4.3.2.3). The historico-legal data concluded that a highly relevant Israeli system of education was created in the region. A fragmented and almost non-existent system education developed for the Palestinians (para 4.3.2.5).

A series of international summits of political leaders were convened between 1993 and 1995. Factors of relevance were concluded in these summits. These international consultations produced the legal framework for the future Palestinian state. The creation of the new Palestinian Ministry of Education resulted from the political settlements brokered by the international community. The relevance of international Palestinian-Israeli peace initiatives is to be concluded in the establishment of a unique Palestinian Ministry of Education. Factors of relevance emerged during the first five years as the new Ministry addressed the historical legacy of fragmentation. The Ministry of Education had to adopt emergency measures in order to deal with the appalling conditions in the provision of educational basics. Relevance in the Palestinian region was nevertheless concluded in the attempts of the Ministry to meet the needs of the people at the social and the personal levels (para 4.3.2.5 & 4.3.2.6).

4.3.9.3 Socio-Economic Factors

The Palestinian country data indicated that the Palestinian Authority is almost completely surrounded by Israel (para 4.3.3.2 (a)). This presents the emerging state with a major economic challenge. Palestinian citizens do not all live within the borders of the Palestinian Authority (para 4.3.3.2 (b)). This presents

the fledgling Ministry with particular challenges in respect of educational relevance. The refugee status of some Palestinians continues, while Palestinians living in the occupied territories add to the problem of educational fragmentation (para 4.3.3.2 (b)). The economy of the region is dominated by the very strong Israeli economy (para 4.3.3.3 (b) (c) & (d); para 4.3.3.4 (b) & 4.3.3.4 (c)).

The Palestinian economy is still very dependent on agriculture. High unemployment and under-employment statistics for the Palestinian Authority presents the state with particular challenges. The example of the frequent closure of the borders with Israel further illustrated the problem of the dependence factor. In general the dependence of the Palestinian economy on the Israeli economy emerged as a major barrier to relevance in educational provision in Palestine. From the socio-economic data provided it is almost possible to conclude that an independent Palestinian economy does not exist. The provision of educational relevance (general and vocational) in an economy where economic growth does not take place is not possible. It was concluded that factors of relevance are do not accrue easily. Relevance in educational provision is inhibited at all levels.

4.3.9.4. Structure of Education

The evaluation of relevance in the Palestinian structure of education took into account the fact that the Palestinian Ministry of Education had existed for merely five years at the time of writing (para 4.3.7.1). The re-conceptualisation of educational provision in the Palestinian Authority was based on the principles of Islam (para 4.3.7.2). Factors of relevance were perceived in a single department of state. An anomaly exists in Palestinian educational provision in respect of the existence of two Ministries of Education (para 4.3.7.3), and three state departments to supervise the provision of VTET in the Palestinian Authority (para 4.3.7.8 (a)).

The provision of educational basics was concluded to be one of the most critical tasks of the new Ministry of Education. Problems associated with, inter alia, provision of text-books, buildings and classrooms, etc was to provide relevance in learning. It was concluded that relevance will be severely

inhibited if the situation of emergency was not dealt with in a decisive and constructive manner (para 4.3.7.10 & 4.4.8.1(a)).

The Israeli government had neglected the pre-school phase. At the time of writing the Palestinian Ministry was providing no formal pre-primary education (para 4.3.7.4). The provision of a basic education was emphasised in the Palestinian country data. The relevance of the final two years of schooling became an issue during the Grade 10 year. A fairly limited choice of subjects was available for learners to choose from (para 4.3.7.5; 4.3.7.6 & 4.3.7.7). Relevance in the provision of education in Palestine was concluded in respect of the provision of qualitative education at the levels of basic and post-basic education.

The Palestinian country data demonstrated that unchecked higher education enrolments were not relevant to the needs of the Palestinian people (para 4.3.7.9).

Only traditional orientations were available in Palestinian VTET, e.g. industrial, agricultural and commercial. The community colleges offered a wider variety of subjects, including electives from academic orientations. The training centres aimed to prepare semi-skilled workers for the Palestinian labour market (para 4.3.7.8). It was concluded that the principles of supply and demand applied to relevance in educational qualifications.

Factors of relevance were concluded in the establishment of a single Ministry of Education for the Palestinian Authority. The Jordanian, Egyptian and the UNRWA educational programmes continue to be implemented in some Palestinian educational institutions. The Palestinian authorities were nevertheless aware that genuine relevance for all the people would only accrue once the harmonisation of all educational learning programmes has taken place (para 4.3.7.10; cf 4.4.8.3 (c)).

4.3.9.5 Trends, Reforms and Critical Issues as Factors of Relevance

(a) Introduction

Criteria identified above as factors of relevance may be repeated in this paragraph as they impinge on the evaluation of trends, reforms and critical issues.

(b) Critical Issues

The critical issues that emerged from the Palestinian country data tended to present a bleak picture for relevance in educational provision in the Palestinian territories. The problems of the provision of educational basics had to be addressed during 1994 (para 4.4.8.1 (a)). The comprehensive plan adopted by the Palestinian authorities together with UNESCO included the development of the Palestinian Curriculum Centre. This development must be perceived as a factor of high relevance in the midst of insurmountable issues that required attention during the situation of emergency. The development of relevant learning programmes and materials undoubtedly contributed towards enhanced motivation among teachers and learners and enhanced relevance in the classrooms. The conclusion was reached that the problem was not primarily the provision of the structure of education, *per se*, but the processes whereby learning took place.

Provision of relevance in educational provision is not static. The Five-Year Education Development Plan was concluded in this study to be another critical issue. The plan served as a critical bridge in the transition from the emergency to normalcy. Hence the success of the plan was critical for the future development of relevance in Palestine. Critical to the plan were the financial implications of implementation. Human resource development implied quality of personnel. Training and re-training are costly. The strengthening of the relationship between the Palestinian Authority and its international funding community was concluded as yet another critical factor of relevance (para 4.4.8.1 (b) & (c)).

The issue of economics emerged as another factor of critical relevance in the Palestinian country data. For the Palestinian Authority this meant the disentanglement of the Palestinian economy from that of the Israelis. As the political and military tension between the Israelis and Palestinians increased so did the economic crises deepen (para 4.4.8.1 (d)). It must be stressed again that economic problems are not educational problems *per se*, however, the Palestinian country data indicated firstly, that extremely stringent economic situations tended to disrupt general education (e.g. an increase in the drop-out rate from school, and in the out-of-school population). Secondly, the Palestinian data indicated that as the economic crises increased the resultant problems of low-skills and poor educational levels became educational issues. The Palestinian Authority's decision to develop a national strategy for the development of a system of VTET was taken in this context (para 4.4.8.1(d)).

VTET in Palestine was concluded as a critical issue in respect of the problematic nature of the Palestinian economy. The system was designed to provide the Palestinian region with a skilled labour force. Relevance in the vocational curriculum was expected to address the problems of the Palestinian economy. The Palestinian economy was still dependent on the Israeli economy, and in essence it was still very much an agriculturally orientated economy. Relevance in the vocational curriculum implied reciprocity with the economy, hence, relevance was concluded in a demand driven system of VTET for Palestine. The vocational curriculum cannot solve the problems of a weak economy (para 4.4.8.1 (e)). International aid became a relevant factor in this respect. Access to markets, job creation, the stimulation of business and industries are not educational problems *per se*. Relevance in the vocational curriculum implied responsiveness to the needs of a national economy. A critical factor of relevance in the provision of vocational education in the context of a low-income economy is the growth in the economy. The reliance on international aid becomes critical for the promotion of educational relevance in the general as well as the vocational educational sectors (para 4.4.8.1 (f)).

(c) Trends

The trends in the Palestinian country data included a phenomenon that was described as the “diploma disease”. This trend assumes that the chances of acquiring a job are increased by the acquisition of diplomas and degrees. The needs of Palestinian society were indicated to be contrary to the popular demand for diplomas and degrees. The trend towards higher education qualifications prompted an investigation by the Palestinian Ministry of Education into the standards of university qualifications. This investigation revealed poor articulation between the providers of education and the workplace. A similar trend was discerned in the school situation that arose from obsessive preparation of learners for a university education. The investigation concluded that greater relevance ought to accrue to Palestinian society *vis-à-vis* the strengthening of ties between schools and the community. The trend was discerned as contributing towards youth unemployment, while factors of relevance were perceived in learning programmes that were based on the needs of local and regional development (para 4.4.8.2 (b)).

A further trend in developing a system of relevance for the Palestinian people emerged from the data in respect of the value of the community. The trend is associated with the Palestinian struggle for a homeland, the principles of Community Education were perceived to have relevance in non-conflictual situations as well. The trend emerged as a result of the educational emergency during the *Intifada*. The five roles for community transformation were conceptualised in a people-centred education that took into account the fact that the needs of communities may vary quite considerably from one part of a country to the next. The specific needs of communities are addressed *vis-à-vis* community-based educational programmes (para 4.4.8.2 (c)). The relevance of a community-based approach is extended to the value attributed to the role of the community colleges. Learning programmes remain relevant as long as the colleges interact with local business and industry. High relevance for the needs of the low-income economies was perceived in modularisation of learning programmes. Flexibility and rapid adaptation to the changes in the economy and the labour force required a system that could change rapidly to meet specific needs (para 4.4.8.2 (e)).

(d) Future developments

Relevance is a relative concept. The provision of relevance in future developments assumed that a system of education did not remain static. Policy makers and practitioners address problems in the education and the economy in order to create pathways for relevant learning. The First Palestinian Curriculum was one such initiative, while the problem of fragmentation was addressed in enlisting the services of an independent UNESCO-based mission. The future of relevance in Palestinian education was identified in the steps taken to ensure that the Ministries involved in educational provision were in close and constant contact with each other (para 4.4.8.3 (b)(c)). The PNA has implemented on-going research initiatives that will contribute empirical and goal-directed data to aid the process of generating relevant qualifications. The development of relevant qualifications and human resources in a low-income economy requires specialised expertise. The Palestinian country data thus perceived high relevance in the value of on-going research, at national and regional level. Relevance in educational provision will accrue, basic human needs will be met, and the improvement of the quality of life for all ought to be enhanced (para 4.4.8.3 (d)).

4.4 LOW-MIDDLE-INCOME COUNTRY DATA IN COMPARATIVE PERSPECTIVE

4.4.1 Historico-Legal Factors

The significance of historical factors in influencing relevance in educational provision in a region was concluded in the historico-legal data. The data also indicated the close link between history and ideology, religious or cultural factors in the determination of relevance in the provision of education. The Soviet, Israeli and the Palestinian systems yielded relevant data in this respect. Barriers to relevance were indicted in the long-term irrelevance of systems of education driven by ideological aims. It was also concluded that relevance might not accrue in the immediate aftermath of ideological hegemony. Relative relevance was concluded in the Palestinian-Israeli data.

Problems of anomaly in economic growth and educational provision occurred in a region under the influence of a dominant ideology. The destabilisation of a region was concluded as being detrimental to educational relevance in such regions.

The principles of democracy, its influences on the markets and the interaction between education and society were concluded to be factors of relevance that were able to determine the responsiveness in education. The Palestinian country data further concluded the relevance of international agreements and influences in educational provision.

4.4.2 Socio-Economic Factors

The data from the three low-middle income economies indicated the influence of demographic factors in determining relevance in educational provision. This was concluded in the Russian and Palestinian country data. Providing education for a vast population created unique problems. It was concluded that this had direct implications for the relevance of educational provision and the administrative structure of a system. The Palestinian demographic data indicated the socio-economic problems associated with population location, and geographic encirclement of the two Palestinian regions.

Palestinian human development factors indicated poor provision of basic human needs. There was much evidence of poverty in the Palestinian Authority. This region remained dependent on the markets, jobs, and training institutions of Israel. The Palestinian data concluded that socio-economic problems must be solved first. Politicians and economists must provide the political and economic environment for a relevant system of education to develop.

The low-income economic data concluded that there are limitations to the amount of societal change that can be brokered by an educational system. The Russian data indicated that education was not able to stimulate economic growth *per se*, and inadequate funding emerged as a barrier to relevant

education. Declining standards in education will ultimately erode a system of relevance.

The growth of the Israeli economy made it possible for the vocational programmes to respond to the demands of the economy. This was concluded from the Israeli transition to a high-income economy. Economic growth in low-middle income economies is generally slow. Role-players in economic recovery include the state, and the private sector, international agencies and organisations. The socio-economic data concluded that growth in the Palestinian economy was a critical factor and pre-condition to relevance in educational provision. Economic development in a region was not concluded to be a direct problem of education.

4.4.3 Structure of Education as Factors

The structure of education data for the low-middle-income economies concluded that high relevance was perceived in the provision of general education in all national systems of education. The data indicated that the structures *per se* were not problematic. Problems were in the processes whereby teaching and learning was administered. The fragmentation of the Palestinian structure was however problematic and concluded to be a barrier to educational provision in the territories. Unity in provision had to be accomplished first before relevance was able to accrue.

The authoritarian style of Soviet education emerged as a barrier to relevance. Relevance in technology emerged as a critical factor that enhanced educational relevance. This emerged from the high standards required by the global markets. Computers, science, mathematics, information technology featured prominently in the programmes initiated by the Israeli state as well as private providers in the system. The benefits of co-operation between the public and private providers of education emerged as a factor of relevance in basic education. This became evident in the process of analysing the Israeli data.

The Israeli system tended to provide programmes for marginalised and disadvantaged groups. A safety net was in place to ensure that early drop-outs from school were not permitted to enter the work-place without a period of apprenticeship or some form of training. No such system appeared to be in place in Russia, or in Palestine. Furthermore, the study made reference to the problems experienced by schools in the rural areas. This was particularly prevalent in the Russian data. The Palestinian data indicated problems in schools generally, particularly as a result of the conflict situation that existed between Israel and Palestine. The Israeli data did not indicate disadvantage in the rural areas *per se* primarily as a result of the *kibbutz*-system, but also as result of the fact that the system of education was considerably smaller than the Russian system.

4.4.4 Trends, Critical Issues, and Reforms or Future Developments as Factors of Relevance

4.4.4.1 Trends

Various trends were concluded in the low-income economies. The return to a market economy emerged as a significant trend in the Russian country data. The emergence of private schools compensated for the decline in standards in the state schools, however, these schools were unaffordable for the average citizen. A system of inequity developed in post-communist Russian society. The polytechnical system of vocational education came in for particular criticism. The problem of over-supply of graduates with irrelevant skills emerged as a trend in post-communist Russian society. Furthermore, the imbalance between graduates from higher education and the mid-level skills of the tertiary sector were concluded as being problematic.

Poor articulation between the providers of education and the work-place emerged as a problematic trend in the Palestinian country data. The strengthening of ties between the school and the local community was concluded as a relevant trend in Palestinian society. These links were relevant in respect of addressing the problems of youth unemployment.

The Palestinian country data further stressed the value of community-based education. The people-centred approach took cognisance of the needs of specific communities, the concept being extended to community colleges and the trend towards modularisation. This approach towards educational provision was seen as a trend that contained high relevance for the learning community. The flexibility of modules was seen as being able to adapt to the changes of the labour market more rapidly than rigid learning programmes. There were indications in all three systems of the problems associated with relevance of provision in respect of inadequate funding. It emerged from the Russian and the Palestinian data that the problems of financing education tended to erode relevance in educational provision at all levels. The rejection of state funded education on the grounds of irrelevance was therefore a factor in the Russian youth's attitude towards education immediately after the collapse of Soviet education.

Factors of relevance in the trends in the Israeli data were concluded in three areas of provision. These factors included the relevance of *kibbutz* education for Israeli society. The issue of attitudinal development towards work, particularly blue-collar work, emerged as a factor of high relevance. Related to the value of *kibbutz* education was the Israeli emphasis on science, technology and skills development.

The practical environment of the *kibbutz* was concluded as a relevant trend in Israeli society. The third Israeli trend of early vocational selection was cited as a unique Israeli model of perceiving relevance in a "second best option". In adopting a "second best" model the Israelis had in effect decried the validity of contemporary educational research in the field of vocational education. They applied the secondary school model because it worked in their socio-economic context.

4.4.4.2 Critical Issues

Post-Soviet Russian society demanded a clean break from the legacy of Communism before factors of relevance could emerge. Sub-factors such as illiteracy, poverty, high rates of youth unemployment and the lack of funding

were concluded as critical issues that required urgent attention. The Palestinian data presented the study with similar conclusions. The provision of educational basics had to be addressed with urgency before relevance could be expected to accrue in the Palestinian economy. Normalcy in the provision of educational basics was concluded as a critical priority in the Palestinian country data. The provision of administrative structures for educational provision was not viewed as being an insurmountable problem. The provision of relevant learning programmes was regarded as critical to the processes of achieving relevance in Palestinian society. All three low-income economies examined had to procure international aid to assist in the process of developing relevance in their respective economies. This factor applied to economic development as well, with direct implications for educational provision.

A single factor of relevance that emerged from all three low-income economies was that a clear distinction had to be made between educational and economic problems. The economic problems of a country could not be solved by the educational sector alone. The Soviet-Russian study illustrated this point very clearly. The Palestinian provision of VTET was thus viewed as being potentially problematic. The Israeli data concluded that the Israeli adoption of the so-called “second best option” in the provision of vocational education at the secondary school might have been successful in the Israeli national context. However, this data had to be critically analysed in the context of Israeli economic growth and the transition made to a high-income economy. The crisis of national survival and the heavy demands placed on the national budget by a “second best “ option raised critical questions about the long-term value of the implementation of social policies *vis-à-vis* educational institutions. The fact that Israeli authorities have indicated a preference for a “developing” nation classification further corroborates the questionable relevance of this “second best option”.

4.4.4.3 Reforms and Future Developments

The Soviet-Russian country data indicated that relevance in educational provision was subject to the successful reform of the social and economic

structure of the state. The principles of democracy had to be entrenched in Russian society before social and personal relevance could develop. The Palestinian-Israeli country data indicated similar factors of high relevance in the settlement of military and political tensions that exist between the two countries. Educational relevance may elude the Palestinian economy, while relevance in educational provision may ultimately be eroded in the Israeli context if the political tensions in the region are not settled. Socio-economic, political and military factors have to be resolved before the educational policy-makers and practitioners can successfully implement their plans.

Co-operation between various ministries of state emerged as a factor of relevance in the Palestinian Authority. Inter-ministerial dialogue would cancel the problems of fragmentation of provision. Goal-orientated research initiatives in the emerging Palestinian state emerged as another factor in the emergence of an integrated approach to relevance. These factors were perceived to be part of the economic process of developing relevant qualifications for a low-income economy.

Reforms and anticipated future developments in a society ultimately influence the provision of education. Conversely, reform or developments in the quality of primary and secondary education in Israel ensured reciprocal quality of the national human resources base. Articulation between the socio-economic and educational sectors remains an integral part of the provision of relevance in a society. Relevance is not static, and on-going initiatives in the provision of qualitative basic education emerged as a factor of high relevance in the Israeli country data.

Chapter 4 examined the problems of relevance in three low-mid-income economies, the following chapter will investigate the problems of relevance in Kwa-Zulu Natal. The same analytical format will be applied, as well as the comparative insights from the preceding two chapters.

CHAPTER 5: THE PROBLEM OF RELEVANCE IN THE PROVISION OF EDUCATION IN THE PROVINCE OF KWA-ZULU NATAL

5.1 INTRODUCTION

Chapter 3 addressed the problem of relevance in the provision of education in high-income economies. Chapter 4 addressed the problem of relevance in the provision of education in low-middle-income economies. This chapter will address the second aim of the study:

- to explore the problem of relevance in the provision of education in KwaZulu-Natal (KZN);
- to focus on the trends, critical issues and possible future developments in the provision of education in KZN;
- to examine the responsiveness of the current system of education to the socio-economic needs of the region.

The theoretical insights gained from Chapter 2 will be further investigated and integrated into this chapter. The conclusions to the second chapter will however, be examined in detail in the concluding paragraphs on future developments of this chapter. The analytical format that emerged in the preceding chapters will be applied to this chapter as well. The historico-legal, socio-economic and structure of education *formata* will facilitate the emergent factual data. The critical analyses will on the other hand be facilitated by the format: critical issues, trends and reforms.

This chapter will commence with a historical overview to the present situation of educational provision in the province. The historical overview will be followed by an socio-economic overview of the province. The structure of education in the province will be examined. This section will be followed by a critical analysis of the trends, critical issues, and future developments in the provision of education in KZN. The comparative perspectives of this study will be concluded in this chapter.

5.2 HISTORICO-LEGAL DATA

5.2.1 Introduction

The comparative country data indicated the influence of ideology in the provision of relevant education. The influence of ideology in the provision of education emerged in the Soviet-Russian and Israeli country data. The critical importance of an enabling legal framework was similarly indicated in all the comparative studies. This paragraph will not provide a chronological account of the history of the provision of education in KZN. The examination will be in respect of the ideological influences that shaped the provision of education in South Africa and in KZN. The relevance of the post-1994 system of education in KZN will be analysed in respect of the legislative framework that emerged in the province.

5.2.2 Ideological influences and the provision of education in KZN

5.2.2.1 KZN: a province of contrasts

KZN is situated on the south-eastern seaboard of South Africa. It is the only South African province that supports a traditional monarchy. It has produced political leaders as divergent in ideology as Prime Minister Louis Botha and Chief Albert Luthuli. The province is renowned for *inter alia*, the St Lucia World Heritage Wetlands as well as its sporting accomplishments and many beauty queens. Other contrasts exist in recent and more distant historical events. KZN is a province of bloodshed and conflict. The historical legacy of apartheid and recent violence resulted in stark contrasts between the quality of life in the province.

The tyrannous Shaka's *mfecane* (c1822), the Anglo-Zulu War (1879), and the Anglo-Boer War (1899 – 1902) are KZN conflicts of more than a century ago that influenced the ideological foundations for one of South Africa's most complex provinces. More recently, the sixteen years of conflict (1980 – 1996) resulted in 11 600 violent deaths (South African Institute for Race Relations (SAIRR) 1996:198). The origins of the undeclared war of 1980 – 1996 are

discerned in the politics of the century. The savagery and thirst for revenge that characterised this unofficial war is still unparalleled in South African history. The violence, in the words of Chris Hani reduced the rural areas of the province to “a wasteland, where people move around like dead souls” (cf Jeffery 1997:1). The social disruption impacted on the lives of the people of KZN for more than a decade and seriously affected the educability of thousands of learners. Cassidy (1995:120) described South Africa of the early 1990s as the most violent society on earth. The murder rate in Natal (KZN) was more than double the rate in the next most violent province of South Africa.

The extent of the violence was noted by Jeffery (1997:1):

“Violence increased in KZN from the early 1980s, though its roots lie further back in time. It attained a new intensity in the townships surrounding Durban in 1985 and in the Midlands region, around Pietermaritzburg from 1987. In the 1990s, it spread to other areas – along the south coast and its hinterland, to the north of the Tugela River and into the heartland of what was then the KwaZulu homeland”.

The same author noted the number of people affected by the violence (Jeffery 1997:2):

“The number of people displaced by the violence is equally hard to quantify. When violence intensified in October 1987 in the Midlands area, it was reported that ‘hundreds’ of people had left their homes. In 1988 it was estimated that 60 000 had fled from political violence (while almost half a million had been displaced by floods). A conservative estimate – based on the number of houses known to have been destroyed between 1987 and 1989 – indicates that at least 10 500 people must have been displaced from their homes during this period alone. A more recent estimate is that

between 200 000 and 500 000 refugees fled political conflict in KwaZulu/Natal in the period from 1984 to 1994”.

The influence of the Zulu monarchy in the affairs of the region cannot be under-estimated. The roots of Zulu - traditionalism are deep (Waldmeir 1997:170 – 173). The cause of the conflict is generally attributed to the struggle for power between the ANC and the IFP (Jeffery 1997:3):

“It is common wisdom that the violence in KwaZulu/Natal is rooted in conflict between the ANC and the IFP. It is also common wisdom that the two organisations have for many years been locked in a struggle for power which intensified in February 1990, with the lifting of bans on the ANC (and other organisations) and the beginning of negotiations for a non-racial constitution” (cf Cassidy 1995:21-22; 141-142; Waldmeir 1997:278-279).

The conflict resulted in the displacement of families in the rural areas and in a steady flow of people into the urban areas. Learners with very little education were admitted to urban schools (personal interview for M.Ed. dissertation, Heather Wilson, principal, Carrington Heights Junior Primary, 15 August 1995), creating abnormal learning situations in schools. Education indicators at the time pointed to the fact that only one out of every 100 000 Blacks entering school eventually acquired a university entrance pass (Cassidy 1995:24).

5.2.2.2 Relevance in education and ideological influences

Ideological influences have dominated the provision of education in South Africa from almost the very beginning of our existence on this sub-continent. Behr (1988:219) states:

“The history and of the origins and trends of education in South Africa as portrayed in this book points irresistibly to the fact that education has served a political purpose from its very beginning, with opposing points of view in constant conflict”.

The Concise Oxford Dictionary (1964:601) defines ideology as the science of ideas, a manner of thinking which is characteristic of a class or of individuals. The same dictionary adds that ideology includes the ideas that are the basis of economic and political systems. Ideology has played a critical role in South African society. Relevance in the provision of education in South Africa has historically been based on the ideology of the dominant political system of the time, usually that of the political party in power.

The paragraphs that follow will firstly, examine the philosophy of Christian National Education and its interpretation of educational relevance. Secondly, the Christian ideology of the resistance in South Africa will be examined. Finally these paragraphs will demonstrate that as the resistance gained momentum the Christian focus of educational provision in South Africa was challenged by other ideologies, emanating from developments taking place in the international arena.

5.2.3 The problems of relevance in the provision of education and the ideology of Christian National Education (CNE)

5.2.3.1 Origins

The CNE movement dominated the provision of education for White South Africans from about the time of the governorship of Lord Charles Somerset (1814 – 1826) in the Cape Colony. The movement had its ideological roots in Calvinism, as interpreted by, inter alia, the Dutch theologian Abraham Kuyper (c1900). CNE was developed during the 20th century by Afrikaner ideologues into the political philosophy of Afrikaner Nationalism (Behr & Macmillan 1971:66-67; De Villiers 1975, in Wilson & Thompson (eds) 1975:365; Behr 1988:97-99; Christie 1991:174). The Dutch Reformed Minister S.J. du Toit established the first Christian National Education (CNE) schools in the Cape in 1822 as a reaction to Somerset's policies of anglicization. His movement spread to the two Boer Republics in the north, and as the first Superintendent of Education in the Transvaal Republic du Toit made religion the central focus of education. Relevance in educational provision was in the fusion of religion and culture. Du Toit thus sowed the seeds for the ideological base of

Afrikaner nationalism. The CNE ideals developed further after the amalgamation of the CNE schools with the state schools during the early years of the 20th century (Thompson 1975, in Wilson & Thompson (eds) 1975:301-304).

This quasi-religious movement that resembled Zionism received further ideological stimulation from the writings of Kuyper and his neo-Calvinist colleagues at the turn of the century. De Gruchy (1984:105) holds that Kuyper was one of the main influences responsible for the development of the Reformist base of the apartheid state. Kuyper's theology was linked to the German Lutheran view of sovereignty and state, as misused during the Third Reich. The mentorship of the Dutch theologian Groen van Prinsterer and the writings of the German F.J. Stahl influenced Kuyper. These theologians espoused the Calvinist view of the sovereignty of church and state. De Gruchy (1984:110) says that the influential van Prinsterer fought for "an idea of the state along *"historical-national* lines ...he was the first person to use the phrase *souvereiniteit in eigen sfee* ...with regard to the mutual relation of church and state". The idea of each state having its own national calling in respect of its history and culture suited the Dutch and German nations. It also influenced the emerging Afrikaner nation. In South Africa, the primary interpreter of the Kuyper-theological tradition was the philosopher H.G. Stoker, followed by Nationalist ideologues such as Diederichs, Malan, Treurnicht, Verwoerd, etc. (Luthuli 1962:132; De Gruchy 1984:110; Behr 1988:35-36). Afrikaner nationalism grew during the 1930s and the 1940s. In essence there was a very close identity between the Afrikaner nationalist movement and CNE. J.C. Coetzee of Potchestroom University defined this identity more precisely in a document in 1930, which resulted in the establishment of the Institute of Christian National Education in 1939. The principles of CNE had been defined by 1948. Education in South Africa would have a broad Christian and national character. "Christian" was defined as that which was "based on Holy Scriptures and expressed in the Articles of Faith of our three Afrikaans Churches" (Behr & Macmillan 1971:67) and national was defined as love for one's own culture and heritage (Behr 1988:98). "Christian" and "national" were inseparable, and the school was the heart of national life. CNE, as Christie (1991:171) reminds us, was a system of education for the

white population of South Africa and as such, during the pre-1994 era the White education system was part of apartheid education. CNE thus influenced educational provision for the entire population.

In a policy document formulated shortly after the 1948 general elections the CNE approach to Black education was described as follows in Article 15: "... we believe that the teaching and education of the native must be grounded in the life and world view of the whites, most especially those of the Boer nation as the senior white trustee of the native, and that the native must be led to a *mutatis mutandis* yet independent acceptance of the Christian and National principles in our teaching" (cf Rose & Tunmer (eds)1995:127 & 128).

In his reaction to the "senior trustee" – statement in the 1948 CNE document cited above Hartshorne (1992:196) states that it was this arrogance of the South African White people that was to poison South African society for nearly forty years. The deep sadness of the CNE-ideology is that it was supposedly based on the Word of God, and on the teachings of the great reformer John Calvin.

5.2.3.2 Apartheid Education

The Nationalist Government's answer to the problems of educational provision for the Black population was Bantu Education. The Bantu Education Act of 1953 required that all schools for Blacks be registered with the government. For the Coloured people the 1963 Coloured Person's Education Act placed schooling for Coloured children under the control of the Department of Coloured Affairs. In 1965 the Indian Education Act placed the education for Indian children under the control of the Department of Indian Education. Indian and Coloured Education were transferred to their "own affairs" departments in terms of the 1984 National Policy for General Education Affairs Act, while Black Education remained under the control of the central government, albeit under the new Department of Education and Training (Behr & MacMillan 1971:396-401; Christie 1991:55-58).

In KZN the pre-1948 era demonstrated a strong British influence on educational provision, with many teachers emigrating from England to establish schools in the region (Christie 1991:41; Brookes & Webb 1987:164). However, during the post-1948 era the influence of CNE and apartheid education determined that the policies of segregation and separate development applied in all schools of the province. Education became part of the broader patterns of social inequality, organised along the lines of class and colour (Christie 1991:43; Hartshorne 1992:33-34). A distinct impression arose that Bantu Education was inferior; that "schools should teach Africans to do lower-level manual work" (Christie 1991:42); that White South Africans decreed that Black South Africans "had been cast for the role of hewers of wood and drawers of water, their education must equip them to hew wood and draw water" (Luthuli 1962:33); and "if the natives are to be taught at all, they should be taught industry, I do not see much use in teaching the natives to read and write without you teaching them to make use of their hands as well, you do not create a serviceable being to his tribe or to the country at large" (Rose & Tunmer (eds) 1975:213, citing Theal, G. M. 1881 (Natal Native Commission)).

5.2.3.3 Conclusion

The distinct impression arose during the second-half of the twentieth century that the provision of education in KZN (and South Africa) was irrelevant to the needs of the people (cf Mphahlele 1982:1 – 13). Educational provision was rejected on the basis of ideological discrimination. Resistance in education became a fact of life, and the school became the site of the struggle for change (Giroux 1983:81). Resistance to the CNE ideology fuelled the violent struggle, which took place in the Black schools during the 1970s and 1980s (Christie 1991:173-175; 221f). Ironically, the ideology that motivated much of the resistance movement was grounded in Christian teaching. The following paragraphs will demonstrate how the socialist ideology and the non-sectarianism of a South African Bill of Rights eclipsed the Christian foundations of the resistance movements of the early 20th century.

5.2.4 The problems of relevance in educational provision and the ideology of resistance

5.2.4.1 Origins

As was the case in the former Soviet-Union relevance in educational provision was not possible until the ideological barriers of the state had been removed. Ironically, in South Africa, resistance to CNE ideology had Christian roots as well. The Black South African leaders of the late nineteenth and early twentieth centuries were almost all educated in the mission schools (Christie 1991:36). These schools cultivated a life-long Christian outlook in the turn-of-the-century leaders that was easily translated into social and political consciousness. Kuyper (1975, in Wilson & Thompson (eds) 1975:434) states that prior to Union there already existed a stratum of educated Christian Africans who had passed through the Lovedale Missionary Institution who occupied professional positions such as teachers, lawyers, physicians, journalists, and interpreters. The perception arose however, that middle-class status was synonymous with Christianity, education, and a comfortable colonial life-style (and politics) (Illustrated History of South Africa (IHSA) 1992:280). Despite criticisms of mission schooling the fact remains that many of the early Black resistance leaders had been educated in the mission schools, and a significant number of these leaders were also ordained ministers of religion (Christie 1991:69 & 70). The influence of the Christian gospel was thus applied to the political upheavals delete faced the Black South African population at the beginning of the twentieth century. The racist legislation of the united, all-white, South African parliament shattered the hopes of thousands of Cape Africans (IHSA 1992:280). Influential Black leaders such as J.T. Jabavu articulated, and promoted, Black resistance and militancy vigorously. The Christian influence of the mission schools did not develop into a coherent ideology of the same national proportions as CNE, but the Christian gospel did influence political resistance among Black leaders well into the twentieth century. The Nobel Peace Prize winner, Chief Albert Luthuli, president of the ANC 1952-1967, and passionate Methodist lay preacher, probably representing one of the noblest examples of the

combination of political conviction and deep inner faith (Williams & Hackland 1988:139).

5.2.4.2 Developments in the ideology of resistance

(a) The influence of the mission schools to the ideology of resistance

Resistance to the dominant ideology resulted from resistance to the perception of the educational irrelevance of the provision of education by the state. The leaders of the South African resistance movements were primarily the graduates of the mission schools. The missionary enterprise in the provision of education for Black South Africans is not the issue at stake in the evaluation of missionary education, the point at issue is rather how relevant was missionary education to the needs of the Black people (Mphahlele 1981:9). Graduates of missionary schools assumed positions of leadership in society, and challenged the relevance of the status quo, but without a clear vision. A coherent ideological vision was not evident in the resistance to the all-white politics of this era.

The leaders of the Black resistance movement in South Africa were disillusioned after the 1910 “all white” settlement. A national organisation that could articulate their political aspirations had to be formed. Their aim was the formation of a united political front that would defend the rights and privileges of the African population. A further aim was the creation of national unity among the African leaders and people of South Africa. The IHSA (1992:288) states that these leaders were the products of mission school education, committed to peaceful resistance. After months of planning the South African Native National Congress was launched on 8 January 1912, with the Reverend John Dube, a Natal educationalist, as its first president.

The first twenty years following the formation of the SANNC were turbulent years in South Africa. However, the organisation that had been launched as the champion of the masses, with a strong Christian leadership, began to slip into a period of stagnation (Kuyper 1975:437; IHSA 1992:295). Initially opposition to all-white politics came from three sources: the independent

churches; the trade union movement and the Communist Party of South Africa (Jeffery 1997:15). These movements challenged the SANNC's middle-path policy of peaceful resistance (Kuyper 1975:443-446; Williams & Hackland 1988:6). The trends in resistance to White – dominated educational provision was thus established during the early years of the twentieth century.

Violent resistance in education however, as a means towards effecting change in South Africa was promoted by the CPSA (renamed the South African Communist Party in 1950) (Pike 1980:483f ; Naidoo 1990, in Nkomo 1990:124-135; Christie 1991:240f).

(b) The influence of the churches

Resistance to irrelevance in education in the modern era may have been sparked off by the Soweto Riots of 1976, however, these paragraphs will demonstrate that resistance to the "all-white" apartheid education policy existed from the beginning of the century. It is however, very difficult to disentangle resistance to education from resistance to the dominant political ideology of the state. This became even more difficult after 1948. Black resistance to the Union of South Africa Act of 1910 was evident in the rise and spread of Black independent churches.

The struggle of the Black people against apartheid, discrimination and inequalities is a religious one, and according to African Theology it takes its starting point in Africa, not in Europe (Setiloane 1986:31). Africanisation of the gospel became a theme of the Independent Churches, in reaction to the work of the missionaries (Mogoba 1994:6), but with varying degrees of political interpretation in response to racial domination and oppression (Boesak 1977:26-27; Maimela 1990:186-194). An upsurge in political protest based on Christian-based principles took place during the 1970s and 1980s, education was but one of the many issues of protest. The churches and religious groups were loosely united in the South African Council of Churches (SACC). Resistance and protest also came from the individual church denominations (Tutu 1983:38-44; Mogoba 1994:53-64). In an address in Port Elizabeth in October 1991 Mogoba (1992:26-40) called for one Church, one land, one

education, one economy, one continent, one world in the new South Africa. In the post-apartheid era however, a separation between church and state in the political and constitutional arena was enshrined in the Bill of Rights. Individual rights have also been protected (cf Republic of South Africa 1996, Constitution: Chapter 2, 7(1); 15(1)(2)). This separation had a profound influence on relevance in educational provision in the post-1994 democratic dispensation in South Africa and in KZN. The provision of education in the post-apartheid state was *officially* separated from philosophy, ideology and religion.

(c) The influence of the Communist Party

Jeffery (1977:15) states that the CPSA did not initially have a coherent strategy for challenging the government. However, this began to change by 1928. The Communist International (i.e. Comintern) determined the agenda for the CPSA:

- the establishment of an “independent native republic”;
- the attainment of a socialist state.

(IHSA 1992:325; Jeffery 1997:15)

The immediate goal of the CPSA was to strengthen its links with the ANC, and to transform the organisation into a fighting nationalist revolutionary organisation (Jeffery 1997:15; Pike 1985:166-170). Attempts to radicalise the ANC was a source of debate and tension between the two movements (Williams & Hackland 1988:6). The ANC leadership was not ready to adopt a radical approach to resistance, however, when the more conservative Pixley Seme took over the presidency from the radical Josiah Gumede in 1930 the ANC temporarily faded from the political scene (Maylam 1986:157; Kotze & Greyling 1994:48). Despite Seme’s opposition to Communist involvement in Black nationalist movements co-operation between the two movements continued up to 1965, by which time the ANC executive included three Black communist members. After the banning of the Communist Party in 1950 the CPSA dissolved, but continued its work *vis-à-vis* existing legal organisations such as the ANC. It continued to operate as a secret underground

organisation, renamed the South African Communist Party (SACP). By the time of the banning of the SACP the ANC had experienced an unprecedented revival which may be attributed to election victories in 1948 of the Nationalist Party and the new wave of protest which resulted from the ensuing discriminatory legislation (Kotze & Greyling 1994:48).

The unbanning of the SACP in 1990 made it possible for this small party to resume its activities in South Africa. It became possible for Marxist philosophy to legally shape the future of educational provision in South Africa. Claassen (1996:465) holds that given the inequalities in South African society Marxist (or Neo-Marxist) philosophy was readily applicable to education. In KZN, resistance and later reconstruction in education was pursued vigorously by the academic and SACP member Blade Nzimande. Together with other SACP members Nzimande was active in the politically volatile Richmond area. After 1994 he was included in the South African government. He spearheaded the process of transformation for post-apartheid education, and promoted his plan as chairperson of the National Assembly's select committee on education during the first five-year term of the ANC government (Harber & Ludman 1995:126; Jeffery 1997:277-278; 455-456; 502; 875).

(d) The influence of the trade union movements

- Introduction

In South Africa the trade union movement is of relevance to education because of the alliance between COSATU and the ANC / SACP. During the closing years of the twentieth century the SA business community expressed concern about the poor levels of general education of the worker population (cf Standing, Sender & Weeks 1996:118-121). The initiative taken by the business community, with COSATU's support, was to reconceptualise educational provision in South Africa in respect of outcomes (Chisholm 2000:31-32; National Training Board (NTB) 1994:123f).

- Historical background

The trade union movement in South Africa has a long history. The first union were established in the 1840s in the newspaper industry (Kotze & Greyling 1994:268). However, the politicisation of the trade union movement and its assumed task of mobilising the masses became a significant factor in South African society only in 1919 with the founding of the Industrial and Commercial Union (ICU) in Cape Town (Pike 1985:144-153; IHSA 1992:310-311). The ICU was a major black opposition movement at the time of its founding. The movement's membership reached about 200 000 members at its peak in 1928 (Maylam 1986:158; Pike 1985:140). Divisions within the leadership of the ICU, particularly as a result of the growing influence of the communists in the movement, negatively impacted on the ICU's mass appeal. Another divisive influence was the ICU's alliance with Barry Hertzog's Nationalist-Labour pact in the 1924 general elections. The divisions within the ICU leadership persisted, particularly between Clements Kadalie, ICU general secretary and A.W.G. Champion, the head of the Durban branch. The latter seceded from the national ICU movement and formed the secessionist ICU yase Natal (Maylam 1986:157-161; IHSA 1992:322-323; LaGrange 2000:3 - 6). The ICU movement rapidly lost momentum after 1930 primarily because of the problem of internal contradictions, paradoxes and secessions. The Communist Party assumed the organisation of the Black trade union movements after the decline of the ICU (Kuyper 1975:447; Pike 1985:162). Cross and Chisholm (1990, in Nkomo 1990:52) hold however, that despite the decline in Black political resistance during this period the activities of the ICU, ANC and the Communist Party haunted the liberal white South African missionaries and social workers.

The growth of trade unions in South Africa developed along racial lines (La Grange 2000: 7 – 12). Kotze & Greyling (1994:268) state that the rapid growth of the Black labour force in the 1940s led to industrial conflict and a proliferation of trade unions. In 1953 racially mixed trade unions were prohibited, all strikes by Blacks were declared to be illegal, and Black trade unions therefore had no legal recognition. Two Black trade union groups emerged during the 1950s, the Trade Union Council of South Africa (TUCSA)

and the South African Congress of Trade Unions (SACTU). SACTU was more politicised than TUCSA from the outset, and aligned itself with the ANC. When SACTU's activities became too progressive it was banned and had to continue its activities beyond the borders of South Africa.

The Wiehahn Commission (1977) recommended the lifting of the ban on Black trade unions (IHSA 1992:454-455). The proposal was accepted, and despite on-going harassment by police during the 1980s union activity among trade union leaders continued unabated. The most significant event during this period being the formation of the Congress of South African Trade Unions (COSATU) on 30 November 1985 (Williams & Hackland 1988:67; Kotze & Greyling 268 & 269). COSATU, and more particularly its "charterist" wing were affiliated to the United Democratic Front (UDF), an anti-apartheid and mainly Black political movement (Cross & Chisholm 1990:63). These "charterists" also identified closely with the ANC and the SACP. During the 1980s COSATU, because of its ties with the UDF, the ANC and the SACP became increasingly involved in political activities. This co-operation on the political front resulted in the alliance of April 1990, between the ANC / SACP and COSATU (Kotze & Greyling 1994:272). The tripartite alliance was condemned in many quarters of South African society. In particular, the liberal economic wing of the South African business community accused the ANC of being a captive of the unions, especially of COSATU (Baskin 1996:7). The role of ideology in policy formulation pervaded South African society in the form of socialist and communist ideology (Baskin 1996:viii), the influence of this same ideology pervaded all aspects of South African life: from the Reconstruction and Development Programme (Kotze & Greyling 1994:273; ANC 1994:1), to the re-organisation of South African labour and economic policies (Baskin (ed) 1996:1-19; Standing *et al* 1996:419f), to the re-construction of education and training in South Africa (NTB 1994:92).

- COSATU and SACTU

The influence of COSATU has its most direct impact on the provision of education in South African (and KZN) in respect of the unionisation of teacher organisations (Christie 1991:294; Hartshorne 1992:322) and the emergence

of the COSATU affiliated South African Democratic Teachers' Union (SADTU) (cf LaGrange 2000:12). COSATU's influence on the provision of education in KZN has been profound. Firstly, in respect of resistance activities of the NECC (National Education Crisis Committee) (Cross & Chisholm 1990:65; Christie 1991:289-299), and thereafter in respect of its activities during the post-1994 era of re-organisation of education in KZN. Initially, as members of the mass democratic movement the NECC, UDF and COSATU engaged in a period of protracted dialogue from 1985 to 1987. The issues focused on *inter alia*, People's Education, a politically motivated movement designed to mobilise the masses and de-stabilise organised education. The aim of the People's Education movement was to reject the apartheid-based system of education and to replace it with a system of education that was relevant to the needs of the people (Christie 1991:267f; Hartshorne 1992:341-346). This period of resistance in education experienced a measure of success in October 1990 with the establishment of the South African Democratic Teachers' Union (SADTU). All Black teacher organisations in South Africa merged into one powerful organisation. Christie (1991:265) states that SADTU represented the largest and most unified teachers' organisation in South Africa's history, a movement that arose out of the period of resistance. SADTU's aims included strike action by teachers. The same author concludes, in the same reference, that political developments made the provision of education as complicated in the post-1994 era as it had been in the past under the apartheid government.

5.2.4.3 Discussion

The "Christian" origins of the early resistance to the whites-only policies of the Union government were over-shadowed by the ideology of historical materialism. Marxism is neither religion nor philosophy, but money (Singer 1980:16-19 citing Marx 1843). In England the Christian Socialist origins of the Labour Movement became secularised (*History Today* 1986:40-45). In South Africa, the noble Christian spirit of the early trade unions became divorced from the mass movements of the late twentieth century. South Africa (and KZN) is a secular state. Church, religion and state are separated. The rights of individuals are guaranteed in a Bill of Rights (cf Nzimande 1992, in NTS 1992:17-18). As the formerly oppressed become the new "elite" in South

African society, and endeavour to expunge every vestige of apartheid from South African society, so do spectres of new oppressors rise up with inevitable consequences for relevance in education. The re-organisation of South Africa's labour, economic and educational policies transformed South African society after 1994, but, in the process a new wave of criticism and protest emerged (Baskin 1996:1; Jansen 1997a:1; Chisholm 2000:1).

5.2.4.4 Conclusion

These developments raise Orwellian-type questions: in pursuit of educational relevance has the concept "people" not been interpreted in a similar manner to the nationalist concept of "volk"? Or alternatively, has the Christian based Calvinist ideology of CNE traditions not been replaced with kindred communist ideals as practised by the early Christian Church? The Christian origins of the ANC, its leaders, and alliance partners were indicated in the preceding paragraphs. The ideals of labour movements, socialism and communism, also have Christian origins. Marxist secularisation resulted in the ideological incompatibility of the Christian religion and socialist ideology. Current political ideology is as sectional and exclusive, and potentially disastrous for South Africa as was its predecessor (Hartshorne 1992:6 & 7; 345 & 346).

5.2.5 Re-organisation of KZN society

5.2.5.1 Relevance in education was not possible under the apartheid government in South Africa

Transformation in KZN society was integrally linked to political developments at the national level (Claassen 1996:456; 460-461), hence transformation in South African education was not possible before 1994. The various commissions of inquiry, and investigations into the problems of the South African system of education were not able to recommend a system of education that would meet the needs of all South African citizens (HSRC 1981:196 & 196). The CNE-based structures of apartheid education had to be dismantled before relevance was possible at all levels of provision. Educational provision during the closing years of the apartheid-era was

excessively fragmented. Seventeen education departments provided education to compulsory school-going learners (UNISA 1991:8):

- Education & Culture: House of Assembly (mainly for Whites): four provincial departments;
- Education & Culture: House of Delegates (mainly for Indians): one department;
- Education & Culture: House of Representatives (mainly for Coloureds): one department;
- Education & Training (mainly for Blacks): eight regions, but one department;
- Education departments of self-governing territories: six departments;
- Education departments of self-governing states: four departments.

The recommendations of commissions did not succeed in transforming education in South Africa, and KZN:

- Human Sciences Research Council (HSRC) – provision of education in the Republic of South Africa (1981) – De Lange Report.
- Buthelezi Commission – The Requirements for Stability and Development in KwaZulu and Natal (1982).
- Department of National Education – Education Renewal Strategy (1992).

The multi-party election of 1994 effectively dismantled apartheid and reconstruction and the transformation of civil society provided policy-makers and practitioners in education with new definitions for relevance in educational provision in SA and in KZN.

5.2.5.2 Multi-party elections and a constellation of legislation

South African society had to be re-organised along non-racial lines. The first multiparty elections of 27 April 1994, and the plethora of legislation of the first five years effectively changed South African society. Pierce (2000:18) citing Cheadle and Haysom (2000) refer to a constellation of legislation, each act setting out broad principles and policies to regulate South African civil society.

Some of these acts are broader than the field of education, however, the terms of employment and conditions of employment of educators are nevertheless all regulated within the context of the legal framework of South Africa.

5.2.5.3 The New Legal Framework

The vision for transformation in education was in effect documented in the DOE's 1995 White Paper on Education and Training (cf DOE 1995:*preface*).

The policy documents and the resultant legislation provides the framework for educational provision in the provinces. National legislation is endorsed and enacted by the provincial parliament:

- White Paper on Education and Training in a Democratic South Africa: first steps to develop a new system. February 1995.
 - South African Qualifications Authority Act, No. 58 of 1995.
 - National Policy Education Act, No. 27 of 1996.
 - Constitution of the Republic of South Africa Act, No. 108 of 1996.
 - KwaZulu-Natal Schools Education Act, No. 3 of 1996.
 - Employment Equity Act, No. 55 of 1998
 - Employment of Educators Act, No. 76 of 1998.
 - Further Education and Training Act, No. 98 of 1998.
- (DOE 1996:23; 1996:19-24; DOE (KZN)2000:3; LaGrange 2000: 120 – 126).

The SAQA Act (1995) enabled South Africa to develop its own integrated National Qualifications Framework (NQF) and a supporting quality assurance system (Isaacman 1996:7; Olivier 1998:4). The SAQA Act provided a paradigm shift in the South African learning process from the traditional content-based learning towards outcomes-based learning. The re-organisation and transformation of educational provision in South Africa (and KZN) commenced with the National Qualifications Framework (NQF) as proposed by SAQA.

5.2.5.4 The South African National Qualifications Framework

The NQF provides for an integrated approach to education and training. The framework further provides a register for all unit standards, credits and qualifications in order to facilitate career pathing, portability, articulation and flexibility between economic sectors. The framework thus makes provision for life-long learning. It is a national approach to education and training, and consists of levels, bands and types of qualifications and certificates envisaged for the purpose of nationally recognised qualifications (Olivier 1998:4; Bezuidenhout, Collingham & de Lange 1999:4; Dreyer 2000:5).

The NQF consists of eight levels of learning distributed across three broad bands. These levels and bands constitute the content of the NQF and deal with the nature and extent of the NQF. Table 5.1 shows the bands, qualifications and certificates on the NQF according to NQF levels.

Table 5.1
The National Qualifications Framework

NQFLEVEL	BAND	TYPES OF QUALIFICATIONS AND CERTIFICATES	
Higher Education and Training Certificates			
8	Higher Education and Training Band (HET)	Doctorates	
7		Further Research Degrees	
6		Higher Degrees	
5		Professional Qualifications	
		First Degrees	
		Higher Diplomas	
		Diplomas	
		Occupational Certificates	
Further Education and Training Certificates			
4	Further Education And Training Band (FET)	School/College/Training Certificates	
3		Mix of units from all (NGOs)	
2		School/College/Training Certificates	
		Mix of units from all (NGOs)	
		School/College/Training Certificates	
		Mix of units from all (NGOs)	
General Education and Training Certificates			
1	General Education And Training Band (GET)	Senior phase Grades 7 – 9	ABET Level 4
		Intermediate Phase Grades 4 – 6	ABET Level 3
		Foundation Phase Grades R – 3	ABET Level 2
		Pre-school	ABET Level 1

(Source: adapted from DOE (North Durban Region) 1997:2)

Olivier (1998:6-7) holds that the main responsibility of NQF is to deal with the calibration of qualifications, credits and unit standards in order to build a framework which adheres to:

- the integration of education and training;
- the relevance of education and training as a means towards achieving other ends;
- the credibility of the learning provided by industry, the service sectors and institutionalised providers at the national and international levels of acceptance;
- the principles of coherence and flexibility for movement within the framework;
- the maintenance of standards for education and training as expressed in terms of internationally acceptable outcomes;
- the principle of legitimacy for the participation of all national stakeholders in the planning and co-ordination of standards and qualifications;
- the provision of access at appropriate levels for all learners;
- the articulation between and within the education and training systems;
- progression which allows for national qualifications via different combinations of the components of the education and training system;
- the provision of portability, which provides for the transfer of credits or qualifications from one learning institution and/or employer to another; and
- the recognition of prior learning obtained through formal, non-formal and informal learning and/or experience.

The principles as defined above permeate the literature that emanated from the early reform period immediately after the 1994 general election. These principles are intended to guide planners and policy-makers in education and training to ensure that the provision of education and training remains relevant to the needs of the wider community. The principles constitute the quality indicators for the national outcomes and requirements of the NQF. The NQF deals with the process of involving all stakeholders, this aspect is taken care of within the National Standard Bodies (NSBs), Standard Generating Bodies (SGBs), and Education and Training Quality Assurers (ETQAs) (NTB 1994: 91-112; SAQA 1999a:5-6).

Provision of education in KZN is based on the national framework that integrates education and training. This framework also provides criteria and guidelines for key stakeholders in respect of standard setting and quality

assurance. Relevance to the national development needs is one of the quality indicators and key principles of the NQF. The provision of general education had to be reformed in order to address these principles of the NQF, and SAQA's critical outcomes (Dreyer 2000:8). The paragraphs on the structure of education, and the trends in educational provision will further address this development in the transformation of education in KZN.

5.3 SOCIO-ECONOMIC DATA

5.3.1 Introduction

The comparative country data indicated the high relevance of the socio-economic data of a region, or a country, in respect of the provision of education. This factor emerged in all six comparative studies of Chapters 3 and 4. The general conclusions reached were that relevance in education is optimally evaluated within the context a region's social, economic, demographic and human development data. An in-depth examination of the KZN socio-economic context will therefore be conducted within the following broad socio-economic themes, viz the demographic and human development profile of KZN, and the socio-economic trends as related to educational relevance. Sub-themes will be identified and evaluated within these broad fields in respect of the problems of educational provision.

5.3.2 A demographic and human development profile of KwaZulu-Natal

5.3.2.1 Demographics

(a) Area

The area of KZN is 92 100 km², which is 7,6% of the total surface area of South Africa (Central Statistics (CSS) 1996:1.1). This makes KZN the province with the third smallest land area, exceeding only Mpumalanga (6,9%) and Gauteng (1,5%) (Development Bank of South Africa (DBSA) 1995:2).

(b) Population distribution

KZN is the most populated province in South Africa. The total population of the province, viz. 8 713 000 persons, representing 21,1% of the total South African population. Gauteng represents 17,1%, and the Eastern Cape 15,7% of the total population (CSS 1996:3.3). These statistics compare favourably with the Development Bank data of the previous year (DBSA 1995:2). A significant conclusion from the above data is the fact that 21,1% of the total population resides in KZN and occupies 7,6% of the total land mass. In Gauteng 17,1% of the population occupies 1,4% of the total land mass, this makes KZN the province with the second highest population density in South Africa (DBSA 1995:2).

Population density data for KZN was recorded as 87 persons p/km² in 1991 (DBSA 1995:2) and 94,5 persons p/km² in 1995 (CSS 1996:3.4). The DBSA (1995:2) comments that the population density varies considerably from 3,8 p/km² in the Impendle region to 7 429,4 p/km² in the Ntuzuma region. When expressed as a percentage in respect of sub-regional comparisons the Port Natal-Ebhodwe (PNE) region (i.e. Greater Durban Area) has the highest percentage (i.e. 37%) of the total population living in a mere 4,7% of the total provincial surface area (DBSA 1995:2; CSS 1996:3.6; New Vision Strategy Consultants (NVSC) 1997:3-31).

These statistics indicate a steady increase in the provincial population, as well as an increase in the population density of the PNE-region, the commercial industrial, education, and employment heartland of the province.

(c) Population groups

Population statistics as supplied by the CSS (1996:3.3) are represented in Table 5.2:

Table 5.2
Population statistics RSA and KZN

Population group	RSA (thousands)	KZN (thousands)	Percentage of population groups within KZN
African / Blacks	31 461	7 206	82,7
Coloureds	3 508	107	1,2
Indians / Asians	1 051	799	9,2
Whites	5 224	601	6,9
TOTAL	41 244	8 713	100

(Source: CSS 1996:3.3)

Conclusions reached from the above data in respect of the composition of the population in KZN are as follows:

- 76,3% of the national population is from the African/Black population group; in KZN 82,7% of the provincial population is from the African/Black population group; KZN is therefore above the national norm for this population group;
- 8,5% of the national population is from the Coloured population group; in KZN 1,2% of the provincial population is from the Coloured population group; KZN is therefore below the national norm for this population group;
- 2,5% of the national population is from the Indian/Asian population group; in KZN 9,2% of the provincial population is from the Indian/Asian population group; KZN is therefore above the national norm for their population group;
- 12,5% of the national population is from the White population group; in KZN 6,9% of the provincial population is from the White population group; KZN is therefore below the national norm for this population group.

The majority of KZN's population is therefore from the African/Black population group, or expressed differently, the province in South Africa with the highest number of persons from the African/Black population group. Relevance in educational provision ought therefore to be in respect of this population group, and the education, socio-economic and human development needs of these people.

(d) Age-groups and the provincial population composition

A “population-bulge” exists for the African/Black, Coloured and Indian/Asian population group in the 0-9 year-old, and 10-19 year-old age groups. For the White population group the “bulge” is in the 20-29 year-old and 30-39 year-old age groups respectively. This trend has implications for educational provision at school level for the African/Black, Coloured and Indian/Asian population groups, and more particularly in respect of post-school educational provision for the White population groups (CSS 1996:3.10; DBSA 1994:21). The DBSA (1995:3) summarised this age-group data for all population groups as follows:

“Persons in the age group 0-14 years represented 39,1% of the total population in 1991. When these children mature and reach child-bearing age over the next 30 years, the strong population momentum will be maintained for a considerable period of time”.

(e) Urbanisation, population growth and HIV / AIDS

Of the 39.1% persons in the 0 – 14 year age-group, approximately 28% of the 0 – 14 year age group in KZN reside in the urban regions; 35% of the 15 – 19 year age group is urbanised, and approximately 48% of the 20 – 64 year age group is resident in the urban regions of KZN (Luüs & Oberholzer 1994:7). These statistics have significant implications for education, and in particular, the provision of education in the post-secondary sector of schooling. The SAIRR Survey (1996:23-26) came to similar conclusions, a trend towards the urban areas by younger people, while the rural areas of KZN, and the Eastern Cape, North West and the Northern Province have very high rural populations. Projections by the SAIRR (1996:205) indicate a gradual increase in urbanisation.

While the immediate implication of the population bulge is in respect of educational provision, medium to long term implications exist in respect of post-compulsory school education and training and labour market integration. A more recent trend in KZN has been the negative effect of HIV/AIDS on population growth. It is too early to predict the effect of this disease on

educational provision and the economy of KZN, however, if the 1998 United Nations Report on HIV/AIDS Human Development in South Africa is correct in its estimate of 25% of the general population in South Africa being HIV positive by 2010, then the educational and economic sectors in KZN will have to critically assess the impact of this disease on educational provision and the economy and the quality of human life (UNISA 2000a:5).

(f) Language

The majority (79,3%) of residents in KZN have Zulu as their home language, followed by the English-speaking population (16,0%) and the Afrikaans-speaking population (1,9%) (cf Luüs & Oberholzer 1994:12). English is only dominant in a few regions of KZN, situated mainly along the coast, e.g. Durban, Pinetown, Port Shepstone, Lower Umfolozi, Pietermaritzburg, etc. (DBSA 1994:20 and 21). These statistics do not reflect the statistics applicable to the medium of instruction in the classrooms of KwaZulu-Natal (CSS 1996:3.11). Medium of instruction is English for most Zulu-speakers by the time they reach secondary school, and for all Zulu-learners who have chosen to enter the school system of the schools of the former HOA. The province is thus providing education for the majority of its learners through the medium of a second language, this fact has significant (and serious) implications for the efficacy of teaching and learning in the classrooms of KZN (MacDonald 1991:4-10; Edwards 1996:6; 152-157).

5.3.2.2 Human Development

(a) Introduction

The DBSA (1995:17) points out that human development is measured by an individual's freedom to choose. In order to make an informed choice a person must have basic human capacity and a reasonable range of opportunities to choose from. Indicators such as life expectancy and adult literacy have been used to measure basic human capacity, and income as a measurable indicator of access to opportunities.

(b) The Human Development Indices (HDI) (SA)

The HDI distribution for all population groups at the national level is as follows in Table 5.3:

Table 5.3
Human development indices as per SA population groups

Year	African/Black	Coloureds	Indian/Asians	Whites	RSA
1980	0,557	0,394	0,655	0,739	0,557
1991	0,677	0,500	0,836	0,897	0,677

(Source: CSS 1996:3.17)

From the above it can be concluded that the quality of life in South Africa has improved since 1980, and that this is particularly noticeable in the Coloured and Indian/Asian population groups. However, a 0,677 HDI is considered to be "medium human development" and would imply poverty and lack of human development in many areas of the region under consideration. Human capacity includes access to education, and in particular, to relevant education in order to provide for basic human needs.

(c) Human Development Indices (KZN)

The Human Development Index (HDI) for KZN for 1980 was recorded as 0,491 in 1991, an improvement was indicated (0,602) by the CSS (1996:3.16). This placed KZN in the medium to high-level bracket of human development together with countries such as China (0,644), Sri Lanka (0,665), and Egypt (0,551) (CSS 1996:3.17).

The DBSA (1994:63) however, records an 0,580 HDI for KZN. Inter-provincial comparisons made in the same report placed KZN third last, exceeding only the Eastern Cape and Northern Province. Commenting on the low HDI for KZN the DBSA writers point to the stark contrasts between rich and poor that characterise the development of the region. These contrasts are particularly evident between urban and rural development.

"The province is in general well endowed with natural resources, and the diversified formal economy is relatively less vulnerable to cyclical or structural downturns. It has good infrastructure and strong institutional capacity. This is in strong contrast to the stagnant and vulnerable rural economy and has resulted in striking levels of inequality, markedly uneven spatial development, poorly developed human resources, high levels of violence and political dissonance, endemic political intransigence and increasing impoverishment of the poor".

(DBSA 1995:63)

In conclusion it must be observed that since this report was written the high levels of political violence have subsided substantially, however, crime related violence has become a feature of KZN (and South African) society, that has caused grave concern at every level of the community. More tolerance is evident among the political parties, but the issue of increasing poverty has not been arrested. The community continues to seek solutions from educational providers in respect of education and training that will improve the quality of life in the province.

(d) Literacy

Literacy is usually included as one of the indicators used to calculate the HDI (CSS 1996:3.15). The CSS (1996:7.1) defines adult literacy as referring to persons who are 15 years and older who can read, write and speak their home language. In terms of this definition the adult literacy rate for KZN for 1991 is recorded as being 84,26% (CSS 1996:7.1). This definition does not take into account the increasing number of learners who have passed through the education system since the early 1970s and 1980s when first the private schools and then the former HOA, HOD and HOR schools were opened up to all race groups. Many Black children have grown up without learning to read and write their home language (MacDonald 1991:27 & 28).

The DBSA defines literacy as the percentage of persons thirteen years and older with at least a Standard 5 (Grade 7) qualification (DBSA 1994:127;

1995:1). The literacy rate for KZN is then indicated, as for 1991, as being 58,7% (South Africa 61,4%) (DBSA 1994:1;1995:18). This compares favourably with the 50% to 59% cited by Luüs and Oberholzer (1994:8). Literacy levels for KZN are too low to expect meaningful development to take place in basic capacity building. Skills development, employment opportunities and general improvement of the quality of human life will be negatively affected (DBSA 1995:25).

(e) Life expectancy

Life expectancy is another indicator included in the calculation of the HDI (CSS 1996:3.15). The CSS (1996:3.13) indicates a life expectancy of 61,55 years for KZN as for 1991. The DBSA reports (1994:18; 1995:1) indicate a slight increase for KZN, i.e. 62,6 years. The national aggregate for all provinces is 63,4 years. When the life expectancy data is analysed by population group, a further indication of the human development gap in South African society emerges. Table 5.4 summarises this data.

Table 5.4
Life expectancy in South Africa as per population group

Year	RSA	Blacks	Coloureds	Indians	Whites
1980	58,77	56,23	58,51	65,35	70,43
1991	62,77	60,30	66,46	68,89	73,11

(Source: CSS 1996:3.13)

Life expectancy increased for all population groups in South Africa, the 13 year difference between the Black and White population group has a direct bearing on capacity and access to education and health care facilities as indicated by the HDI. No inter-population data for KZN was available, but given the 0,58 index for KZN, it may be assumed that life expectancy for the Black population in KZN would be less than 60 years (cf Eastern Cape 59,6 years)(DBSA 1994:18). Life expectancy indicates the long term affects of the quality of life of a community, and in particular critical issues such as unemployment, basic capacity and access to health care facilities. The relevance of education as a key provider of capacity must be viewed as one of

the priorities of any government in its endeavours to alleviate human suffering. "Education expands a person's basic capacity to choose, and opens further options for a fulfilling life" (DBSA 1994:25).

(f) Provincial Gross Geographic Product (GGP)

The provincial GGP *per capita* for the period 1980 – 1991 was considerably lower than the national real GGP (KZN:±R2 300; SA:±R3 700). This places KZN in a similar economic position to the Eastern Cape, Northern Province, and the North West (Luüs & Oberholzer 1994:16 & 17).

(g) Conclusion

KZN is the province with the third smallest land area in South Africa. It has the largest population of the nine provinces. This results in the second highest population density in the country. The population growth rate equals the national average. The province has a relatively large component of young citizens. This depicts a potential for a relatively high population growth in the near future. Urbanisation is taking place at a steady pace. These indicators have critical implications for educational provision the metropolitan regions of Durban-Pinetown-Pietermaritzburg (i.e. the PNE-region). Human development indices indicate poverty and poor development, primarily in the African/Black population group. The following paragraphs will develop the socio-economic analysis of KZN further. The socio-economic trends will demonstrate that provision of education in the region takes place within the context of a highly complex society.

5.3.3 Socio-economic trends and the problems of relevance of educational provision in KZN

5.3.3.1 Introduction

The socio-economic trends of KZN, as these impact on the provision of education, will be analysed in greater depth in this paragraph. This paragraph will firstly examine the general background to the South African economy and the perception of irrelevance in educational provision. Sub-themes to be

examined will include the KZN labour market and the sub-regional economic issues, to be followed by an overview of provincial economic issues, viz sub-regional growth and the labour market. Extracts from personal interviews conducted in KZN will be integrated into the main text. A concluding paragraph will prepare the reader for an analysis of the KZN structure of education.

5.3.3.2 Background to the South African economy and the perception of educational irrelevance

(a) Annual matriculation results for KZN

The matriculation results in KZN for the academic years 1997 - 1999 are summarised in Table 5.5, these statistics give an indication of the crisis in educational relevance:

Table 5.5
KZN matric results 1996 – 1999
(National pass rate 1999 48,9%)

Year	1996 (%)	1997 (%)	1998 (%)	1999 (%)
Senior Certificate	39	35	33	35
Matric exemption	23	18	17	16
Total percentage passed	62	53	50	51

(Source: Edusource Data News, June 1997, March 1998, March 2000)

The above data raises the question, “What happens to the 50% of the candidates who do not obtain a matriculation certificate?” In a newspaper report in the *Daily News* (5 August 1999) a front-page report announced that an HSRC investigation had found that under the present economic conditions only one in 30 new job-seekers could expect to find work in the formal sector in South Africa.

The report stated that 241 660 applicants out of every 250 000 endeavouring to enter the labour market annually will be unsuccessful, if the applicants do not possess either a matric certificate, a comparable technical qualification, or another formal qualification (e.g. a learnership certificate) the chances are that employment in the formal sector will remain closed to the early school-leavers

of KZN. It must be stressed again that education and training does not create jobs, the role of vocational education in job creation is nevertheless a closely related issue and has been widely debated (Bot 1992:74). The problems of unemployment as related to the quality of educational provision in the province are nevertheless related issues.

(b) Unemployment and educational provision

South Africa's unemployment rate has been unacceptably high. The unemployment rate was estimated to be 32% in July 1997 by the New Vision Strategy Consultants (cf NVSC 1997:3-6). Fewer and fewer jobs are available for young school leavers. It was estimated by the Department of Education that half of the 4 million unemployed are young people under the age of 30 with at least nine years of schooling. The DOE's Green Paper expressed the problem as follows:

"The apparent irrelevance to employment of 9-12 years of formal schooling is a major indictment of the current matriculation system".

(DOE 1998a:11).

The DOE's White Paper (DOE 1998b:6 – 7) is even more emphatic:

"The lack of relevance of much of schooling and the collapse of the youth labour market are critical social, economic and educational problems facing our young democracy".

The irrelevance of the learning that takes place at school is perceived in the poor skills profile of the labour force. The NVSC Consultants assert that 40% of the economically active population has a primary school education or less (NVSC 1997:3-6).

Curriculum irrelevance emerges as one of the prime contributory factors to the problem of unemployment. General educational provision is frequently referred to in the literature as the critical link between education and the labour

market. Bot (1991:16) describes the links between the South African system of education and the labour market as being faulty, and holds that education is supposed to benefit society, the economy and the individual. She points out that the poor South African economic indicators are in fact a signal that the policies regarding education and training, and the labour market are not in tune with each other, primarily because the system of education in South Africa is too academic in the sense that it does not enskill learners for future self-employment. The problem of relevance is exacerbated by a poor attitude towards vocational and technical education in our society.

“ ... only about 11 per cent of school-leavers go on to a technical career; whereas the proportion should be 75 per cent. In a recent survey of African pupils and drop-outs, only 6 per cent said they envisaged practising a trade and less than 1 per cent aspired to fields such as business, mining, science and technology, or agriculture”

(Bot 1991:16)

This same issue was expressed emphatically in the 1991 National Training Board/Human Sciences Research Council investigation into a National Training Strategy for South Africa. With regard to formal and non-formal education the report found that the educational output of formal education in South Africa was unsatisfactory in respect of the minimum requirements for training. Reasons cited in the report included the low level of literacy of many school-leavers. It was felt that this factor was responsible for many applicants being denied admission to training programmes. Other problems identified included the fact that school-leavers were unable to communicate effectively in the world of work. Poor career orientation at school was also identified as one of the major contributing factors of the poor articulation between school and work. The deficiencies of the formal education system in respect of the minimum requirements for training were aggravated by the high dropout rate from school (NTB/HSRC 1991:234-235).

(c) Inter-sectorial dialogue

As a result of the general dissatisfaction in the private sector regarding educational output a one-day workshop was held in Pretoria on 28 November 1989. The workshop was jointly organised by the Federated Chamber of Industries, Assocom, SEIFSA, BIFSA, and the Chamber of Mines. All the serving Ministers and Deputy Ministers of Education together with their Directors-General were invited to attend. The workshop resulted in the establishment of PRISEC (Private Sector Education Council) in 1990. The following mission was adopted:

“PRISEC will be actively involved in the on-going development of a non-racial, relevant and legitimate national education system which will encourage optimum economic growth and equip each user to cope with the responsibilities of life in a democratic society”.

(NTB/HSRC 1991:265)

Representing the majority of employers in the South African private sector at the time, PRISEC was in a favourable position to formulate the precise qualities and skills required by employers of the formal education system. These were summarised as follows:

“ ... literacy in mother tongue and in English, numeracy up to particular types of calculations which can be specified, work ethics, personal and social skills, reasoning ability, manual dexterity, an understanding of the world of work and the potential to develop specific job skills through in-service training”.

(NTB/HSRC 1991:265)

The NTB/HSRC report concluded with the observation that

“ultimately it will be very important that continuous, unfettered and effective liaison and interaction take place between [training

and education], or a possible future alternative as well as the Minister of Manpower and the Ministers of Education”.

(NTB/HSRC 1991:266)

The struggle to forge the critical links between education and the economic sector appears to have dragged on for almost a decade (if not longer). In a personal interview in September 1999, Andrew Layman, Director of the Pietermaritzburg Chamber of Business and Industry, (and former high school principal and former President of the Natal Teachers' Society) stated quite emphatically that organised business and industry was “sick and tired of trying to try to forge links with the education department that they had given up the idea altogether” (Layman 1999). This hard-line approach may have been one of the underlining reasons why this researcher was not able to negotiate access to a representative of the Durban Chamber of Business and Industry for the purpose of an interview. It was reported at a later stage that the Durban director was not interested in school education (Layman 1999). The problem of inter-sectorial dialogue appears not to have been successfully resolved despite the PRISEC statements. The problem of the provision of a relevant basic general education was only addressed again at national government level after the 1994 general elections.

(d) International competitiveness, skills development and education

A new factor emerged in the post-election documentation. The South African economy could be compared realistically to other world economies at a comparable level of development. These comparisons high-lighted the socio-economic problems retarding growth and development in South African society.

The NVSC (1997:3-7) and the DOL (1997:7) cite the World Competiveness Report (1996) wherein South Africa was compared with the OECD, 15 developing and 5 newly industrialised countries. A variety of socio-economic benchmarks, such as the domestic economy, management, science and technology, and the quality of our human resources were used for purposes of comparison. South Africa's global rating emerged as one of the least

favourable in the world. The NVSC (1997:3-5) conclude that socio-economic development was an integrated process that encompassed more than mere business efficiency. Training and human development were integral to improving social competitiveness.

The problems of world competitiveness were addressed in the DOL's Green Paper (1997:12). The quotation below summarises the problem from the point of view of the government:

"South Africa has been rated as having one of the poorest human resource development records in comparison to other countries at equivalent stages of development.

Problems in the schooling and university systems inherited from the past have contributed to this poor record. In addition, there has been a serious failure to address middle level competency requirements in the society – evidenced by the decline in the apprenticeship system and the failure to put anything in its place. Skills shortages at these and higher levels lead to inefficient enterprise operations.

There has been poor alignment of training programmes with social and economic strategies. Our poor record in mathematics and science and the repeated failure of technical college graduates and those completing unemployment training programmes to find employment, is illustrative of this".

(DOL 1997:12)

(e) Conclusion

The discordant relationship between education and the work place emerges from the national skills dilemma. This problem was clearly high-lighted at the time of South Africa's re-entry to the world economy. The bottom line is that there is a need for education and training to be more responsive to the needs of the labour market. Expressed differently, there clearly exists a problem of relevance in the South African, and in particular the KZN, system of educational provision. The KZN labour market will be examined in greater depth in the following paragraphs in respect of educational relevance.

5.3.3.3 The KZN labour market and educational relevance

(a) Introduction

This section will examine trends in the labour market in KZN in respect of the relevance of educational provision. Comparisons will be made with international standards. The problem of unemployment will be examined as it impacts on the issue of educational relevance. The quality of life enjoyed by the people of KZN will be analysed by means of relevant economic indicators as a framework for assessing the relevance of education and training in the prevailing economic climate of the region.

(b) KZN, population analysis and employment

Table 5.6 illustrates the growth in the economically active population (EAP) in South Africa as per population group. No statistics have been released for KZN. The assumption can be made however, that national trends are applicable to KZN as well.

Table 5.6
Average annual growth and the economically active population in South Africa (1991 – 1995)

	1991	1992	1993	1994	1995	1991 - 1995
Total	13 400	13 679	13 953	14 226	14 497	1,99%
Africans / Blacks	9 159	9 389	9 619	9 850	10 078	2,42%
Coloureds	1 419	1 446	1 468	1 488	1 509	1,55%
Indians / Asians	391	397	403	408	414	1,44%
Whites	2 431	2 447	2 463	2 480	2 496	0,67%

(Source: CSS 1996:10.1)

Notes:

- The EAP in the table consists of workers (i.e. employees and employers) in the formal and informal sector as well as unemployed persons.
- The former TVBC states are included in these statistics.

- Clearly a trend exists in a growing economically active population, this applies particularly to the Black / African population group, the only group

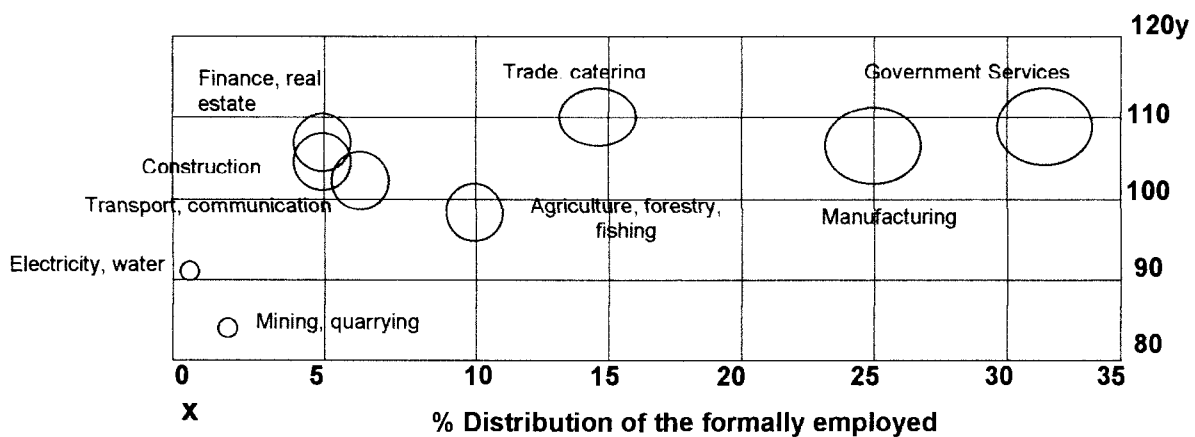
above the national norm. Luüs and Oberholzer (1994:15) comment that the KZN potential economic active population is below the national norm, the province exceeding only the Eastern Cape and the Northern Province.

(c) The KZN Labour Market

KZN has the second largest labour force in South Africa. Almost 19% of the total labour force of South Africa is employed in this province. In comparison with the rest of South Africa the province is the largest provider of employment in the agricultural sector (15,6%), and the second largest in the manufacturing (22,6%), commercial, catering and accommodation (21,3%), and transport and communication (21,3%) sectors (DBSA 1995:5). The province provides jobs for approximately 17 % of the total formal employees in South Africa. A significant trend is the formal labour market absorption capacity of the province. This declined from 77,4% in 1980, to the lowest of all the provinces, i.e. 55,9% in 1991 (DBSA 1995:4; NVSC 1997:3-14). This phenomenon in the KZN economy has been a source of grave concern to the leaders in the province in all sectors. Figure 5.1 illustrates the sectoral distribution of the province's formally employed persons.

Figure 5.1

Formal employment in KZN as per economic sector and in relation to the RSA (1991)



(Source: NVSC 1997:3-15)

NOTES:

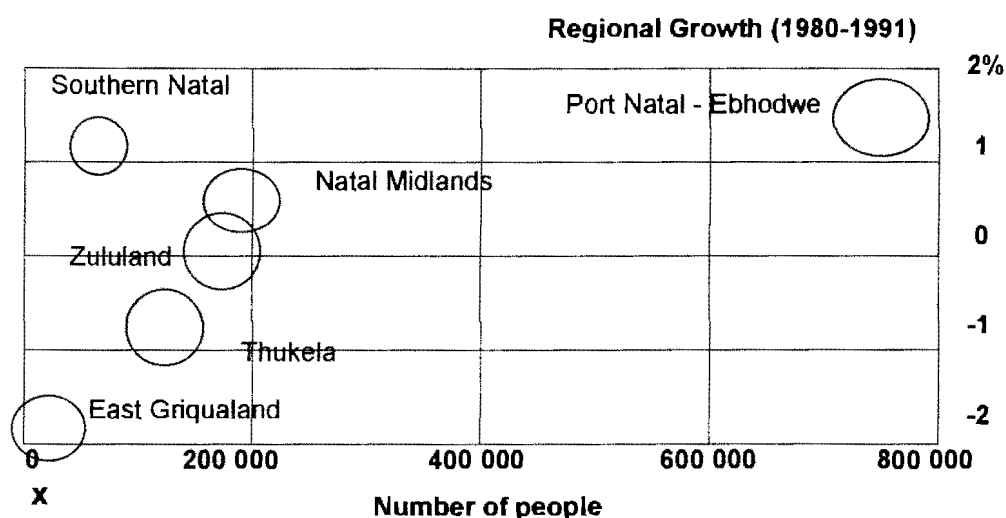
- The sizes of the bubbles represent the number of people employed in each sector.
- The y-axis is indexed, i.e. the bubbles above the 100 show better growth in the province than for the rest of South Africa, conversely, bubbles below 100 show less employment growth.

- The figure shows that most of the economic sectors of KwaZulu-Natal have a better employment growth rate relative to the rest of South Africa. Government services, manufacturing, trade/catering, and agriculture / forestry / fishing are the largest contributors to the formal employment sector in KZN, exceeding also the national trend (cf Luüs & Oberholzer 1994:18-21).

(d) The KZN Labour Force

As stated above the decline in KZN's labour absorption capacity has declined significantly. Figure 5.2 illustrates the regional composition of the formal employment sector in KZN (1991).

Figure 5.2
Regional employment analysis



(Source: NVSC 1997:3-16)

Notes:

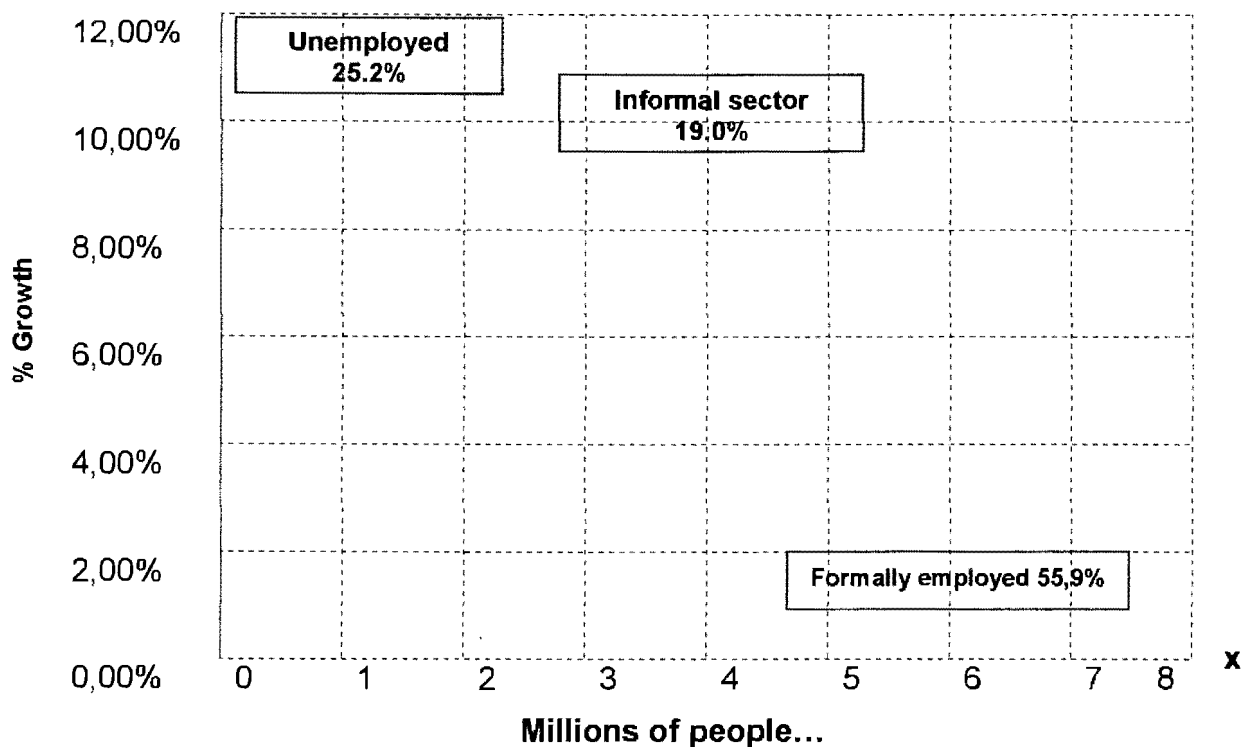
- The x-axis and the bubble sizes show the number of person's formally employed as per sub-region in KZN.
- The y-axis shows the growth in formal employment in KZN 1980 – 1991.

- The Durban sub-region (i.e. Port Natal – Ebhodwe (PNE)) has the largest number of people employed (736 111), with a growth rate of between 1 and 2% between 1980 and 1991. The Zululand, Thukela and East Griqualand sub-regions have employment figures of less than 200 000 each, with a negative growth rate of between 0 and –2% for the same

period. Employment in East Griqualand declined between 1980 and 1991. Very little significant economic growth took place in KZN in most of the sub-regions. The only exception being the PNE-sub-region.

Figure 5.3 suggests a growth in the informal sector, and in the number of unemployed people in South Africa (1980 – 1991):

Figure 5.3
Employment in South Africa by sectoral growth and number (1980- - 1991)



(Source: NVSC 1997:3-11)

- The above figure shows the marginal growth in the formal employment sector (5,9%) and the consequential growth in the South African informal sector (19,0%) and in unemployment (25,2%).
- The formal employment sector absorbed most of the economically active population up until 1991. A sharp decline took place during the 1980s and 1990s.
- There are economic trends that indicate a growth in the size of the South African economically active population. This is particularly evident in the Black population race group.

- In the case of KZN the largest concentration of the labour force resides in the PNE-sub-region. A migration towards this region has continued for more than a decade, and this trend has saturated the job-market in the sub-region (NVSC 1997:3-33).
- While some growth has taken place in the PNE-sub-region a decline has taken place in the other sub-regions, i.e. primarily the rural areas. The informal sector has experienced unprecedented growth in KZN, this sector is represented mainly by the Black population group in the PNE-sub-region.
- **Critical questions:** the above data indicates a serious mismatch between education and the work-place in KZN; the critical question that is raised is whether the information that has been gathered from surveys and research studies have made a difference to the relevance of educational provision in our schools and colleges? Box 5.1 contains extracts from a personal interview with Andrew Patricio, Director, KZN Business Training Centre, 21 September 1999. This interview addresses a critical aspect of relevance in educational provision.

Box 5.1

Extract from personal interview

Andrew Patricio

KZN Business Training Centre

21 September 1999

Our main purpose is to teach people how to run their own businesses; we offer 30 hours tuition. We receive applications from people who only have a Grade 9, to those who have a master's degree. The content of our courses include marketing, understanding taxation and VAT, the principles of accounting, understanding a balance sheet, credit control, and stock control, labour relations, etc. We are here to teach anything that has to do with entrepreneurship. Our training is very specific, but we believe that it is hands on training that is required in the business world, and not theory. Our courses include a mentorship programme afterwards; anyone can come back afterwards for advice.

New entrants to the market do not possess the basic skills of how to run a small business, the impression I am getting is that no one is teaching the children at school, they appear to be ignorant about how a business works. There is a void between the schools and the business world. It is in fact a problem of communication. There is also a gap between the schools and the technical colleges. It has to do with communication and image. The BComs and the MBAs have a high status in our society. There are thousands of BComs in the market, but many of them can't find jobs. Do we really need them? Do you really need a BCom to be a good banker? The more people who are self-employed, the better it will be for our whole economy.

One of the reasons why I think our courses work is because people are already in business, they have the practical experience, so they come here on a part-time basis in the evenings and the theory we do makes so much more sense, they can apply it the next day in their work situation, so what we have is in effect an interaction between theory and practical; this works, people don't have to memorise facts, learning takes place quite naturally.

We award a certificate at the end of the programme, but it is not endorsed by anybody, neither is there any centralised control. I have heard about SAQA, but I have no contact with them, people come here to learn about how to make money, not to get certificates (cf *Entrepreneurship Education Initiative*, a Richards Bay Minerals - Project; *Education with Enterprise Trust*, Harrismith).

- Whether the courses offered by Patricio are able to reach the population most affected by poor economic growth remains an open question. Patricio's organisation operates in a wealthy Durban suburb. The data gathered from this interview indicates a definite interest in shorter courses by the business community. A trend in respect of more hands-on-knowledge as opposed to formal qualifications is evident, a demand for entrepreneurship skills of self-employment is increasing; the gap between the school-college sector and the workplace was high-lighted by the remarks made by Patricio.

5.3.3.4 KZN sub-regional growth in the labour market

(a) Introduction

The decline in the rural areas and the growth in the informal sector are illustrated in Table 5.7. Using a mean growth rate of 3,80% for the EAP (1991) for KZN, and 0,80% growth rate for the formal sector, the same table projects the EAP for KZN in 2000 and the sub-regions.

Table 5.7
KZN sub-regional growth (1991 – 2000)

Labour supply	Zululand	Thukela	Natal mid.	PNE	S Natal	E Griqua	KZN
EAP 1991	364 016	296 604	356 0303	1 243 743	143 854	17 654	2 421 901
Growth rate 1980-1991	3,00%	3,20%	3,30%	4,50%	4,10%	0,10%	3,80%
EAP (2000)	476 499	394 955	478 089	1 841 799	206 020	17 833	3 401 310
Formal employment 1991	185 693	149 802	196 599	736 111	72 343	12 340	1 352 888
Growth rate 1980 – 1991	0,10%	-0,80%	0,50%	1,50%	1,10%	-1,90%	0,80%
Labour supply 2000	476 499	394 955	478 089	1 841 799	206 020	17 833	3 104 310
% to Total	14%	12%	14%	54%	6%	1%	100%

(Source: DBSA 1995:44)

With the exception of the PNE and Southern Natal the remaining sub-regions do not indicate significant growth. The decline in the rural areas prompted the following interviews with representatives from the agricultural sector

(b) Southey

Extracts from the personal interview with Southey (2000) in respect of educational provision and the problems of relevance in the rural areas are contained in Box 5.2

Box 5.2

Extract from personal interview

Richard Southey

KwaZulu Natal Agricultural Union (KWANALU)

28 March 2000

When we speak about education and training in the agricultural sector we must differentiate between the managerial and technical aspects of education

and the training of labourers. Most agricultural enterprises are small family businesses. How relevant is education to the family farmer? The most typical type of education for the average farmer is the college type of education. In this respect Cedara's courses are adequately. I think Cedara provides for most of the educational needs of the average farmer. They could emphasise the business aspect of farming a little bit more. But beyond Cedara the average farmer is not really interested in any other type of education or training. Cedara provides short courses that are very popular. A one or two day course on some new aspect of farming, e.g. artificial insemination, or labour relations will attract a farmer's interest. But he is not prepared to sit there for three days. That will be pushing it a bit. Many of the younger farmers may attend courses more regularly; technical things attract them, like computers in farming.

The labourers are primarily unskilled. Most of them don't have more than a Std 2 (Grade 4) education. A Grade 7 qualification is an exception. This is fundamentally a problem for the farmers, but they have learnt how to work around the problems. Functional illiteracy does impact negatively on productivity. But the farmers don't go out of their way to encourage adult literacy classes. It is not worth the hassle. There are training centres for farm labourers in the province, but once again, not all farmers support these centres. It means time off the job, and they really can't afford to be without labourers for long, it is a matter of attitude, and very short sighted I agree.

I think there are three secondary schools in KZN that offer agricultural subjects as subjects for matric, but personally I don't think it really makes any difference to agriculture. The skills we require are fundamentally generic, and you don't have to be exposed to the milking of cows for five years to get on with farming in the future. The skills we require are in fact management skills. Agriculture is about culture and not about education. I'm not sure that the Israeli kibbutz system will work in KZN (or in SA) the land issue is a very sensitive issue. The kibbutz idea has been associated with socialism, and our people are not culturally sensitised to sharing, they will struggle on until they are forced off the land, or forced to find work, but they will not share. They are more inclined to hire (or rent equipment) than share. The concept of sharing is very different among, for example the German people, but not in SA. The Israeli farms experienced huge cash flows from world Jewry; this does not

apply to SA. I don't think the concept of learnership will work on the farms either. The farmer is more concerned about how he is going to get through his heavy schedule; he doesn't have time to worry about training. Education is not a factor that really concerns the farmer. Agriculture is not about education it is about culture.

(c) Gumbi

Extracts from the personal interview with Gumbi (2000) corroborates data from the above interview. The Gumbi interview contributes new perspectives in respect of education, economic development and traditionalism.

Box 5.3

Extract from personal interview

Phumlani Gumbi

Deputy Director – Professional Services – Department of Agriculture and
Environmental Affairs

South East Region

29 June 2000

There is indeed a lot of poverty in the rural regions of this province, basically because of the unemployment. The poverty is not only attributable to the conflict that was evident in the rural region some years ago, there are other reasons why the people are poor. It does affect the children, especially the primary school children. There are assistance schemes to help feed the children at school.

The children are basically all at school, but we still see them roaming around, parents don't always have the money to send them to school, when I spoke to an abandoned 12 year old recently, he told me he was looking for work; in the tribal areas there is a direction that all children have to go to school; but we still see them roaming around during school time.

It is difficult to answer the question on relevance, especially in the tribal schools, the children tend to leave after a certain point, if there is no secondary school, close to their home, then they either have to stay somewhere else if they want a secondary school education, or they leave school, it is at this stage that the wheels come off for many of them. There is

no policy about dealing with poverty and the problems relating to education at my level; we have policies about how to improve the environment of the school, and the issue of gardens and schooling occupies our attention quite a lot. Apart from the garden policy we don't have any direct partnership with the department of education. We will require more funding if they require us to do more than this.

Yes, the kibbutz system, I have seen them, this is a hard one, co-operatives in KZN are only in respect of produce and equipment, there is no co-operation in respect of funding, and the value of this type of system will have to be proved for the region, I suspect also that racial issues will be a problem; South Africans are not co-operatively minded; we have a young democracy and the capitalist system is thriving, this is a major stumbling block; the kibbutz system is very socialistic; I think in our country every man tends to suffer and struggle, and we all end up being poor.

Politics will play a big role in a co-operative system, there is a lot of rivalry between the chiefs, and tribal politics is very powerful. The paramountcy of the chief is still a big factor in the rural areas. Relationships between schools, especially principals and outside people, are often strained, in the rural areas. In terms of qualification, this is important in the agricultural sector. Not many go to college. We have training centres, but the farmers don't always send their employees to these centres for various reasons. The centres can make a difference, but at the moment we are only scraping the tip of the iceberg. Yes, of course, I am worried.

I think maybe the secondary schools can come into this gap. If the training centres and the colleges are not providing training then maybe the secondary school should provide some form of training in the rural areas. The vocational curriculum sounds good, but we must teach more than just gardening. The olden days that was given to the children to do as a punishment. What is required is more hands on experience, we must be careful of teaching them too much theory.

(d) Naidoo, Gumede, Mdluli & Nzimande

Towards the end of the data-analysis process it emerged that more data was required in respect of educational provision in the tribal trust lands. Mr G.

Naidoo of the Department of Agriculture recommended that an interview take place as it appeared that written documentation on the role and powers of the chiefs in the tribal trust lands did not exist. An interview was arranged with a representative from the Department of Agriculture in Inchanga. On arrival it transpired that unbeknown to the researcher other representatives had been invited to the interview. A panel interview was conducted, the relevant data that emerged from this interview has been summarised in Box 5.4

Box 5.4

Extract from personal interview

Messrs G. Naidoo; P. Gumede; H. Mdluli & V. Nzimande
Representatives – Department of Agriculture and Land Affairs
South Eastern Region
Inchanga
26 April 2001

The land controlled by the *amakosi* is scattered through-out KZN. It is very fragmented, but probably accounts for between 30 – 50 % of all provincial territory. Most of the tribal trust lands are north of the Tugela. The *amakosi* are an integral part of the institution of the Zulu monarchy. As with the king himself, the *amakosi* are hereditary, and the titles are passed down from one generation to the next in the same families. The political status of the traditional leaders have not been clearly defined in our constitution, and particularly in KZN, we still have much uncertainty about the constitutional powers of the *amakosi*. While the *amakosi* rule in their tribal lands on a consultative basis, and meetings are frequently convened, their power and influence in their territories are quite pervasive. You dare not annoy or fall out of favour with the chief.

For development to take place in these territories the approval of the *nkosi* must be sought, this includes education. The *nkosi* and his representatives will sit on the Governing Bodies of the schools, almost indefinitely, and will control the affairs of the school. The principal must get along with the chief. This control determines to a large extent the functioning of the school. It is not unheard of that teachers be given a hiding with sticks by the men of a particular community for alleged acts of misconduct.

The people are very poor. Children are not all at school; you can drive through the villages at almost any time of the year and find children wandering around in the streets. These children are not older children; they are primary school children. The older children question the value of education. They see the problems of unemployment in their regions and question the value of staying on at school. They have problems with what they learn at school. Yes, the situation of the secondary schools is a problem in these tribal trusts but also the lack of relevant secondary schools. If for example there were more technical high schools, like George Campbell it would make a difference. There is a school in Durban that teaches about tourism, hotels and catering. This is good. This is the kind of school that is needed in these regions. They ought also to be taught about small business development. You see tourism is growing, and so is the informal sector. These SBD skills are the kind of skills that they need. The people couldn't care about formal qualifications like matric. Certificates are not important, but skills are. But a certain amount of education is also important. If a farmer needs a worker to keep records, e.g counting his chickens, it will help if the worker can read and knows how to keep records. There is a very high turn-over of farm workers. They don't have much ambition, and they probably get bored, and move on to work for some one else. It will be useful if farmers are taught about labour relations with their workers. But not a lengthy course, a short programme that lasts about a day or two.

The *amakosi* are the key to development in the rural areas. If a chief is not convinced that development needs to take place in his tribal lands there is very little that can be done. This is traditionalism, and development is very slow.

(e) Conclusion

Very little growth has been projected for the rural sub-regions, only the PNE shows significant signs of growth in the formal sector and in the supply of labour. Schooling, particularly primary education needs to be strengthened in the rural areas. There is a need for more secondary schools. The interviews indicated that the formal qualification approach will not work in the rural regions of KZN. Very deep problems exist in respect of the provision of

relevant education at the level of the secondary school, as well as the tertiary level of colleges/training centres. Traditionalism is an established way of life in the province, and exerts a profound influence on educational provision. Any solution to educational problems will have to take this fact of life into account. The interviews also indicated that international experiences that have worked elsewhere might not work in the cultural milieu of KZN. A unique South African (KZN) approach to educational relevance in the rural areas needs to be developed the critical problems of these regions.

(f) Labour market demand

More recent trends in the South African labour market indicate a decline in the demand for employment in four employment sectors:

Box 5.5

Labour increase / decline statistics (in thousands): SA (1998 – 2003)

- mining and quarrying (519 → 490);
- manufacturing (1 340 → 1 295);
- electricity, gas and water supply (70 → 65);
- government (community, social and personal services) (1 641 → 1 567).

(Source HSRC 1999:10)

An increase in four employment sectors is indicated by the same report:

Box 5.6

Labour Increase / decrease statistics (in thousands): SA 1998 – 2003

- construction (301 ← 328);
- trade (955 ← 1 064);
- transport, storage and communication (549 ← 589);
- non-government (community, social and personal services) (299 ← 322).

(Source HSRC 1999:10)

- Slight increases have been indicated in some industries; the increases do exceed the decreases (\pm 66 thousand), but the growth in the economically active population is still greater than the available demand for employment.

Implications thus exist for self-employment, and a corresponding response from the formal education sector to meet the emerging need.

(g) KZN, labour market projections and unemployment

Projections indicate that the problem of socio-economic-educational irrelevance will not be resolved in the foreseeable future. Table 5.8 shows the Consultants' projection for 2000, based on data available in 1997.

Table 5.8
KZN demand and supply of labour : 2000 (in thousands)

000	Zulu-land	Thukela	Natal Mid	Durban (PNE)	South Natal	E Griq	KZN
Demand	192	144	208	865	83	11	1503
Supply	476	394	478	1841	206	18	3413
Excess Supply	284	250	270	976	123	7	1910
			Less:	Accommodation in informal sector			648
				Tourism Potential			70
				Construction Potential			45
				Unemployed Best Case			1147
				% of Economically Active			34 %

(Source: NVSC 1997:4-6)

- The above data projected the unemployment for KZN to be 1 910 000 for the year 2000. Expressed as a percentage this amounted to 34% of the economically active population. The problem, as illustrated above, is most acute in the rural areas. The possibilities presented by business-education partnerships become a factor of potential relevance in the present scenario of educational irrelevance. The extracts from personal interviews with representatives from the agricultural sector and from the formal business sector are further corroborated by extracts from the Layman (1999) interview.

(h) Layman

Box 5.7

Extract from the personal interview with

Andrew Layman

Director Pietermaritzburg Chamber of Business and Industry
Former Principal Alexandra High School, Pietermaritzburg, and President of
the Natal Teachers' Society

3 September 1999

The first point I must clarify is that the business community is not very interested in educational affairs. This fact tells us a few stories. One story that it tells us that it is immaterial to them what the kids are learning at school; it is the function of the tertiary and the business sector to pick the right people that they themselves will be able to train for the workplace. The second story that this fact tells is that the education sector is hopelessly out of touch with the needs of the business world; we have a lot of people we can choose from; the business community has in fact given up on state education, and they won't keep to matric as an entry requirement if they don't have to; we want to employ people who will suit our needs and who have the qualities that can be used in the workplace, and so often the qualities that we are looking for are the qualities that are not tested in the schools.

Another fact that we have to take into account is the fact that the Skills Development Act is now in place, and it is imperative that the business community train, so training for the workplace is really the prerogative of the business world, in fact we really couldn't care a damn if education trains for the workplace, or if it doesn't, this is a very sad state of affairs.

Technical colleges are under-utilised; they offer a range of interesting courses and their courses are very interesting, but I question the value of vocational education in the sense that vocational education tends to imprison a person into a particular career; vocational education programmes tend to fail because they develop only one type of skill, for example a construction worker has no idea of marketing, or how to keep accounts. The technical colleges have a very poor image, particularly among the White population. The Whites think that because they have been to school in a top ex-Model C school, they are

too good for the technical colleges, this is particularly true of White males, they are extensively outnumbered by people of colour, and females.

The problems confronting those who would like to see more relevance in education are enormous. Firstly, our matric has become increasingly irrelevant to the workplace, and the alternative seems to be chaos. The deterioration in school discipline is also worrisome. There is a void between school and work, we need to ease the transition in some way, it seems almost as if we need a statutory body that can oversee the transition into the workplace, our youngsters are not educated for unemployment, they are educated for employment, and when it happens they don't know how to cope. The Chambers do have a role to play in easing the transition from school to work. We do have an education council, but it is not functioning very well; the chamber movement in SA is unfortunately very divided along racial lines. Finally Curriculum 2005 has been very badly marketed, it is in fact running up against a brick wall, unfortunately the entire country is geared up towards the flagship "Matric".

- The problems of educational provision and relevance appear to centre around secondary school relevance, and the perception of the matriculation examination as an adequate preparation for the work-place. Other issues of relationships between the education department and other departments of state, and the private sector appear to emerge from sources consulted and from the interviews. Concerns about the new OBE Curriculum 2005 emerge from the Layman interview. The problems of training for the work-place appear to have been taken out of the orbit of the education sector, as the perception of irrelevance has also been extended to include the technical colleges. It appears therefore that economic growth and the training of workers in the province will for the foreseeable future rest in the hands of a virile and aggressive private sector. An analysis of the structure of education in KZN will further develop insight into the providers of education in KZN.

(i) Conclusion

These paragraphs examined KZN sub-regional growth in respect of educational growth. The decline in the rural areas of KZN prompted the three interviews with representatives from the agricultural sector. The fourth interview reported in this section focused on the relationship between business and education. The interviewees were in agreement that poverty and economic development was a major problem in the rural areas. Unemployment in these regions was a further problem and resulted in early drop-out from school. The prevalence of unschooled young children continues to be a problem. Poverty plays a role in the perpetuation of this problem. Three out of the four interviewees agreed on the fact that for many of the learners in the rural areas formal education and qualifications were irrelevant. The absence of relevant secondary schools and training centres that provided shorter courses in relevant agricultural skills was noted. The institution of the *amakosi* has definite implications for the provision of education in a large percentage of the province. Relevance in educational provision in the tribal trust lands will not be achieved without the co-operation and support of the *amakosi*. Their powers are steeped in traditionalism. Development in these regions will be retarded indefinitely if the constitutional powers of these rural leaders are not clarified. This fact has direct implications for relevance and the improvement of the quality of educational provision in the tribal trust lands, and for KZN as a whole.

5.4 STRUCTURE OF EDUCATION IN KWAZULU-NATAL (KZN)

5.4.1 Introduction

The format for the examination of the KZN structure of education will be the same as that adopted in the previous two chapters. The terminology used will essentially be the current South African “outcomes-based” terminology. From time to time the context of the sources cited will necessitate a reversion to non-OBE language. These lapses are unfortunate, but unavoidable. The paragraphs on the structure will provide the factual data. The evaluation will be developed in the paragraphs of trends, critical issues and future

developments in education. A brief overview of the structure of administration in KZN will introduce an examination of the educational structures in the province.

5.4.2. Administration

Table 5.9
KZNDEC Statistical Analysis

REGION	DISTRICTS	CIRCUITS	SCHOOLS	LEARNER ENROLMENT					STATE PAID EDUCATORS
				Pre & Grade R	Gr 1 – 7	Gr 8 – 12	Special Other & Remedial	Total Learners	
Durban South	5	24	698	10 003	24 4851	14 1783	1 069	397 706	11 493
Empangeni	5	26	814	5 736	263 622	127 793	340	397 501	9 959
Ladysmith	5	27	784	5 823	248 231	131 854	1 311	387 245	10 298
North Durban	5	28	729	7 468	237 055	144 333	2 782	391 638	11 103
Port Shepstone	4	22	623	2 419	184 290	82 739	280	269 728	7 129
Ulundi	6	27	918	8 390	260 479	110 011	7	378 899	9 381
Vryheid	4	15	524	1 709	122 950	60 305	270	185 234	5 091
KZNDEC TOTAL	39	195	5 913	45 622	1 767 142	906 455	7 728	2 726 995	73 035

(Source: DOE (KZN) 1999:1; DOE 2001a:2 – 12)

The provincial department of education in KZN is administered from the official capital Ulundi. The education department is sub-divided into regions, districts and circuits. A regional chief director administers each region. Table 5.9 gives an indication of the number of learners and educators in each of the eight regions. Table 5.9 shows that the Durban South Region is the region with the highest number of learners. It includes one of the most densely populated areas in the province and in South Africa. The North Durban Region, and the Empangeni, Ulundi and Ladysmith regions, closely follows the Durban South region (cf DOE (KZN) 1999 :1).

Most educators are paid by the state, in recent years Governing Body paid posts have become a factor in the former Model C schools. These appointments are made annually in order to reduce the numbers in class groups. There are more Governing Body posts in the two Durban regions (DOE (KZN) 1999:1). In one sense these schools are administered from their respective circuit offices, effectively, the control and administration of these privileged schools rests with the Governing Bodies and the Management teams of each school. The provincial DOE and its regional offices have to cope with the problems of formerly disadvantaged schools in the province. These learners account for the majority of the school enrolment in the province (DOE (KZN) 1999:1).

5.4.3 The General Education and Training Band (GET)

5.4.3.1 Introduction

The GET band is the first level of learning on the NQF. Level 1 comprises four phases (with Adult Basic Education and Training (ABET) equivalents):

- The Pre-School Phase
Grade R (Reception)
ABET Level 1
- The Foundation Phase
Grades 1-3
ABET Level 2
- The Intermediate Phase
Grades 4-6
ABET Level 3
- The Senior Phase
Grades 7-9
ABET Level 4

Providers include the formal school system (public and private), work-based training, labour market schemes, colleges, community programmes, etc. GET certificates are awarded at the conclusion of a recognised learning programme (Isaacman 1996:24; Olivier 1998:7-8; DOE 1998a:4).

5.4.3.2 The Pre-School Phase

(a) Introduction

In South Africa and KZN, the provision of education at the pre-primary level has been complex. National and provincial governments have officially supported pre-school education. State involvement in early childhood education diminished gradually during the remaining years of the decade (cf Claassen 1996:425).

(b) The Providers

The providers of pre-school education are almost entirely in the private sector. All pre-schools in KZN are financed either by parents or charities or other privately financed institutions. Providers include former state-aided pre-primaries, pre-primaries supported by churches, social welfare and charity organisations as well as many privately managed pre-primaries. A new development is the inclusion of a Grade R (or a Grade 0) into the main stream primary school. Essentially, pre-primary education consists of two years, i.e. an entrance year, followed by a school readiness year. A new development has been the inclusion of a younger (3 – 4 year olds) age-group to accommodate the change in the minimum age for admission to compulsory education in KZN (UNISA 2000b:21-24; 32 – 33; cf personal interview with Meryl Wood, Principal Hillcrest Pre-Primary School, 2 August 2000).

(c) Conclusion

State withdrawal from the pre-primary sector has resulted in an abandonment of learning programme standardisation. Quality in early childhood education cannot be guaranteed. The qualifications of teachers and the learning programmes implemented are not subject to professional scrutiny. Unqualified persons can be employed in pre-primary schools. Colleges and universities in KZN have closed down the pre-primary learning programmes for teacher trainees. Pre-primary components exist in junior primary courses at colleges of education. The only reputable provider of pre-primary teacher training in KZN, therefore, is UNISA.

5.4.3.3 The Foundation Phase

(a) Introduction

This phase is the commencement of compulsory education. Grades R – 3 (7 – 9 years) foundational learning skills in language and numeracy are established in this phase. Formative learning in human and social sciences, and natural science takes place in the foundation phase (DOE 1997b: 4 – 5).

(b) The Providers

“Junior primary schools” continue to exist in KZN. The three grades of the foundation phase are however, usually attached to a primary school. These schools are housed in separate buildings. Private schools usually include foundation phase units into the primary school (e.g. St Mary’s, Kloof: Grade 1 – 12; Thomas More, Kloof: Grade 1 – 7; Grade 8 – 12) (cf *Independent Education* 2000:79).

(c) Conclusion

In order to remain relevant to the development of learning in subsequent phases the early childhood development of young children must be the foundation of social relations and all learning processes. Hence the critical link that needs to be established between the educators of this phase and those in the pre-primary phase, on the one hand, and with the educators in the intermediate phase on the other hand. Relevance accrues when dialogue and co-operation between educators takes place.

5.4.3.4 The Intermediate Phase

(a) Introduction

The Intermediate Phase builds on the Foundation Phase, the learning programmes begin to move in the direction of individual areas of learning informing General and Further Education and Training (DOE 1997b:5)

(b) The Providers

As with the Foundation Phase, providers of this level of learning are almost exclusively public schools. Private schools and home schooling offer an alternative form of schooling for parents. The Intermediate Phase is usually accommodated in one primary school building. Some junior primary schools in KZN conclude with the Grade 4 year (e.g. Mariannhill Lower Primary School). Anomalies of this nature exist and have resulted from the critical shortage of classrooms in the senior primary school (DOE (KZN) 1999 :1).

(c) Conclusion

The Intermediate Phase is a critical learning phase as the consolidation of foundational learning takes place. Critical thinking and related learning skills develop significantly during this phase. Learning problems emerge, and if intervention does not take place timeously future learning may be impeded. All learners follow the same programmes of learning. Early selection to vocational tracks does not take place in KZN. Some schools may stream learners (e.g. A + mixed ability classes, or A + B + C etc), the learning programmes nevertheless, remains the same for all learners. The 10 – 12 year age group of the Intermediate Phase has significant implications for future learning as the basic learning skills are developed in this phase. This is a critical phase in KZN for many learners. The first signs of boredom with learning take place in this phase and many older learners begin to consider dropping out at this level of learning.

5.4.3.5 The Senior Phase

(a) Introduction

The senior phase is the final phase of compulsory schooling. Grades 7 – 9 (13 – 15 years) are usually accommodated in the primary school (Grade 7) and the secondary school (Grades 8 and 9). Exceptions do arise as indicated in the previous paragraph. During their final primary school year Grade 7 learners usually proceed to the nearest secondary school. Future career

orientation are considered at this stage as learners may enrol at secondary schools with a specific work-related learning areas, *inter alia*, music, ballet, hotel and catering, and technical subjects such as electronics. In general the learners are being prepared for the final subject choices in preparation for the matriculation examination at the end of Grade 12.

(b) The Providers

The providers are usually public schools, private schools and home-schoolers. Home-schoolers at some stage during the Senior Phase enrol for correspondence courses with private providers such as INTEC or Damelin. In KZN the Senior Phase is provided by academic secondary schools, however, technical high schools exist for male and female learners (e.g. Ogwini Comtech, Umlazi, George Campbell Technical High School, Durban, etc), as well as agricultural high schools (e.g. Weston Agricultural College). The majority of learners enrol at an academic secondary school. These secondary schools are all orientated towards the requirements for the matriculation examination. Special secondary schools exist for learners with special needs (ELSEN)(e.g. Westridge High School, the Open Air School, the Kenmont School). Vocational secondary schools do *not* exist in KZN for learners in the main stream (NCFE 1997:18).

(c) Conclusion

The Senior Phase concludes with national assessment and the possibility of obtaining a national qualification (i.e. General Education and Training Certificate). Some learners exit from the formal schooling system and enrol at a technical college or another type of institution in the FET band. In KZN, and SA, the prestige of the matriculation certificate overshadows all decision-making processes at this stage of a learner's school career.

5.4.4 The Further Education and Training Band (FET)

5.4.4.1 Introduction

The FET band is made up of NQF Levels 2, 3 and 4. Learning in the FET band is non-compulsory. Levels 2, 3 and 4 are equivalent to Grades 10, 11 and 12 at school, or Programme Levels NO, N1, N2 and N3 at the technical colleges. FET certificates are awarded at the conclusion of a recognised programme of learning (Isaacman 1996:24-27; Claassen 1996:477)..

5.4.4.2 Providers

Providers include (*inter alia*):

- senior secondary schools (public and private);
- technical colleges, community and other colleges (e.g. FET colleges);
- NGOs;
- private companies;
- work-based training;
- labour market training schemes; and
- regional and industrial training centres.

(Isaacman 1996:24; Olivier 1998:8; DOE 1998a:4).

Provision of FET is not the sole responsibility of any one of the nine provincial education departments. Providers include, *inter alia*, the Departments of Labour, Trade and Industry, and Agriculture and Forestry. The Department of Labour's SETAs became statutory on 1 April 2000, with, *inter alia*, the responsibility to develop a system of modern learnership. The private sector's training schemes are an integral part of the FET band. An anomaly exists in the system with regard to learners who proceed to Grade 12 with general academic education studies, the NQF, nevertheless, places them in an FET band together with vocational orientations such as modern learnerships and technical and national qualifications of technical colleges. Further anomalies exist in respect of the separation of education and training between the departments of education and labour. The SETAs are administered by the

Department of Labour, while the Department of Education ostensibly administers the educational aspects (DOL 1997: 56 – 60; DOE 1998a: 14 – 17: 20 – 27).

The DOE (1998b:12) made early reference to a critical issue affecting relevance in its White Paper:

“...South Africa seeks to develop an integrated and co-ordinated system of education and training while labour market training and career services remain under the Labour portfolio.the co-ordination of policy has now been formalised in the Inter-Ministerial Committee on Human Resource Development. However, the fact that education is a Schedule 4 function under our Constitution while Labour is not, creates significant policy and administrative complications, which must be addressed creatively” .

(cf Schedule 4: Functional Areas of Concurrent National and Provincial Legislative Competence (RSA 1996:143))

5.4.4.3 Discussion

The legal and structural framework for the provision of FET in KwaZulu-Natal has already been established. However, it appears that the views of Nzimande (then Chairman: Cabinet Portfolio Committee on Education) on the provision of FET in South Africa are as valid in 2000 as in 1997. He stated in a telephonic interview that FET was a

“critical area of education, an aspect of education in South Africa that is undeveloped both conceptually and practically” .

(Nzimande1997)

The concept of FET has since been mapped out in the act. The full implementation of the system has yet to be developed (DOE 1999: 8 – 9). Current problems in FET provision in KZN may be briefly cited as follows:

- lack of human resources, particularly full-time officials to serve the entire province (personal interview, Brian Cadir, principal, Swinton Road Technical College, 1 June 2000);
- lack of funding (R111 723 000 for Technical College Education, i.e. 1,5% of total provincial budget 1999/2000 budget) (DOE (KZN) 2000:11);
- under-utilisation and “Cinderella” – status of technical colleges (Kraak & Hall 1999, in Kraak and Hall (eds) 1999:1);
- dominance of the South African matric and the HET band in respect of the relevance of qualifications and the world of work; (and “illogical prejudice against technical education”, (*The Sunday Tribune*, 28 May 2000, citing Hamilton, A. MP (IFP)).

5.4.5 The Higher Education and Training Band (HET)

5.4.5.1 Introduction

The HET band is made up of NQF Levels 5-8. Learning is non-compulsory. At the conclusion of a recognised programme of learning diplomas, higher diplomas, occupational certificates, degrees, higher degrees, doctorates and further research degrees are awarded.

There are eight institutions of higher education in KZN. These institutions offer either full-time or part-time study, or distance learning. More than one campus exists for some of the HET institutions. The Eastern Seaboard Association of Tertiary Institutions (ESATI) established a Central Applications Office which serves all eight member institutions (ESATI 1999:3 & 18).

5.4.5.2 The Providers

The eight HET institutions in KZN are:

- Mangosuthu Technikon
- ML Sulton Technikon
- Technikon Natal
Campuses: Berea, City & Pietermaritzburg
- Technikon Southern Africa

Distance Education

Regional Offices: Newcastle, Pietermaritzburg & Pinetown

- University of Durban-Westville
- University of Natal

Campuses: Durban, Pietermaritzburg, Medical School & Edgewood

- University of Zululand

Campuses: KwaDlangezwa, Ulundi & Durban-Umlazi

- University of South Africa

Distance Education: Regional Office: Durban

(cf ESATI 1999:21-24)

5.4.5.3 Discussion

The trends in HET in KZN are indicative of significant changes taking place in the region rather than isolated changes taking place in the HET band. Firstly, the arrival of the private sector in the provision of higher education has placed a strong emphasis on self-appraisal at HET level and the marketing of HET courses, research programmes, and achievements. A second trend in the region has been the slowing down of student growth in the universities, not so much in the technikons. First entry student intake is stable and growing, however, a real problem exists with the non-return of students to second, and third year studies. There is no clear indication of the underlying reasons for this trend. The third trend HET is related to the "t" in HET. Not all university managers consider training to be the task of a university, however, there are developments among the universities and technikons to develop shorter-term courses in order to be seen to be more relevant to society. The general trends therefore among HET institutions in the KZN region are issues of re-curriculating and restructuring, and declining enrolments. These trends have prompted initiatives and attempts to remain relevant to the community (based on a personal interview with Dr John Butler-Adam, CEO Eastern Seaboard Association of Tertiary Institutions, 12 July 2000).

5.4.6 Conclusion

The structure for the provision of education in KZN is equivalent to that of the other countries included in this study. A few minor differences notwithstanding, no major differences between KZN and the comparative countries emerged from the country data. The post-1994 legislation effectively eliminated many of the imbalances in respect of *inter alia*, the structures, and access to education, etc. The problems of relevance in educational provision persist. Some of these problems are related to the legacy of apartheid. Others are not. These issues will be further examined in the analytical paragraphs that follow.

5.5 TRENDS, CRITICAL ISSUES AND FUTURE DEVELOPMENTS IN THE PROVISION OF EDUCATION IN KWAZULU-NATAL IN KZN

5.5.1 Introduction

The issues that have been included in these paragraphs have all emerged from the comparative data yield of the preceding sections. The definition of “trends”, “critical” and “reforms” (or future developments) continues to be adhered to as defined in Chapter 2 (cf para 2.10.2).

5.5.2. Trends

5.5.2.1 Introduction

Trends in the provision of education in KZN will be examined in five broad themes:

- 5.5.1.2 quality of life in KZN;
- 5.5.1.3 the role of SAQA in KZN;
- 5.5.1.4 the provision of FET in KZN;
- 5.5.1.5 technical college education in KZN;
- 5.5.1.6 the provision of GET in KZN.

5.5.2.2 Quality of life in KZN

(a) Introduction

A basic human needs approach has been adopted in this study in respect of educational provision. Education is a basic human need, and as such it is premised that the other elements of basic human development have to be present and available before relevance in education can be expected to accrue. Ghai (1978: 6) states that any process of growth that does not lead to the fulfilment of these basic needs, or even worse, disrupts them, is a travesty of the idea of development. Trends in the quality of human life in KZN has therefore been included in this section as no meaningful relevance can be expected in education until the basic human need of our population has been satisfied (cf Ghai 1978:9; Ghai & Alfthan 1978, in Ghai *et al* 1978: 31 – 45).

(b) The economy of KZN and problems in the provision of basic human needs

- Introduction

KZN has experienced problems in the provision of basic needs. The Gross Geographic Product (GGP), the GDP for the province as well as a selection of other international economic indicators will be used to quantify trends in the KZN economy that will demonstrate a poor wealth profile.

- KZN and the rest of SA: the Gross Geographic Product and the Gini Coefficient

The Gross Geographic Product (GGP) is a measure of relative wealth. When expressed as an index, the GGP is an indication of the growth recorded by a sub-region relative to the growth in the aggregate economy. Table 5.10 compares KZNs GGP with that of SA, and the other provinces. Only the totals have been used. The factor incomes used the GGP for nine SA employment sectors.

Table 5.10
GGP (factor incomes) for SA's nine provinces : 1994
(R millions)

Province	GGP	Rank
Western Cape	53 874	3
Eastern Cape	29 049	5
Northern Cape	8 000	9
Free State	23 688	6
KZN	57 007	2
North West	21 252	7
Gauteng	144 359	1
Mpumalanga	31 175	4
Northern Province	14 158	8
RSA	382 562	

(Source: CSS 1996:20.3)

KZN ranked second to Gauteng in respect of its GGP. In respect of the provincial distribution of GDP (1995) as well (NVSC 1997:2-18). The 1995 distribution amounted to 15% of the national GDP, second in respect of Gauteng (38%). The provincial GDP per capita however, shows KZN to be one of the poorer provinces in South Africa, 50% of the population earning less than R840 per month (NVSC 1997:3-19). The Gini Coefficient for 1993 in KZN was 0,64. This means that income distribution in the province has been uneven (cf Luüs & Oberholzer 1994:22).

A coefficient of 0 means perfect income distribution, while 1 means a skewed income distribution, e.g. Denmark has a 0,21 coefficient, which indicates income equality. The World Bank (1997:223) records a Gini Coefficient of 0,58 for SA (NVSC 1997:3-20; World Bank 1997:223 & 253).

(c) South Africa, the World Economy and the Gross Domestic Product

The Gross Domestic Product (GDP) per capita is used to measure the average standard of living in South Africa. In Table 5.11 the SA national economic output is compared to that of a few selected countries using the GDP per capita indicator. The World Bank (1997:237) records a GDP of 136 035 (US\$ millions) for SA in 1995.

Table 5.11

Gross domestic products : selected countries (1995)

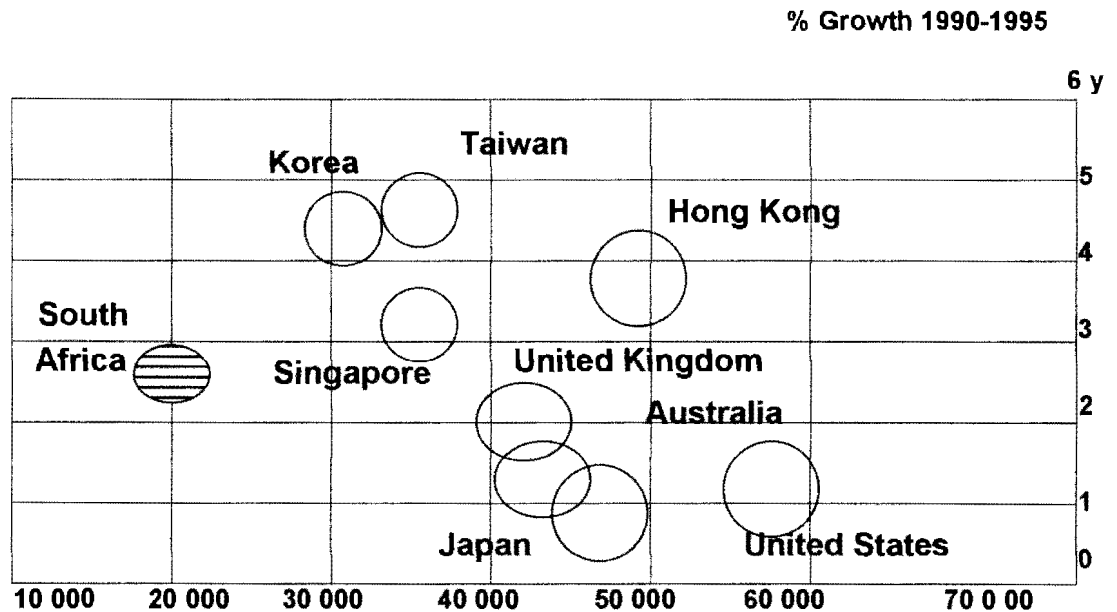
Country	GDP (US\$ millions)
South Africa	136 035
Hong Kong	143 669
Australia	348 782
Korea	455 476
United States	6 952 020
Japan	5 108 540

(Source: World Bank 1997: 237)

When the GDP is expressed as economic input per employee using the US dollar purchase price parity index (US\$ PPP) South Africa features fairly low down on the graph. Figure 5.4 compares the GDP per employee with the percentage growth from 1990-1995.

Figure 5.4

GDP per employee 1995 US\$ PPP



(Source: NVSC 1997:3-9; 8-6)

(d) Conclusion

- The economic trends above indicated very clearly the inter-relatedness of the KZN and the South African economy. Economic trends in the international markets have a direct affect on the performance of the KZN economy. KZN then is dependent on the SA economy for growth.
- South Africa's GDP per employee is low and the growth is in the moderate bracket (between 2 and 3%). If the economic input per employee in South Africa is low, ultimately there will be less "take-home pay" for everyone. World Bank (1997:215) data indicate that in South Africa 23,7% of the population live off less than \$1 per day (PPP). Borat and Leibbrandt (1996, in Baskin (ed) 1996:154-156) show that a large percentage of SA households live in poverty or in deep poverty, the majority of these being Black households.
- Educational irrelevance indicates a discordant relationship between education and the economy. Educational qualifications do not always ensure employment, but prevents job loses (cf Borat & Leibbrandt 1996:150). If the provision of education in a region is relevant to the needs

of the economy, the poverty / wealth profile ought to indicate an improvement in the quality of the lives of people.

- Labour market trends in KZN (as in SA) suggest curriculum irrelevance in the provision of education. A system of education must meet the human needs of learners in providing them with a basic education that will equip them for life. On leaving the formal education system the majority of school learners ought to enter a society where they will become integrated into the world of work. In SA however, Bhorat and Leibbrandt (1996:143) point out that a crisis of the gravest severity faces the labour market in terms of the high level of unemployment that persists in the economy. The most critical age group being the 16-24 age group. When analysed according to gender and population group the unemployment crisis targets "Black females in the 16 to 24 year age-group" (Bhorat & Leibbrandt 1996:146-147).
- The problem is particularly acute in the artisanal and semi-skilled occupations. The HSRC (1999:39) labour market survey, displayed in Box 5.8, made the following projections:

Box 5.8

Projected growth in artisan and semi-skilled occupations (1998 – 2003)

- a moderate growth in artisan employment; the greatest generation of artisan jobs being the building sub-sector; a moderate growth in demand for bricklayers and plumbers is expected;
- a substantial growth in the trade related sectors; artisans such as butchers, confectioners, and motor mechanics in the motor trade will be in demand;
- a moderate growth in the manufacturing industry is expected; while computerisation has replaced the skilled artisan, the introduction of the new technology requires the use of artisans such as electricians, and fitters and turners to maintain the machinery.

(Source: HSRC 1999:39)

- Negative trends in the economy have a reciprocal effect on learning programmes. It must be stressed again that training (and education) do not create jobs, however, skilled persons are better equipped to compete for

jobs as well as holding out opportunities for self-employment in the informal sector (NVSC 1997:5-1). An unskilled and potentially unemployed school-leaving population has a detrimental affect on the morale of upper secondary learners. They enter the market with negative perceptions. The relationship between the educational levels of learners in KZN and the skills profile of the KZN population will be examined for trends in the following paragraphs.

(e) Levels of education and the KZN skills profile

- Introduction

Data available for an analysis of the educational profile of the KZN (and SA) workforce show a very low percentage of the population with a post-secondary educational qualification. The converse therefore applies, i.e. the greater percentage of the economically active population only have a primary qualification (NVSC 1997:4-4). The Zululand sub-region has the greatest percentage of workers with no formal education (24,8%), while the PNE-sub-region has only 6,5% of its labour force with a secondary qualification.

- Average years of schooling

CSS-data (1996), also based on available sources from the period 1980-1991, show an improvement in the educational profile of persons 25 years and older, but still inadequate in respect of the middle-to-high skill requirements of employers. Tables 5.12 and Table 5.13 illustrate the poor educational profile of the SA population by population group and by province.

Table 5.12

Average years of schooling by population group (1980-1991) [Persons 25 years and older]

Year	Total	Africans/Blacks	Coloureds	Indians/Asians	Whites
1980	5,43	3,63	5,72	6,98	10,96
1991	6,86	5,63	6,94	8,78	11,02

(Source: CSS 1996:6.7)

Similar data is provided by the SAIRR (1996:97 – 99). The report states that in 1994 the highest level of education of 26 % of the population was Grade 8 – 11, 25 % had no education, and the highest level of education for 23 % of the population was Grade 4 – 7.

Table 5.13

Average years of schooling by province (1980-1991) [Persons 25 years and older]

Year	RSA	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North-West	Gauteng	Mpumalanga	Northern Province
1980	5,43	7,63	4,63	5,42	5,13	4,91	4,35	7,35	3,92	2,82
1991	6,86	8,45	6,65	6,25	6,50	6,48	5,75	8,59	5,34	4,6

(Source: CSS 1996:6.8)

- Educational peaks

All the population groups peaked at Grade 12 level, however when the Grade 12 and post-secondary levels of education are expressed as a percentage of the total persons per population group the following emerges (cf SAIRR 1995:100 – 109):

Table 5.14

Education levels : SA population groups (1996)

	Total	Blacks	Coloureds	Indians	Whites
Educational levels: Persons, 20 years and older, Grade 12 and above as a percentage of population group	26,0	16,8	17,4	37,3	66,8
Post-secondary qualifications only	3,2	1,3	0,8	3,4	12,0

(Source: CSS 1996:6.9)

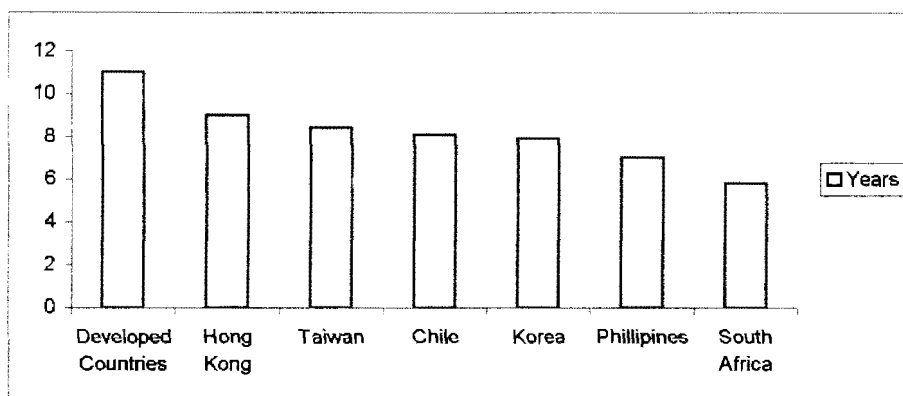
- More schooling

Bhorat and Leibbrandt (1996:149-150) point out that more schooling improves the earning power of the worker; more schooling also improves the chances of finding another job should he / she become unemployed. The authors hold that unemployment among university-degree holders accounts for 0,4% of

total unemployment, while those with no formal education accounted for 10,4%. The other significant trend raised by the authors is that among the Black population 13,6% of the unemployed possess a matric certificate. This accounts for the large group of recently matriculated and unemployed Black youths in the 16 to 24 age group. High youth unemployment among the Black population is then a very serious problem. International comparisons and average years of schooling in SA also indicate very low levels of education for the South African population. Figure 5.5 illustrates this comparison graphically.

Figure 5.5

International comparisons : average years of schooling : SA



(Source NVSC 1997:3-7)

The development of skills was demonstrated in the Japanese country data to be optimally based on good general educational foundations.

- Skills development in SA and KZN

High-level skills development require a higher level of general education. Critical thinking skills, abstract reasoning, and decision-making skills will be limited if the general education base is too weak. Table 5.15 summarises KZNs skills profile as per employment sector in 1991.

Table 5.15**Skills level per employment sector : (1991)**

	HIGH- LEVEL	MID- LEVEL	SEMI / UNSKILLED
Agriculture, forestry, fishing	0.47 %	5.63 %	93.90 %
Mining, quarrying	2.98 %	18.35 %	78.67 %
Manufacturing	9.24 %	39.08 %	51.68 %
Electricity, water	9.69 %	53.66 %	36.65 %
Construction	7.71 %	49.59 %	42.70 %
Trade, catering	11.06 %	69.60 %	19.34 %
Transport, communication	7.31 %	73.08 %	19.62 %
Finance, real estate	23.69 %	70.89 %	5.42 %
Services	13.75 %	70.63 %	15.62 %

(Source: NVSC 1997:4-4)

Very high percentages occur in the mid and semi / unskilled columns above, implying low levels of education. A gloomy outlook in respect of the quality of life for KZN is projected by the NVSC report. This is summarised in Table 5.16 according to provincial sub-regions.

Table 5.16**Skills profile for KZN sub-regions (projection for 2000)**

	Zululand	Thukela	Natal Mid	PNE	S Natal	East Griq	KZN
Low	279 048	200 048	230 480	612 185	113 243	10 680	1 445 290
Medium	172 251	174 932	212 758	1 071 992	80 276	6 280	1 718 833
High	25 200	19 975	34 850	157 621	12 501	873	251 070
Total	476 499	394 955	478 088	1 841 798	206 020	17 833	3 415 193
Low	59 %	51 %	48 %	33 %	55 %	60 %	42 %
Medium	36 %	44 %	45 %	58 %	39 %	35 %	50 %
High	5 %	5 %	7 %	9 %	6 %	5 %	7 %

(Source: NVSC 1997:4- 5)

❑ Conclusion

- From the above data it emerges that KZN would have a meagre 250 000 in the labour market with high-level skills in 2000, 1,7 million with mid-level skills, and 1,4 million with low-level skills. The Zululand, Thukela, and Southern Natal and East Griqualand sub-regions are particularly impoverished in respect of skills. The employment sectors most affected include agriculture, forestry and fishing, mining, quarry, manufacturing, and construction. It has already been pointed out that the composition of the employment sector is likely to favour skilled professionals and artisans. Restructuring in the labour market will favour the trade, catering and accommodation sector, followed by the finance and construction sector. From the above data it emerged that traditionally the agricultural sector remains outside the skills development debate.
- When South Africa's employment structure is benchmarked against the global community, it can be seen that our unemployment problem is one of the worst in the world and that this problem is partly caused by the lack of education and training of our employees.
- The educational profile indicates a similar pattern to the socio-economic profiles. The Black population group is the most disadvantaged in respect of levels of education. The socio-economic gulf between the PNE-sub-region and the other sub-regions of KZN applies to education as well.
- Low and mid-level skills account to over 90% of the KZNs labour force. Clearly this does not meet with the demands of the world markets referred to earlier in the chapter. Mid-level and high-level skills are required for South Africa (and KZN) to remain competitive in the markets of the world. The comparative data that emerged from this study s demonstrated quite convincingly that relevance in education is a critical factor in the development of mid and high level skills in any economy. No improvement in the quality of life in this region can be expected until educational levels have been improved.

(a) Introduction

The South African total quality system separates the functions of standards setting and quality assurance. The paragraphs that follow will briefly examine the functions of the total quality system that influences quality and relevance in educational provision. The critical analysis will be preceded by a brief examination of the functions of some of the structures and stakeholders of the NQF. The factual data will be illustrated by reference to some recent accomplishments. The conclusion will make brief reference to comparative data from Scotland in order to apply the data to KZN.

(b) Functions of NQF structure

❑ Standards Setting

The process of quality begins with standards setting and the registration of qualifications (SAQA 1999b:6). Standards setting functions include

- structuring of learning into twelve organising fields;
- to set standards *vis-à-vis* six stakeholder categories with equitable representation at a national level;
- to make recommendations of standards and qualifications to SAQA;
- to ensure quality of standards;
- to review registered standards.

(SAQA 1999a:7)

In order to set nationally recognised standards two structures are employed in the twelve organising fields. The case of agriculture and conservation will be used to illustrate the functions of the standards setting structures, the National Standards Bodies (NSBs) and the Standard Generating Bodies (SGBs). NSB 01 serves the agriculture and nature conservation organising field. In the September issue of the NSB01 newsletter the author states that “an important task of the NSB is to encourage the establishment of further SGBs in the NQF field. Initiatives to establish SGBs have been noted in the grain-milling sector,

conservation, horticulture, ABET and HET (Agricultural College and Technikon sectors) and the sugar industry..... the NSB has the task of identifying critical areas where SGBs need to be established to support a logical and planned qualifications framework” (cf *NSB 01 Update 1999:1*).

The following sub-fields were established for NSB 01:

- primary agriculture;
- secondary agriculture;
- nature conservation;
- forestry and wood technology;
- horticulture.

Each sub-field may establish an SGB, however, if the scope of a sub-field is too wide, associated SGBs may be established. Stakeholders include representatives from: enterprise, providers, unions, labour, the state and critical interest groups (cf personal interview, Juanita Wilkens, Assistant Director, Quality Assurance, SAQA, 14 December 1999; cf *NSB 01 Update 1999:2*).

Qualifications and Standards are recommended by the SGBs in NQF levels, Illustration 5.1 illustrates this point for NSB 03:

Illustration 5.1

NSB 03: Business, Commerce and Management Studies

National GET Certificate in Human Resource Practice (NQF level 1)
National FET Certificates in Human Resource Practice (NQF levels 2 – 4)
National Diploma in Human Resource Management and practice (NQF level 5)
Bachelors Degree in Human Resource management and Practice (NQF level 6)
Masters and Doctoral Degrees in Human Resource Management and Practice (NQF levels 6 to 8)

(Source: SAQA Update Volume 3, Number 2, February / March 2000:3)

❑ Quality Assurance

SAQA (1999a:6) states that the South African quality system perceives quality assurance, quality management and accreditation as a process. Quality assurance includes a system of linkages and feedback loops within the framework. In essence the framework makes provision for a dynamic relationship between the functions of quality assurance and the role of SAQA, the standard setting bodies, and the learners. Quality assurance includes:

- three sectors: economic, social and education and training;
- two principal organising bodies: accredited quality assurance bodies (ETQAs) and accredited learning providers;
- decision-making structures: i.e. national stakeholder representatives ensure public accountability, relevance and credibility.

(SAQA 1999a: 7; SAQA 1999b: 7)

Education and Training Quality Assurance Bodies (ETQAs) are:

- responsible for monitoring and auditing achievements in terms of national standards or qualifications;
- accountable to SAQA for the standards of learning achievements;
- responsible for assuring the quality of learning achievements;
- accredit providers.

(SAQA 1999a:7 ; 8 & 30)

Providers are

- accountable to the ETQAs for the management, development and delivery of learning programmes;
- responsible for ensuring the quality of the learning experience in respect of registered standards and qualifications;
- responsible for recording, researching and reporting the achievements of learners (SAQA 1999a:7).

(c) Critical Analysis

A quality system is responsible for the provision of clear pathways to relevant lifelong learning for all learners. The principles of quality as defined in the National Training Strategy Initiative in 1994 (NTB 1994:91 - 112; of Olivier

1998: 6 & 7) is adhered to by SAQA (1999a:5) will be used as indicators for the purposes of evaluating relevance in the South African (and KZN) quality system. Evaluation is in respect of: integration, relevance, credibility, coherence, flexibility, standards, legitimacy, access, articulation, progression, portability, recognition of prior learning, and guidance to learners. These principles are the quality indicators in respect of the desired national outcomes of the NQF (SAQA 1999a:6).

The SAQA system is complex. In many respects the system eludes the understanding of the average citizen and of professionals and educational managers (cf Jansen 1998:323). The above data on standard setting and quality assurance indicates that the South African total quality system is a very good system. International consultants from Scotland, New Zealand, Canada and Mexico have contributed to the efficiency of the system in respect of development, implementation and administration (cf Wilkens 1999). The provision of an outstanding total quality system for South Africa is a factor of high relevance for KZN. The critical question to be applied to this analysis is whether the provision of a system of quality assurance in KZN has made a difference to the basic needs of the learners. This study has defined the needs of individuals in a social and a personal context. The embeddedness of relevance in the socio-economic context of society has been repeatedly stressed in this study. The quality of human life is influenced either negatively or positively by the relevance of educational provision in a region. The bottom line is simply whether the factors of relevance have made a difference to the basic needs of individuals. In offering a fair critique of the South African total quality system the following critical observations are made in the light of the personal interview with Wilkens (1999). It is acknowledged that the South African total quality system is still evolving, however:

- no ETQAs were in existence at the time of the interview;
- quality assurance and quality initiatives in KZN schools have not become a reality; many newspaper reports bear testimony to this problem;
- will the SAQA system facilitate learning in KZN, and will it create greater access to life-long learning in order to improve the socio-economic circumstances of the people of this region;

- to what extent has the portability of qualifications become a reality in the working lives of ordinary citizens, and how relevant is the proposed record of achievement to the quality of human life in the region;
- learnerships were described by Wilkens (1999) as not being proper qualifications; when asked what they were she replied, "I don't know what you call it, but it is not a qualification, it is not registered on the NQF";
- short courses, of less than 6 months, are not registered on the NQF; this observation then emerges as a barrier to relevance in respect of the modularisation of learning; while modular learning exists in some secondary school and HET institutions in KZN this same relevance for life-long learning in the work-place does not exist ;
- company based training is currently not recognised; not much progress has been made in respect of on-the-job training (cf Wilkens 1999);
- the SETAs, Skills Levy Act of the Department of Labour do not currently appear to influence the provision of relevance in the education and training sector of the Department of Education;
- the responsibility for learnerships rests with the Department of Labour; the question of learnerships being offered through the Department of Education will be examined in greater depth later in this paragraph.

(d) Conclusion

The Scottish system was discussed in Chapter 3, and the development of the system was examined in the context of relevance. The Scottish country data demonstrated a system that was accessible to all citizens, with clear pathways to learning *vis-à-vis* the partnership that was forged between the departments of education and trade and industry. The Japanese country data further indicated the high relevance of life-long learning, and the integration of company-based learning programmes with the formal education sector. From the above critique the problems of fragmentation in educational provision continue to persist in KZN society. The system of quality assurance has not addressed the issues raised above in respect of: integration and standards, flexibility, access and portability.

5.5.2.4 Further Education and Training

(a) Introduction

The FET band will be evaluated for relevance in KZN in respect of provision at the senior secondary school the technical colleges, and in respect of learnerships.

(b) Senior Secondary School

□ Introduction

FET is provided directly (or via distance education) at the senior secondary school level (DOE 1998a:4). Consequently Grades 10 – 12 fall within the FET band of the NQF; hence FET policy applies to the senior secondary phase of secondary schools in KZN (cf DOE 1999:15). This policy envisaged significant changes in respect of the provision of relevance in educational provision and human resource development for SA and KZN youth (DOE 1999:6). From this perspective relevance ought to be reflected in the learning programmes of senior secondary institutions.

□ Senior secondary learning programmes and the problems of relevance

Learning programmes offered in KZNDEC senior secondary schools may be conveniently grouped into three models:

- the traditional six subject matriculation learning programme model: *[with minor variations between institutions]* e.g. (1) George Campbell Technical High School: (i) English (ii) Afrikaans (iii) Mathematics (iv) Physical Science (v) Technical Drawing [all compulsory] (vi) and one technical elective [Higher Grade Technika: Electronics, Electrical, Mechanical: Standard Grade Technical: Electrician Work; Fitting and Turning; Motor Mechanics; [time allocation: an even distribution between the six subjects]; (2) Pinetown Boys High offers a wider choice of 'traditional' subjects from a general learning curriculum that includes choices from vocationally

orientated electives, e.g. (i) English (ii) Afrikaans (iii) Mathematics (iv) Physical Science [all compulsory]; (v) one subject from: Geography; History; Art; Technika Electrical; Technika Mechanical; Technika Electronic; Fitting and Turning; (vi) one subject from: History; Biology; Accountancy; Technical Drawing [time allocation: an even distribution between the six subjects]; (cf Correspondence: George Campbell Technical High School, 24 March 2001; Pinetown Boys High, 26 March 2001);

- the remedial school model: Kenmont High School and Open Air High School (Remedial High Schools) (i) English (ii) Afrikaans (or Zulu) (iii) Travel and Tourism (iv) Hotel and Catering (v) Computyping (vi) Business Economics [a limited choice exists in respect of Mathematics, Computyping; Biology, Physical Science, Technical Drawing and Accounting]; [time allocation: even distribution between the six subjects]; (cf Correspondence: Kenmont High School, 30 January 2001; Open Air High School, 10 December 2000);
- the special school model: Westridge Special High School; *[up to Grade 10 only]* (i) English (ii) Afrikaans (iii) Mathematics (iv) (v) (vi) selections from traditional academic electives as well as the technical electives [Hairdressing; Home Economics; Bricklaying and Plastering; Computyping; Motor Vehicle Repairing; Sign Writing, Welding, Panel Beating etc; time allocation: approximately 50 % of teaching time allocated to academic subjects and subject theory and 50 % for practical training in the electives]; (cf Correspondence: Westridge High School, 21 June 2000).

The traditional model provides for the majority of KZN senior secondary learners; minor variations occur in some secondary schools (cf personal interviews, Noeleen Levine, 12 April 2000, Vocational Guidance Educator, New Forest High School; Nami Mchunu, 25 April 2000, Acting Chief Education Specialist (Vocational Guidance) South Durban Region). The Remedial High Schools and the Special High Schools are for ELSEN learners, and admission is strictly regulated by the province, *vis-à-vis* rigorous psychological screening. The problem of relevance in educational provision was encapsulated in a

remark made during a personal interview, Brendan Lambrick (General Hotelier, 12 April 1999), “ these types of schools are for special children with problems only; why do you have to struggle in your school work before you are able to go to this kind of school; surely we should all have an opportunity of choosing to do a practical matric”.

The observations made in the above paragraph as well as the Lambrick-comment are corroborated by excerpts from the personal interviews conducted with Levin (2000); Mchunu (2000); Tanya Daya and Patricia Meyer (3 May 2000; First Education Specialists, North Durban Region); and Bongani Nzimande (2 May 2000, Vocational Guidance Educator, Ogwini Territorial High School (COMTECH) , Umlazi).

Box 5.9

Extract from personal interview with

Nami Mchunu

Acting Chief Education Specialist (Vocational Guidance) South Durban Region
25 April 2000

They need a lot of career guidance these days to tell them what they can do; it is still the case that many Black children follow a general curriculum leading to a matric; not all our children are academic but if some sort of skills training or vocational training is introduced earlier on in their school careers then by the time they get to Grade 12 and they are about to leave school then they will have a skill that they can take with them into the working world; they will be able to make a living out of that.

The problem is not what happens to the 50% who do not pass their matric but what happens to the 50% who do pass their matric; those who get it they also go down the drain, because there are no jobs for them and the crime rate goes up all the time; only a very small percentage is able to go to a tertiary institution; it is really frustrating trying to talk to those who are doing matric now, when we try to tell them to study we are told that matric will not take them anywhere, it is worse for those who have brothers and sisters and who have seen that once they have passed their matric they just sit around at

home. The perception exists that matric is irrelevant. Yes, it is irrelevant to the job market.

We should start on another track, we should try to get those who are struggling at school to consider another track, even in the primary school; and the moment we in South Africa start thinking along these lines then I think we in South Africa will have taken a positive step forward; I've been to Germany and I've seen how people can afford to leave Grade 4 (the *hauptschule*) and become trained in different types of skills, like electrical work, plumbing and when they leave [school] in Grade 9 they will have some skills to make a living out of; the crime rate will go down if people are able to use their hands to make a living out of.

We are very understaffed in this unit; we would never cope [in an ideal situation] even now we cannot reach all the schools; not all schools have guidance councillors; some vocational guidance councillors in our high schools do it voluntarily, they also have to teach other subjects and they only do it in their spare time.

Most of our technical colleges don't offer learnerships; we need to change the curriculum, and we must offer learnership courses, we have a situation of bums on seats, because the children are only there because they have to be there but they are learning nothing. But the schools must first find out from the industries what they need; we must start with industry; not education; and when they come out from the technical colleges the industrial sector will grab them because they are qualified; but we need a facilitator in the field to make it happen; the present situation is pathetic.

Box 5.10

Extract from personal interview with

Bongani Nzimande

2 May 2000

Vocational Guidance Educator

Ogwini Territorial High School (COMTECH) , Umlazi

We have 1650 learners, 48 teachers, 8 administration staff, and two deputy principals; the subjects we teach include the general subjects, commercial subjects, science, electrical science, metal work and woodwork, technical drawing, technical home economics; everyone does maths; a choice exists between Afrikaans and art.

We are a vocational high school yes, our name will soon change because we were called a combined technical high school when we combined the general with the vocational subjects; once they leave us they can go to a technical college, usually the Umlazi Technical College, and but they can also go to the colleges in town; some go to the Mangosutho Technikon or even to University.

Toyota has helped us to build some workshops for the motor mechanical section they have also sponsored some machinery and a woodwork and metal workshop. We have been discussing the introduction of learnerships into the school, we are not sure what will happen, but we think that the introduction of learnerships will be for the community only, this is only in the field of bricklaying and motor mechanics, but it should be for the learners because there is a need for learnerships in Grade 12.

The children are excited about doing technical subjects. We don't have any admission criteria, we have to take them from the area, and sometimes we see that some children are not suitable and we have to send them somewhere else. Their background does help them to succeed in their subjects. You know that in Denmark the children do woodwork as early as Grade 3, as well as other technical subjects, if they only start when they come to this school it is sometimes too late. We need to give more technical education in the primary school.

Yes, I think we are relevant, but the problem is that there are not too many schools like this one. I think there is another school like ours somewhere in Umlazi and of course the COMTECH. I think there is another school like our one in KwaMashu.

Our classes are large, 60 to 65, this is especially a big problem when we teach the languages and Mathematics; if we have to do OBE control will be a big problem; our classrooms are too small. There is a big need for a fulltime guidance teacher. I am the only one who does vocational guidance at this school, and I still have to teach my subjects as well; I will be very happy if they could find a full-time guidance teacher.

(c) Critical analysis

❑ Levin, Daya & Meyer

The remarks of Mchunu and Nzimande were corroborated by the interviews conducted with Daya & Meyer (2000) and with Levine (2000). New Forest High School (a former House of Assembly (Model C) school) introduced Mercantile Studies in conjunction with the Maritime Association of KZN. All interviewees in the vocational guidance cluster of interviews agreed that the vocational guidance councillors were restricted to internal functions and that given their classroom teaching responsibilities there was not enough opportunities for them to develop their external functions with other providers of FET in the field of work and business and industry (cf Levine (2000); Mchunu (2000); Nzimande (2000)). The critical problem lay rather in the provision of vocational guidance educators in all schools in order to develop relevant insights into learning programme selection and future education and training in the FET band. "We are working relevantly, but not in a broad enough perspective, we are not reaching our learners with our programmes, we are working intuitively, but not practically; the children we are not reaching are mostly situated in the rural areas; but more than that, many children are immature in the high school, that is a major problem, and they need to be at school, but they are not getting a technical or a vocational education, we tend to lose them" (Daya & Meyer 2000).

❑ Senior Secondary Relevance

Vocational Secondary Schools in the Israeli, Russian, and German sense of the word do not exist in KZN. Private providers of technical education (e.g. as

supported by ORT) do not exist either. The learners at the senior secondary level do not have a variety of options to choose from. The George Campbell mission statement declares that the school aims to prepare learners for “adult life in a technologically advanced society” and that the post-school opportunities will be in respect of admission to “universities, technikons.....and because of the solid technical grounding that our learners receive, they are in demand in the industrial sector” (cf correspondence: George Campbell 2000:1). The Kenmont and the Open Air Remedial Schools are *not* open to the majority of senior secondary learners. Mchunu (2000) and Daya and Meyer (2000) state clearly that their units are not able to reach all learners with learning problems. This applies particularly to learners in the rural areas. The majority of learners do not plan to enter higher education and would welcome an opportunity to pursue a vocational learning programme. This lack of variety may be construed to be a serious barrier to relevance in educational provision in KZN.

☐ The Vocational Guidance Educator

The emphasis appears to fall on the provision and role of the vocational guidance educator in the senior secondary school. The problems appear to be two-fold, firstly, the provision of vocational guidance educators in all schools, particularly in the rural areas and secondly, their external roles as link-persons in respect of the placement of learners in appropriate institutions of learning or in the workplace. The placement and correct functioning of these educators are critical to the success of FET in the region.

☐ Learnerships

Given the demands of the workplace for mid to high-level skills and the high-standards of globalisation the problem of producing qualitative artisans becomes a critical issue. Additional tuition in general subjects, as well as a theoretically sound basis for the practical component of learnerships has been lacking in the past. The registration of learnerships has declined in KZN and in SA. Technical colleges are not offering learnerships to the same extent as was the case in the past. The critical question is that a learnership void has been

created in the South African (and KZN) labour market. The senior secondary school has the potential to address this void.

☐ Partnerships

These initiatives are relevant, but there are too few examples of partnerships between secondary schools and industry in respect of learning programme innovation. A New Forest High School partnership resulted in Marine Studies being offered as a subject for learners in the senior secondary phase (cf correspondence: New Forest High School 5 April 2001).

☐ Learning Programme Relevance as related to population density

Diversity in learning programme provision can only be implemented if there is a demand. Demand is determined by student enrolment. Relevance is thus dependent on enrolments. Enrolment in the secondary schools of the formerly disadvantaged regions of KZN are high. These high enrolments are frequently prevalent in the densely populated cities of KwaMashu and Umlazi, situated to the north and the south of Durban. No learnerships appear to have been implemented in the senior secondary schools, spokespersons for these schools state that “we are fighting for the recognition of N1, N2, and N3 learning”. The critical question remains, why do secondary and tertiary institutions have to “fight for recognition”? The legal framework exists, and so too the demand for relevance.

☐ Early Selection

The respondents indicated that the introduction of skills training in the schools of KZN is too late. The comparative data indicated that young learners can be successfully introduced to vocational education as early as the fourth grade. The schools in the KZNDEC phased out the woodwork and the other practical components of the curriculum due to financial constraints. Relevance in the primary school and the junior secondary school does not appear to be a reality in the same way as witnessed by some of the respondents in Germany and

Denmark. Not all researchers however, are in agreement with this view (cf Fisher 1993: 77).

❑ The vision

The vision for FET has been clearly outlined in the Green and White Papers (cf DOE 1998a:4 - 5;29; DOE 1998b:6 & 28 ; DOE 1999:2). The problem appears to be one of bridging of the gap between the formulation and documentation of a vision and the realisation of the vision at grassroots level for ordinary people. The Ministries of Education and Labour have a joint responsibility for providing education and training pathways for young people and adult workers, and for developing more effective linkages between training and work. The introduction of learnerships in FET institutions is an important development. For this purpose, FET institutions will be advised on how to access programme funding through the Sectoral Education and Training Authorities (SETAs) and the National Skills Fund. No clarity on co-operation with Labour exists at present. Part-time secondary school models do not appear to exist in KZN.

❑ Conclusion

As stated above the right things seem to be happening at the national and provincial levels, particularly in respect of the provision of an enabling legal framework, yet relevance does not appear to accrue to the providers and consumers of relevant education. The senior secondary level of schooling is a critical stage of schooling. Some learners have already dropped out of school or they drop out during the senior secondary stage. It is also during this stage of schooling that negative perceptions about the relevance of schooling are formulated that in turn has a negative influence on the school-to-work transition process. Irreversible problems have already become manifest in the learning of many learners in the primary school. It is apparent that the South African system of total quality has not been addressed in educational provision in KZN. The two surveys investigated some of these problems and will be evaluated in the paragraphs on critical issues.

(c) Learnerships

- Introduction

In his opening remarks to the launch of learnerships and certificate presentation ceremony of the KZN Skills Development Pilot Project, the Minister of Labour, Mr Membathisi Mdlalana commented that work readiness is what was needed, and that learnerships, like the apprenticeships before them was still based on the idea that spending time in a real life workplace was a critical part of learning. The Minister commented that this was not a new idea, "traditional societies in our country passed knowledge on from generation to generation in similar ways, pot-makers; beadworkers ironworkers and thatching specialists all learnt from someone else in the community who, in turn, had learnt from someone else in the community.... sadly all too often this chain was broken with the land influx policies of the past" (cf DOL 1999:1-3). The registration of learnerships and the award of certificates are primarily under the control of the Department of Labour.

In SA the old apprenticeship system was shrouded in controversy and racial bias (cf De Villiers 1948:144 – 161). Other more recent historical sources point to a long history of discriminatory legislation that finally culminated in the gradual erosion of the system (Lundall 1995: 4 – 15; Kraak 1999e, in Kraak & Hall (eds) 1999: 152 – 153). The German country data indicated the integral role of the apprenticeship system as a means of education and training in Germany. The Israeli Apprenticeship Law makes provision for compulsory transfer to an apprenticeship should a learner not be ready to enter the labour market and drop-out of school prematurely. The 'safety net' policy as practised by Germany and Israel ensures that a period of compulsory education and training occurs before entry to the work-place. In both Germany and Israel the 'safety net' policy implies relevant inter-ministerial dialogue between Labour and Education. The data below will demonstrate that despite the transformation within the Department of Labour in the post -1994 era and the new respectability attributed to the learnership system registered learnerships continued to decline after 1994. This decline is paradoxical given the problems of skills shortages experienced by the province and the country. The critical

analysis will propose however, that potential factors of relevance for educational provision in the province do exist (cf Kraak 1999a, in Kraak & Hall (eds) 1999: 17 – 18

- The Current Situation

The current situation is summarised in Tables 5.17, 5.18 and 5.19. The three tables clearly reflect the decline in the number of newly indentured apprenticeships registered, the number of apprentices successfully completing their contracts, and the overall pass rate for trade tests.

Table 5. 17
Newly indentured apprentices (SA) 1990 – 1994

Year	1990	1991	1992	1993	1994
Total	9054	10 758	7492	6247	5002

(Source: CSS 1995:3.50)

Table 5.18
Number of apprentices who completed their contracts of apprenticeship (1983 – 1994)

Year	83	84	85	86	87	88	89	90	91	92	93	94
Total	9149	11306	12933	11769	10686	8578	5138	7132	6987	5212	9362	3960

(Source: CSS 1995:3.53)

Table 5 .19
Trade test results of apprentices (SA) (1990 – 1994)

Year	1990	1991	1992	1993	1994
Trade tests undertaken	8052	8545	9983	10 714	6793
Passes	4319	4527	5588	6408	4153
Percentage	53,6	52,9	55,9	59,8	61,1

(Source: CSS 1995:3.51 – 3.52)

The decline in apprenticeships was particularly marked between 1991 and 1992. There was a decline in most industrial fields, however, the decline was particularly marked in the fields of aerospace, automobile, electricity supply, government sectors, the motor industry. An interesting increase was noted in the electrical contracting industry.

(c) Critical Analysis

- Introduction

Conclusions drawn from the above statistics are worrisome. The sharp decline in the number of indentured learnerships is evident from the data in Table 5.17. The decline in the learnership sector is further corroborated by the very mediocre pass rates for the trade tests (cf Table 5.19). The number of apprentices who successfully completed their contractual period also declined. The statistics are in fact further indicators of the collapse in the youth labour market in KZN. The focus of the critique falls on the problems of the youth labour market and the accumulation of decades of poor articulation between education and labour. The role of the senior secondary phase of schooling becomes the focus of closer scrutiny and critical analysis.

❑ Critique

- This problem was discussed earlier in this chapter (cf DOE 1998b:6 – 7; Kraak 1999a:18). It may be pertinent to repeat the facts, viz that 20% (i.e. 3 million) of SA's economically active population is highly skilled, while 805 (12 million) is semi-skilled, unskilled or unemployed; in summary South Africa's skills profile compares poorly with other middle income economies (DOL 1997: 6–8; DOE 1999:7). It is generally agreed that the apprenticeship system of the old apartheid regime collapsed. This seems to be linked to the transition in the apprenticeship labour market (Kraak 1999e:152); the same author states that during the early 1960s to the mid 1980s apprenticeships were a regulator of the labour market, however, by the late 1990s the apprenticeship system was all but dead. This decline must be linked to the problems experienced by the South African and KZN

labour market. Further dysfunctionality in the labour market, according to Kraak (1999e:152 – 154) may be attributed to the unresponsiveness and the passivity of the technical colleges. These colleges seemed to move further and further away from their main tasks, viz the training of apprentices (i.e. from 1950s to the 1970s). Lundall (1995: 1) states that German superiority does not lie at the level of higher technical and education but at the level of working class instruction. If the technical colleges are no longer providing for the technical working class youth and the Department of Labour is not coping or does not manage educational institutions for re-training (cf personal interview, Louse Moore, Department of Labour, 5 May 1999), then a void in the training sector for working-class youth is implied. The conclusion reached then is the senior secondary school does hold some possible potential in respect of re-introducing relevance in educational provision the working class youth of KZN.

- Education and Training is the responsibility of NSB05. All qualifications and standards in education and training in South Africa and KZN will be developed by NSB05. Skills facilitators will be appointed in KZN. Some schools are in terms of the Skills Development Act of 1999 required to pay a levy to the Skills Development Fund. The SETA for NSB05 will oversee the entire process. This is the stated practice (cf correspondence ETDP • SETA to all providers 6 March 2001). In their White Paper the DOE (1998:8) stated that “the introduction of learnerships in FET institutions is an important development. For this purpose, FET institutions will be advised on how to access programme funding through Sector Education and Training Authorities (SETAs) and the National Skills Fund”. The functions of the SETAs will therefore include the establishment of learnerships and the monitoring of quality in education and training in NSB05. The DOL (1997) devoted an entire chapter to the re-introduction of learnerships in its Green Paper. The senior secondary school falls into the FET band, the SETAs and the NSBs control this sector as well as the other providers of FET(cf DOL 1997;25 – 38). The potential for relevance in the promotion of learnerships at senior secondary level of schooling is therefore a distinct possibility. The DOE (1990:41) (i.e the Walters Report) made reference to the advantages of having the vocational system under

the control of the education department. The same author remarked that it would be possible to build up a reasonably coherent number of technical courses; the pupil's education would not be prematurely fixed exclusively on skills within a specific occupational field.

- Reference is been repeatedly made to the fact that two central government departments are involved in the provision of FET. Tensions between national and provincial governments in the provision of relevant education exist (NCFE 1997:42). The issue of shared responsibility for learnerships emerges from the country data as being somewhat problematic. The critical question hinges on the extent to which articulation between the two departments of government can become a reality in everyday life (cf DOE 1998b:24).
- This study has indicated that in the light of globalisation preparation for work requires a strong theoretical (or liberal education) learning foundation. The value of the liberal education dimension emerged as a factor of high relevance in the Japanese country data. There is no denying the superior value of the provision of education in schools and colleges in respect of theory and general education (cf NCFE 1997: 44 – 45). Production is the prime function of the company, while narrow job - training is not the prime function of education. Globalisation however, requires more general education and theoretical insights. The emphasis ought therefore to shift to those who are professionally enskilled to educate *and* train. The senior secondary school has not been employed optimally in respect of vocational education for the workplace, and can be utilised to a far greater extent as preparatory institutions for the workplace. Globalisation requires more emphasis on problem – solving and the theoretical issues of technology that can serve as the basis for future development of high technological skills (cf Kraak 1999a: 21 – 25).
- Conclusion

The collapse of the KZN youth labour market created a crisis in the economy of KZN. This problem has been compounded by the stringency of globalisation

in respect of the demand for high – technological skills in the world markets. Simultaneous to the global developments has been the decline of the registration of learnerships with the Department of Labour. The void has not been filled by another form of qualification for the KZN working class majority. This chapter has demonstrated repeatedly that problems devolving to the education sector of KZN have their origins in the unacceptably high levels of unemployment in the province. This applies particularly to youth unemployment. The informal sector has grown. The legal framework for the provision of relevance is in place, so too the structures for delivery. The problem of relevance appears to be one of translation of legislation and policy documents into reality in order to meet the needs of the individuals in communities.

5.5.2.5 Technical College Education

(a) Introduction

The problem of relevance in the provision of education in the technical college sector relates to the history of racially divided education in South Africa, and in KZN. Very little has been written about the provision of technical education for the Black, Indian and Coloured population groups. Available data rely on a core of extant sources (cf Malherbe 1925:424 – 426; De Villiers 1948: 5 – 13; 232 – 260; Behr & MacMillan 1971: 393; 414; 436; Malherbe 1977: 188 – 199; Behr 1978: 125 – 126; Behr 1988:138).

(b) Racial division in technical and vocational education

Orr (1932:1) states that the origin of technical education in South Africa can be traced to the discovery of diamonds in Kimberley. Before 1871 South Africa could not lay claim to being an industrial nation. In the same reference, the author notes that the development of technical education spread from Kimberley to Johannesburg and thereafter into the universities in respect of the training of engineers, the growth of the apprenticeship system and to the growth of the technical colleges. The provision of technical education remained racially divided and fragmented for many decades. It was probably

these divisions that prompted De Villiers to include detailed data in a chapter on the provision of vocationally orientated education for the “non-Europeans” in his report (De Villiers 1948:232 – 269). The author stated that it was not part of the terms of reference of his Commission to investigate or report on the provision of education and training for these population groups, however, during the investigation it was realised that the education of this section of the community formed an important part of the whole national scheme of education. The Commission undertook to address this aspect in the report. De Villiers admitted that he was not able to include as much detail as he would have liked to (De Villiers 1948:232). Technical and vocational education in South Africa and KZN continued to be racially racially fragmented after 1948.

In his summary to the provision of vocational education in South Africa Wulfsohn (1959:130 – 131) made similar observations to De Villiers:

“Treffend in die Suid-Afrikaanse bedeling ten opsigte van beroepsonderwys is die verdeelde beheer en die lae toelatingspeil tot betreklik eng-gespesialiseerde kursusse in hoër tegnies, hoër handel - en hoër huishoudkunde.....’n tweede leemte is die gebrek aan doelgerigte voltydse en deeltydse tegniese kursusse van bo-senior-sertifikaats peil. Daar is ’n menigte verbrokkelende kursusse wat in noue rigtings spesialiseer. Maar die klein aantal gevorderde sertifikate wat verwerf word, toon dat selfs dié poging om die smaak en willekeur van die individu te behaag, nie suksesvol is nie.....wat inrigtings en fasiliteite betref, is die getal kolleges en skole nogal betreklik hoog met die blanke bevolking waarvoor voorsiening gemaak word”.

Provision of technical and vocational education in the former Natal was equally divided along racial lines. In his history of the Natal Technical College Rees (1957:146f) concentrates only on the provision of education for the White population group. As in the other sectors of what is now known as the FET Band, the technical college sector reflected the inequities, the imbalances and the injustices resulting from the dominant ideology of the Nationalist Government. Prior to 1994 technical colleges effectively excluded black students until the creation of ‘black’ technical colleges and technikons (cf Bellis 1998:156).

Developments during the early 1990s focused on non-racial policy processes that continue to transform the technical college sector. Extracts from a personal interview with Brian Cadir (Principal, Swinton Road Technical College, 1 June 2000) and the reference to recent documents will demonstrate that factors of relevance continue to elude the providers of technical education in KZN.

Origins of the barriers to relevance may lie in our racially divided history, but also in the problems associated with administration and funding of technical college education. An early comment made by Spencer (1937: 57) as a result of a commissioned investigation into the functioning of technical colleges in the Union is of interest, "I am satisfied that the grant [to the Durban Technical College] has been inadequate, it is difficult to see how the amount of the grant has been determined....there are no heat engine rooms, at present the laboratory is also a motor demonstration room and is used as a classroom as well, this is a hopelessly inefficient arrangement, and should at once be remedied". The problem of funding and equipment became a re-curring theme over the next six to seven decades in KZN.

Other reports and publications continued to stress the need for more technical education in South Africa (cf Van Zyl 1965: 3 – 5). The HSRC (1981a:138 – 142) Investigation into Education (Technical and Vocational Education) came out in strong support of vocational education at the tertiary, "mixed secondary" and senior secondary vocational school levels (cf HSRC 1981b:25 - 26). At this early stage reference was made to the relevance of the Community College, as well as five-year colleges that would commence at the beginning of Grade 9. These institutions would be responsible for the education and training of mid-level technicians (HSRC 1981b:26). Rautenbach made vigorous attempts at changing the prevailing attitude towards vocational education during the 1970s and early to mid-1980s. His numerous submissions and articles testify to his commitment to relevant education in South Africa (cf Rautenbach 1981b, in HSRC 1981b: 95; and personal interview Rautenbach 10 April 1999). Scepticism of the motives of those who advocated relevance in education during the apartheid era retarded meaningful developments in this field almost indefinitely. The HSRC (1996)

report on the development of technical college education in South Africa was one of the first post-apartheid investigations into the relevance of this type of education. The negative attitude towards relevance in South African education changed at this point in history (cf HSRC 1996:xii).

(c) Factual data in respect of Technical Colleges in KZN

There are 24 technical colleges in KZN. The colleges are grouped into state-aided and state colleges. Private providers of technical education exist. The difference between the state and the state-aided colleges is reflected in the funding strategies that apply as well as governance of the colleges. In respect of staffing, 93% of technical college staff is full-time. Five vocational fields are offered by technical colleges in KZN. Table 5.20 summarises these fields together with the sub-fields and the percentage of colleges offering learning programmes in the respective sub-fields.

Table 5.20***Learning Programmes offered in KZN Technical Colleges***

Vocational Field	Sub-field	Percentage of colleges' learning programme offerings
Engineering	Civil	57%
	Mechanical	78%
	Electrotechnical	96%
	Industrial	39%
	Motor	74%
Business	Secretarial	100%
	Business Studies	100%
	Accounting	100%
	Public Administration	25%
Social Services	Educare	100%
	Care of Children	17%
	Visual Arts	50%
	Performing Arts	33%
Utility Industries	Food	40%
	Hairdressing	60%
	Tourism	40%
General Education	NSC Courses	100%

(Source: Hall 1999a:72)

The factual data indicate that 24 colleges provide technical education for a province of 8,3 million inhabitants. Five vocational fields are offered. Hall (1999a:76) makes reference to the large number of instructional offerings. The vocational fields are nevertheless restricted to the vocational fields as indicated above. Popular choices, according to the table above, are in the electrotechnical fields and in the fields of business and office management and educare. These statistics are somewhat misleading as over 70% of all instructional offerings are in the engineering field with the utility industries accounting for a mere 1% of all instructional offerings (Hall 1999a:73). General education courses are usually compulsory. The programmes follow the criteria for the national certificates (N1 - N6). These certificates are offered in the FET (N1 – N3) and in the HET (N4 – N6) band. Very little progress has

been made in respect of “non-national” and “non-formal” instructional offerings. The author concludes that technical college learning programme provision is a complex matter (Hall 1999a: 72 – 73). The duration of courses varies from 3 months to 3 years. The geographical situation of technical colleges in KZN was questioned by (Kraak 1999e :162 – 165).

When the KZN basic factual data is briefly compared to that of Scotland, and in particular to the Falkirk College (cf Chapter 3 para 3.4.4.2(a)), the following emerges: with a Scottish population of just over 5 million inhabitants, Scotland has 46 FE colleges, some situated in remote rural and island regions, with an enrolment of 400 000 for the 1998/99 academic year. The popular Falkirk FE College enrolls over 16 000 students per annum. Full-time, part-time and flexi-time learning and degree courses are possible. Degree programmes do not reduce the college’s commitment to education and training. At all levels of learning a wide range of subjects are included. The emphasis falls on combining flexible learning with a variety of learning methods. Life-long learning through education and training becomes relevant to community needs (Falkirk 1999:2).

(d) Critical Analysis

- Administration and officials

The authors of the 1996 HSRC investigation into technical college education commented on the high percentage of non-returned questionnaires (i.e. 41,4 % response)(HSRC 1996;xiii). The same report identifies 19 technical colleges for KZN (HSRC 1996: Map 1), while the 1998 report identified 25 colleges! (Hall 1999a:69 – 70). The authors of the 1998 HSRC investigation into the provision of technical education in KZN refer to their difficulties in acquiring accurate data from at least four colleges in the province. They concluded that despite all their efforts reliable information on staff qualifications, student numbers and success rates was not forthcoming from four colleges. The authors concluded that the administration of certain colleges was seriously undermined by the lack of up-to-date and correct data. It was obvious then that in some colleges accurate information was simply not

available and that a number of college principals and senior administrators were not comfortable with the interpretation of statistics (Kraak & Hall 1999:11 – 12).

This researcher feels obliged to report that difficulties in obtaining access for purposes of this study were not experienced with the colleges but with the administrative staff of the directorate. Appointments made were not kept, excuses offered were along the lines of “I have an emergency” or “I have to go to Pietermaritzburg”. Other excuses included, “phone me in three weeks time” or “I can’t talk now, it is not convenient”. Officials operated from their homes. Members of the official’s family answered telephone calls, or the researcher was directed to a cell phone. One official re-located from his home to Ulundi during the data gathering phase of the study, increasing the number of officials in the directorate in Ulundi to two. Persons who were not fluent in English answered the telephone in the Ulundi office. Telephonic protocol was positively unprofessional. Letters to the directorate remain unanswered to this day. Communication with the administrative structure of the FET directorate in KZN was thus very difficult. Kraak made specific reference to this inefficient and inept bureaucracy (Kraak 1999c, in Kraak & Hall (eds) 1999: 131).

- Cadir

It must be stated that FET in KZN is not limited to the technical college sector (cf DOE 1998:4), however, technical colleges are potentially the most relevant providers in the entire FET band. The Cadir-interview was comprehensive, a detailed report is presented in Box 5.11 below. This interview was accurately supported by the personal interviews conducted with technical college principals Hans Labuschagne (19 July 1999) and Gavin Chapman (30 September 1999). Cadir’s views are also thoroughly corroborated by the findings and conclusions of the HSRC (1999) investigation under the leadership of Kraak and Hall (cf Kraak 1999e:148).

Box 5.11

Extract from personal interview with

Brian Cadir

Principal

Swinton Road Technical College

1 June 2000

Introduction

The Swinton Road Technical College is situated in the heart of the heavy industrial area of Jacobs that surrounds the Durban Airport. The college principal, Brian Cadir has more twenty years experience of technical education in more than one province. When the question of relevance was put to Cadir he elaborated on the major problems faced by the colleges in KZN today as well as some of the 'contaminations' (i.e. barriers to relevance).

Relevance

- (a) the colleges don't know where they stand; they are provincially controlled but the learning programmes are determined at national level; in other words these are not the programmes of the region but the programmes as determined by policy-makers beyond the borders of the province;
- (b) the colleges fall into the further education sector, but the higher education sector has seen a gap in the market and has determined to offer similar programmes at the level of higher education; they are therefore in competition with the technical colleges; the technical colleges were supposed to be a means whereby certain students could *enter* higher education;
- (c) the third problem is the hierarchical structure of the KZN administrative structure; there are only three full-timers in the entire province operating in the FET sector; there is the director, Mr Ingram who is situated in Ulundi, Mr Prinsloo (Durban) and Mr Nortje (Northern Natal); now recently Dudu Dlamini has been seconded to the FET sector as a co-ordinator, she does not have a clear job description;
- (d) there are problems with the administrative structure in the province; there is no support structure for us technical college principals as well as for the

director Mr Ingram for himself; he uses the committee of technical college principals as a steering committee for the province but from the province and the department there is no clear protocol and hierarchical structure.

Contaminations

- (a) what is disconcerting is that some colleagues have become impatient and they think that if they take matters into their own hands they can make things happen; their intentions may be honourable; but sometimes they fall outside the parameters of the law; in a sense they are perpetuating the past; or to put it differently, they are creating this perception;
- (b) the problems we experience with the national education policy is indeed a problem for us; they have got their ways and means; but the problem is what happens when that policy reaches ground level; the technical colleges are part of the FET sector but FET is much bigger than the technical colleges; in order to ensure that we remain relevant we must create channels for dialogue between the policy-makers and those who have to implement the policies at the grass-roots level of implementation;

it is a problem of conflict of policy between the two education departments; if the national education department says one thing the provincial department is silent; and vice versa; we are employed by the provincial education department, but even our director says, that interpretation of policy is one thing while the implementation is another; this is a problem.

- Conclusion

There is a great deal of evidence in support of Cadir's views as set out above. One of the conclusions reached in the HSRC report was that a policy void existed in the KZN Department of Education. This void referred to staff and student development programmes; the abandonment of components of college management which were in place in the old dispensation but which have not been replaced with any new systems. Special mention was made of the endless moratoria on permanent staff appointments. Tensions between

national and provincial departments exist, this emerged clearly from the Cadir-interview.

(e) Private providers & Community College

Hall (1999b:10) cites the one provide provider in the field of technical education. When this researcher attempted to contact this college, it appeared that the college no longer existed. A spokesperson from another college with a similar name indicated that they had been aware of this college but that they had no dealings with it. "City Colleges" often advertise in the local newspapers (cf Anchorlite College). Supposedly relevant courses are offered to the public, particularly business and commercial subjects. The credibility of these type of programmes are dubious. Other more established providers serve the city and the wider KZN community (cf correspondence: INTEC College 15 May 2000; Varsity College 17 May 2000; Damelin 17 May 2000). The conclusion reached is that these "city colleges" may be loosely classified as "community colleges". While some of these colleges offer qualifications that may not pass the test of the quality indicators, others have become highly esteemed. No colleges along the lines of the Japanese Miscellaneous College concept were identified. The community college concept in the post-school technical-vocational learning field has the potential to become highly responsive to the needs of employers in our cities and in the rural areas of this province. Provision of relevant education in this field has the potential to be considerably enhanced with the aid of modern technology. The private sector has a critically vital role to play in the community college sector.

(f) The Future

The colleges' master plan is to keep things afloat until there is some clarity on the direction and future of the provision of technical college education in KZN (cf Cadir 2000). The relevance of the technical college is sector is negatively affected by the inability of colleges to build capacity. The partnership with the National Business Initiative (NBI) is a factor of relevance in this respect; they will manage the R100 million under the Colleges Collaboration Fund made available by the Business Trust; the monitoring of the progress and programme building will be the responsibility of the NBI (cf correspondence

Department of Education (Pretoria) and Technical College Principals, 26 August 1999; National Business Initiative (NBI) Website 8 June 2000). At the end of the day the problem is not one of the relevance of the technical colleges but of the provincial department of education.

“ You can train a man to be good diesel mechanic, but if your don't give him any tools all the skills and knowledge that you have given is to no avail; he will never be able to fix the train; nothing will ever happen, and that train won't move”.

(Cadir 2000)

(g) Conclusions

- History

The historical legacy of racial divisions continues to impact on the relevance of technical education. The divide between state and state-aided colleges tends to perpetuate the problems of qualitative education. The recommendations of numerous investigations and submissions were ignored over the years and decades. Consequently learners and future employers have questioned the credibility of technical college qualifications. Access to technical college is thus prejudiced.

- Confusion between FET and HET qualifications

The credibility of the technical college sector is over-shadowed by the confusion between the provision of FET *and* HET qualifications in the technical colleges. The confusion is compounded for technical college managers when HET institutions offer similar learning programmes.

- Administration and officials

Inefficient administration together with tensions between national and provincial departments of education impact negatively on the management of technical colleges, and ultimately on the provision of relevant qualifications.

Inefficient bureaucracy seriously impedes the potential vibrancy of one of the more important providers of relevant education in the FET sector.

- Geographical distribution of colleges

The geographical distribution of technical colleges in KZN is skewed towards the main centres, i.e. the greater Durban-Pinetown region, and Pietermaritzburg. Colleges exist on the North Coast, South Coast and in Northern KwaZulu-Natal, however, no colleges serve the many smaller centres and rural communities. The conclusion is reached that access is denied to many learners who would benefit from the flexibility of technical college learning.

- Complexity of learning programme provision

In theory it appears that the technical colleges are providing a vast number courses. The sub-fields in the engineering vocational fields are popular, however, the lack of variety in programme provision continues to be a barrier to relevance in this sector. In practice the perception of under-utilised colleges continues. Very few part-time courses are offered, this may be related to a number of factors, including employer reluctance to participate in after-hours learning; lack of transport after-hours and the prevalence of criminality and safety considerations in travelling home after-hours.

- Links with the secondary school

Very few formal links with the secondary schools exist; this may be attributable to the generally poor status of technical college qualifications. Higher education qualifications hold more appeal in KZN (and South African) communities. The greater appeal of the HET sector relates once again to the lack of relevance of FET in the technical college sector. Vocational qualifications in the technical colleges are perceived to be narrow and very specialised. Uncertain job prospects, in the short-term and the long-term are critical considerations for secondary school learners in KZN. Articulation and integration between education and training is thus impeded.

- Public Relations

Vocational qualifications in KZN have low-status, but colleges do not conduct vigorous public relations campaigns in the schools and local communities. The distribution of promotional material in schools and the workplace would enhance the potential for access and credibility.

- Absence of “non-national” and “non-formal” qualifications

Life-long learning implies relevance to the needs of the learner and the workplace. Distance learning is in fact the main provider of life-long learning in SA and KZN (INTEC, Technikon SA and Technisa). This may relate once again to safety factors in respect of attending evening classes. Lack of innovation and initiative cannot be ruled out. Technical colleges are ideally situated to serve the local business and industrial communities of KZN. Recognition of prior learning remains problematic, as well as the coherence of the system of life-long learning.

- Private providers

Greater participation of the private sector in technical education is required. The involvement of the Business Trust *vis-à-vis* the National Business Initiative is viewed as a factor of high relevance. However, the absence of local initiatives is noticeable. Partnerships and consortia are also conspicuously absent. Community Colleges funded by the private sector and managed by a company, or a consortium of companies holds potential for our cities and regions. The portability and credibility of company-based training and qualifications will be considerably enhanced.

5.5.2.6 General Education and Training (GET)

(a) Introduction

The critical importance of the provision of general education was indicated as a factor of high relevance in the comparative country data yield. Brief

reference will be made to the historical trends in the provision of GET. Further reference will be made to the transitional process in the administration of GET in KZN. The recent transformation in the provision of education in public schools will be examined for specific trends. In particular the impact of Curriculum 2005 will be examined from the point of view of learner relevance. This section on GET will conclude with an examination of the role of private providers of education in KZN.

(b) Historical trends in the provision of GET

The history of apartheid education is well-known, and will not be repeated here (cf Behr 1978: 150 – 157; 159 – 203; Behr 1988: 213 – 220; Christie 1989: 29 – 64; Cross & Chisholm 1990, in Nkomo 1990:53 – 67). The restructuring of GET in KZN is an accomplished fact. In practice, however, the eradication of the legacy of historical disadvantage continues (cf Claassen 1996: 470 – 471; SAIRR 1996:111). Historical disadvantage is responsible for many problems in respect of quality of provision in education. The following paragraphs will examine problematic trends in the provision of education in the province of KZN.

(c) Transformation in administration

The administration of educational provision in the province has in effect been completed with the harmonisation of five former departments of education into one single provincial department of education. Education is administered from Ulundi, the traditional capital of the Kingdom of the Zulus, and effectively the capital of KZN. Ulundi is situated in the north of the province and is inaccessible to the major centres of the province. Airlinks between the main centres and Ulundi are limited. Travelling time by road from the main Durban-Pietermaritzburg centres is between 3 and 4 hours. Communication with the capital and educational headquarters is a distinct barrier to effective administration.

Regional offices are situated in Ulundi, Empangeni, Ladysmith, Vryheid, Pietermaritzburg, Port Shepstone, and two regional offices in Durban.

Administrative structures include a further 43 districts and 201 circuits (DOE (KZN)1999:1).

Decades of under-funding of education in KZN have been a re-curring theme in the administration of education in KZN. The DOE (KZN) (2000:8) states that “despite over 88% of the budget being allocated to public ordinary school education, the current allocation of R2642 per learner in KwaZulu – Natal is the lowest in the country, which has a national average of R3232, with Gauteng allocated R4589” (cf DOE (KZN) 1999:1; Bot 1996:6; SAIRR 1996:109 – 114).

The problems experienced in the provision of relevant education and that of efficiency of delivery are therefore integrally related the issue of funding.

(d) Transformation in learning processes

- Pre-primaries

Pre-primary education prepares learners for learning in the formal and compulsory levels of learning. The comparative data indicated that all the systems included in the study upheld pre-primary education as being a relevant and essential preparation for formal learning. The Japanese country data indicated the relevance of Pre-primary education as a critical preparation for learning in the general education classes of the primary schools. The Israeli country data indicated the relevance of pre-primary education in the rural environments and the value of educational provision in the preparation of learners for scientific and technological thinking. The ANC (1994: 91 – 93) proposed a dramatic expansion in early childhood education. However, access to pre-primary continues to be limited to a minority of privileged families. No clear policy exists in respect of the provision of pre-primary education. The DOE (1997b : 19) states that “the reception year should not be understood as an institutional year of instruction in the primary school at this stage”. Claassen (1996: 475) estimates that only 16 % of privileged white families in South Africa received a pre-primary education. The problem of the provision of pre-primary education is a highly problematic area in the provision of education for the majority of pre-school learners in KZN.

❑ Compulsory Education

- Introduction

The restructured curriculum was introduced nationally in January 1998. Curriculum 2005, the national name for the South African interpretation of a curriculum based on outcomes is aimed at producing thinking and competent citizens for a new South Africa (Dreyer 2000:3). The South African interpretation of outcomes-based education was influenced by the work of William Spady (cf Chisholm 2000:17). Spady (1993:10) stated that the transformational model of OBE was solely concerned with students' success after they left school. The DOE (North Durban Region) (2000:7) states that transformational OBE is a South African initiative aimed at transforming the education and training system so that South Africans are equipped to meet the challenges of the coming millennium. The transformational model was adopted because it was organised around nationally agreed, cross-field critical outcomes. The overriding objective of the entire process, is that the same system of learning applies to all learners and to all types of learning.

- Critical outcomes

The South African system of OBE is based on 12 critical outcomes that precede the intended course of study. From the "intended outcomes ... the supportive knowledge, skills and processes are derived as enabling objectives in order to achieve the outcomes" (Olivier 1998:36). The COs are broad, generic cross-curricular outcomes, which are the essential knowledge skills, attitudes and values which underpin all the life-long learning processes of the South African system of education (DOE (Gauteng) 1998:ii; Bezuidenhout *et al* 1999:7). The twelve critical outcomes as adopted by SAQA and presented as seven critical outcomes, and five developmental (or additional) outcomes are displayed in Table 5.21 below:

Table 5.21
Critical and Developmental Outcomes

CRITICAL OUTCOMES	DEVELOPMENT OUTCOMES
PROBLEM-SOLVING SKILLS 1. Identifying and solving problems in which responses display that responsible decisions using critical and creative thinking have been made.	LEARNING SKILLS Reflecting on and exploring a variety of strategies to learn more effectively.
TEAMSHIP 2. Working effectively with others as a member of a team, group, organisation, community.	CITIZENSHIP Participating as responsible citizens in the life of local, national and global communities.
SELF-RESPONSIBILITY SKILLS 3. Organising and managing oneself and one's activities responsibly and effectively.	CULTURAL AND AESTHETIC UNDERSTANDING Being culturally and aesthetically sensitive across a range of social contexts.
RESEARCH SKILL 4. Collecting, analysing, organising and critically evaluating information.	EMPLOYMENT SEEKING SKILLS Exploring education and career opportunities.
COMMUNICATION SKILLS 5. Communicating effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion.	ENTREPRENEURSHIP Developing entrepreneurial opportunities.
TECHNOLOGICAL AND ENVIRONMENTAL LITERACY 6. Using science and technology effectively and critically, showing responsibility towards the environment and health of others.	
DEVELOPING MACROVISION 7. Demonstrating an understanding of the world as a set of related systems of recognising that problem-solving contexts do not exist in isolation.	

(Source: DOE 1998a:35)

☐ Learning Areas

The traditional school subjects are incorporated into eight learning areas:

- 01 Language, Literacy and Communication
- 02 Human and Social Sciences
- 03 Technology
- 04 Mathematical Literacy, Mathematics and Mathematical Sciences
- 05 Natural Sciences
- 06 Arts and Culture
- 07 Economic and Management Science
- 08 Life Orientation

(DOE 1997b:26 & 27; Bezuidenhout *et al* 1999:7 & 8).

☐ Specific outcomes

Specific outcomes are linked to each of the learning areas. These specific outcomes reflect the knowledge, skills, attitudes and values that the learner is expected to achieve at the conclusion of each learning area. There are 66 specific outcomes. The detail of each specific outcome being described in the range statements, assessment criteria and performance indicators of each learning area (DOE 1997b:19; DOE (Gauteng) 1998:ii; Bezuidenhout *et al* 1999:8).

☐ Range statements

The range statements specify how far the specific outcomes should progress at each particular level (DOE 1997b: 17).

☐ Assessment criteria

The assessment criteria provide the broad statements of what needs to be assessed for each specific outcome. Various types of assessment have been identified, the outcomes of set tasks are evaluated according to performance and rating criteria, highly competent, or competent, or developing steadily, or

does not meet the minimum requirements at present (DOE 1997b:12: (Bezuidenhout *et al* 1999:31 – 42).

☐ Performance indicators

The performance indicators identify more precisely what learners should know and be able to do as they progress towards each specific outcome (Bezuidenhout *et al* 1999: 8 – 9).

(e) Critical analysis

☐ Introduction

The Minister of Education appointed the National Review Committee on 8 February 2000. The Chisholm-report was presented to the Minister on 31 May 2000. The retention of an outcomes-based approach to educational provision was recommended (Chisholm 2000:23-28). The National Cabinet met on 24 and 25 July 2000 and re-affirmed their support for the principles of outcomes-based education and the curriculum review process. The media release of 31 July 2000 indicated that the Department of Education would attend to the recommendations of the Review Committee (cf correspondence DOE (KZN) Circular Number 120, 26 October 2000).

It is evident that the success of Curriculum 2005 is very important to the South African Ministry of Education. Curriculum 2005 is a decisive break from the autocratic apartheid curriculum. It is a curriculum that was designed to address the needs of all South Africans. The irony of re-structuring the curriculum is that in the process of addressing relevance policy-makers introduced a new set of problems for South African educators.

☐ A curriculum of dubious theoretical origins

It was imperative that the new education and training system reflect the democratic values of post-apartheid South Africa. Curriculum re-structuring in South Africa had to reflect the principles of equity, and provide the same

opportunities and access to quality learning for all its citizens. (cf DOE 1997b:1). The initial discussions about the suitability of OBE for South Africa took place in the competency debates in Australia and New Zealand during the early 1990s. These debates were continued in the training and development discussions of COSATU. The immediate impetus for the development of OBE emerged from discussions around the crystallisation of the NQF in the ranks of SAQA that the South African interpretation of OBE began to emerge (cf DOE undated: 3 - 10). The legal-framework, according to the Department of Education policy documents includes the Constitution of the Republic of South Africa, and the White Paper on Education and Training (1998) (cf DOE 1997b: 21). References to outcomes in these early documents of the post-apartheid state are oblique. The theoretical origins of OBE are equally obscure.

According to Jansen (1998:322) OBE does not have one single theoretical origin. Some authors have associated OBE with BF Skinner, or Ralph Tyler and Benjamin Bloom. According to Chisholm (2000:15) Spady was a major influence on curriculum thinking in South Africa after 1994. Spady (1993:12 – 14) associates OBE with the work of John Carrol and Bloom. Amidst the rhetoric on the theoretical origins of OBE Spady distanced himself from the South African interpretation of OBE. He is quoted by Chisholm (2000:18) as saying that South African OBE is more of a professional embarrassment than those who make the suggestion will ever realise. Spady, according to the same author, described the South African interpretation as a gross distortion of and a deviation from the original idea, and called for a return to the source of the original idea.

Curriculum 2005 was intended to address the injustices of apartheid education. People's Education during the years of resistance campaigned for the democratisation of education. Today OBE is non-negotiable. The South African educator has become an implementer. OBE will be implemented according to the policy dictates of the Department of Education. Jansen (1998:327) describes this irony as a cruel twist of history. Educators find themselves marginalised, with very little official support. The conclusion is reached that OBE is merely a grandiose political statement (cf Williams

1999:361). During our personal interview, Mchunu (2000), stated that with Curriculum 2005 the people are worse off than they were during the apartheid years. Relevance in educational provision will be gravely eroded if the implementation of Curriculum 2005 is not a theoretical and a practical success.

☐ Complexity of the language of Curriculum 2005

The language of Curriculum 2005 is obscure and complex. The majority of educators in KZN are teaching through the medium of their second language. (MacDonald 1991:4 –8;32 -34). School-based educators tend to be practically orientated persons and obscure words serve as a hindrance in the process rapid of planning, and lesson preparation. Frequent references to COs, SOs, range statements, and programme organisers, is overwhelming and frustrating (cf Jansen 1998:323). Chisholm (2000:23) states that submissions to the Review Committee pointed to three problems in particular, the use of meaningless jargon, the unnecessary use of unfamiliar terms in replacement of more familiar terms and the lack of common understanding of Curriculum 2005 terminology.

☐ Idealism

Curriculum 2005 is intended to be an integrated approach to learning. Indeed it has made great progress towards eliminating artificial subject-barriers between subjects. However, to assume that the introduction of technology in all grades will ensure that future South African citizens will become technologically literate in classrooms of forty, fifty and even sixty learners is highly idealistic. Furthermore, to expect ordinary classroom-based teachers to have access to power tools and other electric, pneumatic and electronic tools (DOE 1997b: TECH-12) is even more unrealistic. If teachers do perchance have access to sophisticated tools competent usage cannot be assumed (cf Williams 1999:363, 364 & 368 & 369).

☐ Practical problems in implementation

Curriculum 2005 implies that educators have access to a rich source of materials, resources, and duplicating materials. Most teachers do not have motor cars, and rely on public transport. Opportunities to acquire materials is limited (cf Williams 1999:368). The success of the Curriculum depends on resourcefulness (cf Chisholm 2000: vii;24). If schools do not have electricity, photocopiers, text-books, materials etc the success of Curriculum 2005 will already be severely limited. Large undisciplined classes are an on-going challenge for educators. Grouping, and multi-tasking in crowded classrooms is not conducive to learning. OBE facilitators insist that learners progress at different levels. Can the average South African classroom educator be expected to keep an accurate record of multiple levels of progress of between forty to fifty learners? Jansen raises questions about the kinds of teachers who are employed in South African classrooms (Jansen 1998:325 – 326). Policy-makers, he charges have not spent enough time in the average South African classroom. Data gathered earlier in this study indicates that the conditions that prevail in the classrooms of rural KZN are far from conducive to the implementation of a sophisticated system of education.

☐ Administrative overload

Allied to the above is the problem of administrative overload. Educators are expected to produce macro plans, meso plans, and micro plans. Curriculum 2005 requires detailed and intense planning and preparation. Educators are obliged to keep meticulous records of individual learners' progress. Stringent record keeping is obligatory. It must be stressed again that classes of 50, and even more learners per educator continues to be a present day reality. The administrative overload becomes burdensome. The practical implications for some educators of this scenario is unrealistic (Jansen 1998:328; cf Chisholm 2000: 21 & 22).

❑ Assessment

Assessment in the OBE-classrooms in South Africa emerged as being problematic (cf Chisholm 2000: vii; 23 & 24). There was no alignment between the teaching processes and assessment. An attempt to address this criticism was made in the preparation of the Department of Education's 'Expected Levels of Performance' document released this year (cf DOE 2001:LLC-1: 24). This document merely increases policy developers' claim that they have "fine-tuned the criterion referenced assessment system to include expected levels of performance per grade and per phase" (DOE 2001b: 1). Educators now have to take into account the phase statements for each grade within a phase as well as two developmental levels and the expected levels of performance. Different types of assessment are applied in the OBE-classroom (cf DOE (North Durban Region) 1999b:14 – 15). Assessment includes a variety methods, tools, and techniques (DOE (North Durban Region) 1999a:85). Twenty-five percent achievement constitutes progress to the next level. It is not recommended that learners repeat grades. A common perception therefore exists that standards in state schools have declined. A trend towards enrolment in private schools or home schools is evident in KZN society.

❑ The policy of inclusion

An integral part of the OBE classroom is the inclusion of learners with special education needs into the mainstream (cf DOE 1997d: 55; DOE (North Durban Region) 1999b: 5 – 10). The special class units have been closed down, and the learners incorporated into the mainstream. These learners add additional burdens to the work-load of the educators. The official view is that Curriculum 2005 provides opportunities for learners to learn at individual levels, the reality of the situation is that ELSEN learners require individual attention that is not possible in classrooms of between 40 to 60 learners. These learners are disruptive and tend not to contribute much in group-activities. Quality cannot be guaranteed. The net result is that the idealism of OBE has resulted in a sacrifice to quality. Jansen (1998:323,325-326) argues convincingly about the poor understanding of the realities of South African classrooms by the policy-makers. While policy makers continue to ignore basic classroom realities the

potential relevance of a promising approach to schooling in KZN will be eluded yet again.

❑ Conclusion

The controversy over the implementation of the South African interpretation of OBE has taken its toll in KZN schools. Parents have withdrawn their children from the former Model C schools as a result of the implementation of Curriculum 2005. There is a distinct impression that standards and quality in these schools have been lowered. Much of the blame in respect of the perceived lowering of standards rests with the introduction of Curriculum 2005. The final paragraph in the GET analysis will therefore focus briefly on the role of private providers in the field of education

(f) The Providers of Private Education in KZN

❑ Introduction

The country data indicated the value attributed to the Thirteenth Year in some of the high-income and low-income countries included in the study. This paragraph will examine the so-called Thirteenth Year (or post-matric as it is colloquially referred to in South Africa) together with the role of other private providers.

❑ The Private School Sector

A distinct trend in the growth of the private school and home schooling movements is evident in South Africa (and KZN). A general exodus from the township schools to the schools of the former Model B and C schools is one aspect of this trend. These trends indicate a growing dissatisfaction with the provision of education in state schools. In response to a call to forcibly occupy the private schools by COSAS the National Minister of Education is reported to have publicly re-affirmed the state's support for the constitutionality of the education provided by the private school sector. The Minister added that there was a distinct place in South African society for the education provided by the private schools (cf *The Mercury*, 8 May 2001).

The private schools absorb many of the White and Indian children who have fled from the former Model C and B schools. It is reported that private school enrolments have increased by 15% (*Independent Education*, 2001:59 - 60). This estimate could be conservative given the waiting lists at some private schools. The same publication reports that the Independent Schools' Association of Southern Africa provides a forum for diverse member schools. The author points out that twenty-two of the associations' 80 members are from outside of the borders of South Africa, and that a total of 26 member schools serve black communities (*Independent Education*, 1999:35). The problems associated with the spiralling costs of financing education results in a commitment by concerned parents to make ever greater sacrifices to ensure their children benefit from a qualitative education. The private school sector enters the education market to meet this specific need.

☐ Factual Data

A trend was discerned in some of the more prestigious high schools of KZN to offer a Thirteenth Year. The Glenwood High School learning programme for a Thirteenth Year is offered as an illustration of the learning plan. Illustration 5.2 indicates that the Thirteenth Year learning programme is in fact a partnership with Damelin College and the University of South Africa.

Illustration 5.2

Glenwood High School: Extension Year 2000

OPTION 1

MATRIC UPGRADE

- ☐ Work experience
- ☐ Life Skills Programme
- ☐ Extramural Programme
- ☐ Normal Class participation
- ☐ Personal Computer Skills

OPTION 2

GLENWOOD/ DAMELIN DIPLOMA

- ☐ Marketing
- ☐ Business Communication
- ☐ Business Management
- ☐ Consumer and Buyer Behaviour

OPTION 3

UNIVERSITY OF SOUTH AFRICA (an example)

- ☐ Accounts 1
- ☐ English 1
- ☐ Psychology 1
- ☐ History 1

(Source: Glenwood High School (18 April 2000))

☐ Critical analysis

The Thirteenth Year is not a well-developed concept in the schools of KZN. Options 2 and 3 are in effect not original offerings. The structure of the Thirteenth Year learning programme is based on the programmes offered by other providers. The Thirteenth Year, with the exception of Option 1 becomes a “piggy-back” – exercise. The certificate and degree courses can be taken at other institutions, or by means of correspondence course at home. Justification for offering a Thirteenth Year becomes a dubious exercise. The only motive appears to be a continuation of playing high-school sport. Options 2 and 3 only offer first year subjects. Students will be obliged to enrol at the mother institutions at the conclusion of the Thirteenth Year. Spokespersons from the various institutions approached indicated that the Thirteenth Year was not offered annually.

The question arises whether a thirteenth year does not indicate a need for the introduction of the community college concept in KZN. Other private competitors in the post-school sector exist, e.g. Varsity College. These institutions offer “piggy-back tuition” for the University of South Africa. Originality in provision is absent, and little progress is therefore made in

respect of relevance for the workplace, and relevance to the needs of the markets.

According to Kraak (1999e: 159) the community college concept has been advocated quite enthusiastically in certain quarters of South Africa. The author states that these institutions have been established in the buildings of former teacher training colleges or technical colleges. The concept is yet undeveloped in South Africa, but in certain circles the idea has a strong egalitarian thrust (cf NCFE 1997:175 – 182). Kraak, in the same reference cited above is enthusiastic about the value of the Community College as a unique institution in the transition from school to higher education. The Community Colleges concept if developed in partnership with the private sector could play a critically role in the development of the relevance in education for communities.

☐ Conclusion

There is a distinct role in the KZN community for the education provided by the private schools in respect of school-based education. There is also a very distinct gap in the education market for more community-based education at college level that will facilitate the transition from school to the workplace. The current trends towards providing piggy-back tuition will however, have to be supplemented by a variety of shorter courses in order to meet very specific needs. The Community College is an ideal concept to provide this type of education. The Thirteenth Year fulfils a very specific need in respect of the transition from school to university. However, the Community College ought to bridge the gap from school to work and not duplicate the functions of a other institutions. The participation of the private sector would considerably enhance the relevance and credibility of such institutions.

(g) Conclusion

The critical analysis of curriculum processes in KZN must answer the basic questions of relevance: is the curriculum meeting the needs of people at a personal and at a societal level. Expressed differently, is the curriculum doing

what it is supposed to do, i.e. provide a relevant education for all the citizens of South Africa ?

The perception of decline in standard in public school education persists in the province. Furthermore, the problems of the transition from school to work (or higher education) have not been satisfactorily addressed. The critical question is how realistic are these aspirations, and can the country afford grandiose visions for the provision of an outcomes-based curriculum ? Can we afford to fail ?

The economic consequences of a semi-literate society are grave indeed. The problems seem to lie with the issue of relevance in education in the GET sector, and the relevance of education in respect of the transition of learners from the FET sector to the workplace. These two very critical issues were therefore addressed by means of the surveys conducted in KZN.

5.5.3 Critical Issues

5.5.3.1 Introduction

Factors of high relevance emerged from the Japanese and Scottish study in respect of the responsiveness of education to the needs of business and industry. The Scottish data yielded factors of relevance in respect of enterprise-education partnerships while the Japanese country data indicated relevance in respect of company-based training for work, as well as direct involvement of business and industry in the education of senior secondary learners for the work-place.

Other factors of relevance emerged from the German and Israeli comparative studies in respect of the early selection of learners into a vocationally orientated stream. The German system permits early selection to three types of schools at the conclusion of the Grade 5 year. The Israeli system supports a system of school-based vocational education in the senior secondary school. Both systems were concluded to be successful in their national contexts.

These same issues were viewed as being potentially critical to the development of KZN. The two surveys were designed and conducted during 1999 and 2000 in order to probe these critical issues in greater depth. The first survey was conducted from the 6 April 1999 to the 18 July 2000. The education-enterprise relevance (EER) survey focused on the relevance of the education sector to the needs of the workplace. The learning programme relevance (LPR) survey was conducted in June 2000 and focused on the perceptions of Grades 5, 6 and 7 learners in respect of the relevance of their learning programme.

5.5.3.2 The education-enterprise relevance survey for companies

(a) Introduction

The survey focused on the articulation between education and industry. The responsiveness of our senior secondary and tertiary institutions to the socio-economic needs of the KZN region was the main focus of the EER-survey. The comparative country data yield provided the postulated material for the EER-survey. Chapter 5 has examined the reasons for the poor growth in the KZN economy. The survey was aimed at gathering primary data in respect of the poor relationship between education and enterprise in the KZN region. Three interviews were conducted in the Western Cape. The Western Cape has a higher growth rate than KZN (cf Luüs & Oberholzer 1994: 16 & 17; 22). Data gathered in this province were therefore expected to provide contrasting material. The expected contrasts did not emerge. The data yield from these three interviews had no significant affect on the conclusions.

(b) The instrument

The questionnaire (cf Annexure 5) was based on some of the early comparative data that emerged from the study as supported by material from Carnevale, Gainer and Meltzer(1990:1 - 36) and University of Warwick (Centre for Education and Industry) (1991: 4 - 27). Respondents were asked to either rank or rate the multi-choice items from eight categories of questions.

(c) Method

In South Africa much work-place training takes place on -the - job (OTJ) (Bellis 1998, in Finlay, Niven, & Young (eds) 1998: 158), hence the questionnaire was focused on proprietors and human resources managers from a sampling of large companies in the Durban Metropolitan region and in the Western Cape.

An appointment was made with a representative of a company, and the questionnaire was presented to the respondent. A confidentiality undertaking was offered to all respondents (cf Annexure 2). In most cases the confidentiality undertaking was declined, and the interview was conducted in a relaxed atmosphere. The survey instrument was completed in the presence of the respondent, while a tape-recording of the discussion was made. The researcher was present at all times. A recording was made of Incidental comments and discussion. This approach generated meaningful discussion, and the resultant data yield was rich and relevant.

Each interview lasted approximately 30 minutes (cf Howard & Peters 1990: 28 - 30). By combining the questionnaire method with the interview method of data gathering the same questioning technique could be applied to all the respondents. This approach also ensured that all questionnaires were correctly completed and returned immediately after the interview. A hundred per cent return rate was thus guaranteed. The disadvantage of this approach is the fact that the interviews were time consuming. The transcription of the tape-recordings were equally time-consuming. However, the eleven interviews conducted produced qualitative data. Quantity was thus sacrificed for quality.

(d) Limitations of the survey

It must be stressed firstly, that the interviews conducted were spread out over a period of a year, and secondly, the scope of the survey was somewhat limited. No definitive conclusions can therefore be made, however, the

conclusions did facilitate the identification of factors of relevance, as well as barriers to relevance in educational provision.

(e) EER survey evaluation

- Introductory remarks

The questionnaire items were grouped into eight schedules for the purposes of the tabulation of the data. Respondents were assigned a number to simplify tabulation (cf Schedules 5.3, 5.4, 5.6 & 5.7). Keys were used in some schedules in order to keep the detail in the tables to a minimum. The questionnaire had to be fairly easy to respond to, hence the rating and ranking scales were designed for easy application. The researcher also wanted to avoid technical difficulties in responding to the questionnaire items in order to ensure that a relaxed and congenial atmosphere prevailed during the interview.

- Schedule 5.1: EER & general information

Schedule 5.1 tabulated the general information (name, date, etc) followed by data gleaned from Items 1.1 → 1.6. The classification of economic sectors (Item 1.3) was based on the HSRC (1999: 6 & 7) classification. Agriculture and horticulture were not included in the HSRC (cf 1999:7) classification and exist in categories of their own. It was the original intention to include the SMMEs in the survey (Item 1.4). This was not possible. Proprietors of the smaller businesses were usually too busy, or expressed reservations about their suitability to respond to a questionnaire of this nature. A global interview with the managing director of KZN Business Training Centre [Small Business Partners] in Westville, was conducted instead (cf Particio 2000, Box 5.1). Difficulties in negotiating access to the proprietors of medium-sized companies were similarly experienced, hence the weighting in favour of large businesses.

Schedule 5.1: General Information (cf Items 1.1→1.6)

No	Date of visit	Company	Respondent	Sector	SMME+L	Description by skills (%)				Skills shortage – yes / No
						Unskilled	Low	Mid	High	
1	06-04-99	Engen Refinery	Lynne Hanekom	Manuf.	L	0	0	100	0	Yes
2	06-04-99	South African Airways	Derrill Papendorf	Transport	M	0	0	0	100	Yes
3	12-04-99	Vynide Chemicals	C. Ruben Laten	Manuf.	L	0	25	60	15	Yes
4	12-04-99	Hotel & Tourism Industry	Brendan Lambrick	Services	L	80	20	0	0	Yes
5	13-04-99	KWV, Paarl	Charles Whitehead	Manuf.	L	40	20	16	24	Yes
6	13-04-00	Mondi Paper	Rick Rickards	Manuf.	L	0	5	20	75	Yes
7	17-04-00	Natal Motor Industries	Elsie Varley	Manuf.	M	20	10	50	20	Yes
8	08-04-00	Dunrobin Nurseries	Peter Rowles	Horticul.	L	30	50	20	0	Yes
9	10.05.00	Natal Building Society	Ralph Fortman	Finance	L	0	10	90	0	Yes
10	11-07-00	Jem Cutters cc	Neil Maytham	Manuf.	M	30	50	10	10	Yes
11	18-07-00	Natal Portland Cement	Siva Govender	Mining	L	5	15	30	50	No

Notes

The survey was initially conducted during April 1999 and continued during April 2000. This one-year gap did improve the researcher's interview technique. More international data had been gathered by April 2000. The quality of the informal questioning technique improved in particular and emergent data could be re-cycled into the discourse. SAA has been described as a medium sized company in the survey as the interview was only in respect of the technical section of the maintenance staff at the Durban Airport. Similarly, the NMI interview related only to the services and parts division for Mercedes Benz vehicles at the Prospecton plant, hence the classification of NMI as a medium sized company. Strictly, therefore the only medium-sized company in the survey was Jem Cutters cc.

- Schedule 5.2 : EER & new employees' training programmes

This schedule focused on new employees' training programmes (Item 1.7). The percentages tabulated in this schedule do not always add up to 100%. The instances where percentages exceed 100% may imply that combinations of training programmes are used for new employees.

Schedule 5.2: New Employees' Training Programme (cf Item 1.7)

No	Name	1.7.1 (%)	1.7.2 (%)	1.7.3 (%)	1.7.4 (%)	1.7.5 (%)	1.7.6 (%)	1.7.7 (%)
1	Engen Refinery						15	5
2	South African Airways	100			100			100
3	Vynide Chemicals		100					100
4	Hotel & Tourism	10	80				10	
5	KWV, Paarl				10	10	80	
6	Mondi Paper	1	20	20	1	10	5	20
7	Natal Motor Industries	20	20		30		10	40
8	Dunrobin Nurseries		5					
9	Natal Building Society		90			10		90
10	Jem Cutters cc		80					
11	Natal Portland Cement	3	50	1,25	2	3	1,25	8

KEY:

- 1.7.1 Indentured learnership
- 1.7.2 On-site training (non-contractual)
- 1.7.3 On-site plus college / technical college, day release
- 1.7.4 On-site plus college / technical college, block release
- 1.7.5 On-site plus college / technical college, evening classes
- 1.7.6 On-site plus technikon/training Centre (internal, or shared facilities)
- 1.7.7 Training Centre (internal or shared facilities)

Notes

The data recorded in Item 1.7.7 must be read in conjunction with Item 1.7.2 as most respondents from the large companies indicated that they had their own internal training centres, or that they shared facilities with other companies (cf personal interviews Lynne Hanekon, Training Superintendent, Engen Refinery, 6 April 1999; Elsie Varley, Public Relations Officer Natal Motor Industries, 17 April 2000).

Pre-service education and training had been completed before the interview process for the first (or subsequent) job (cf personal interviews Rick Rickards, Training & Development Manager, Mondi Paper, 13 April 2000; Siva Govender, Human Resource Practitioner, 18 July 2000). Initial training was either at a university or a technikon, or a technical college (or the previous experience and training received at another company, if applicable to the new position).

- Schedules 5.3 & 5.4: EER & ranking of employees' basic skills; EER & the value of employees' basic skills

Schedule 5.3 tabulates the results of Item 2.1. Respondents were asked to rank seven categories of basic employee skills. Schedule 5.4 required respondents to attribute a value to the basic employee skills (Item 2.2). This item served as a cross-check for consistency in the responses. In order to emphasise extremes in respondent opinion, only the two ends of the ranking scales were included in Schedule 5.3. Schedule 5.4 provided a bit more detail in the values attributed to the basic skills criteria.

Schedule 5.3: Employee Basic Skills (rank) (cf Item 2.1)

No	Respondent number: (e.g. 1 = Engen, etc)	1	2	3	4	5	6	7	8	9	10	11	Score	
													✓	0
2.1.1	Skills of basic competence: 3R's	✓	✓		✓	✓	✓	✓		✓	✓	✓	9	0
2.1.2	Adaptability	✓	✓			✓		✓	✓	✓	✓	✓	8	0
2.1.3	Problem solving skills	✓	✓		0	✓	✓		0	✓	0	✓	6	3
2.1.4	Oral communication / listening skills	✓	✓		✓	✓				✓	0	✓	6	1
2.1.5	Personal management		✓			✓			0			✓	3	1
2.1.6	Human Relations	✓	✓	✓	✓	✓	0		✓	✓		✓	8	1
2.1.7	Leadership skills		✓		✓	✓	0			✓		✓	5	1

✓ = high rank (1 or 2) ; 0 = low rank (6 or 7)

Schedule 5.4: Employee Basic Skills (value) (cf Item 2.2)

Respondent number:		1	2	3	4	5	6	7	8	9	10	11	H	M	L
(e.g. Engen = 1)													Summary		
2.2.1	Skills of basic competence	H	H	H	H	H	H	M	M	H	H	H	9	2	0
2.2.2	Adaptability	H	H	H	M	M	M	M	M	H	H	H	6	5	0
2.2.3	Problem-solving skills	H	H	H	M	H	H	H	M	M	H	H	8	3	0
2.2.4	Oral communication / listening skills	H	H	M	M	M	M	H	M	H	H	H	6	5	0
2.2.5.1	Self-esteem	H	H	M	H	M	M	H	H	H	H	H	9	2	0
2.2.5.2	Motivation	H	H	M	M	M	H	H	H	H	H	H	8	3	0
2.2.5.3	Personal goal-setting	H	H	H	L	M	L	H	H	M	H	H	7	2	2
2.2.6.1	Interpersonal relations	H	H	H	H	M	L	H	M	H	H	H	8	2	1
2.2.6.2	Negotiation skills	M	H	M	L	M	L	H	M	M	H	H	4	5	2
2.2.6.3	Team work	H	H	H	M	H	M	H	H	H	H	H	9	2	0
2.2.6.4	Conflict resolution skills	H	H	H	M	M	L	H	M	H	M	H	6	4	1
2.2.7.1	Communicate basic values	H	H	H	M	H	M	H	M	H	M	H	7	4	0
2.2.7.2	Group goal-setting	H	M	H	L	M	L	H	H	M	M	H	5	4	2
2.2.7.3	Organisational skills	M	H	H	M	M	M	H	M	M	M	H	4	7	0
2.2.7.4	Motivational skills	H	H	H	M	M	M	H	M	H	M	H	6	5	0

Notes: Schedule 5.3 & 5.4

In these schedules seven basic skills for employment were ranked and evaluated. Schedule 5.3 focused on an outline of the basic skills of production and service delivery while Schedule 5.4 examined the basic employers' skills in more depth. More sub-categories were included for purposes of evaluation. Respondents did not always know how to rank the items in Schedule 5.3. Guidance had to be offered.

- Schedule 5.5: EER & learnerships

Schedule 5.5 tabulates the data on learnerships in the workplace as a training programme (cf Item 3.1 → 3.8). The terms learnership and apprenticeship have been used interchangeably in this study for two reasons, (a) the term "apprentice" is still used in some of the countries included in the comparative studies of Chapters 3 and 4, (b) the new term "learnership" was officially introduced into South Africa during the data gathering phase of this study.

Only five of the eleven companies surveyed used a learnership system for training.

Schedule 5.5: Learnerships (cf Items 3.1 → 3.8)

No	Respondent	Level of education on admission						Success rate (%)					
		7	8 / 9	10 / 11	12	PM	SS	7	8 / 9	10 / 11	12	PM	SS
2	South African Airways				100						100		
4	Hotel & Tourism			60	35		5			80	90		75
5	Mondi Paper				100						100		
7	Natal Motor Industries				100						100		
11	Natal Portland Cement				100						100		

KEY: PM = Post-matric ; SS = Special School

Notes

The items on learnerships evoked a great deal of discussion. Respondents who did not use the learnership system were at pains to explain why their company had not implemented a system of learnerships for training purposes.

- Schedule 5.6 : EER & partnerships

Schedule 5.6 tabulated the responses to the issue of education – enterprise partnerships (Items 4.1 → 4.9). The criteria included in this item was fairly general, and familiar, with the inclusion of one or two more unfamiliar items (cf 4.7 & 4.8) in order to probe the genuineness of interest in partnerships, and to stimulate discussion.

Schedule 5.6: Partnerships (cf Item 4.0)

Respondent number: (e.g. Engen = 1)		1	2	3	4	5	6	7	8	9	10	11	H	M	L
		Scores													
4.1	Curriculum development	M		H	H	H	M	L		H	M	L	4	3	2
4.2	Company support for curriculum activities	M		H	H	H	L	L		M	M	H	4	3	2
4.3	Mentoring individual students	M		H	H	H	L	L		H	L	L	4	1	4
4.4	Industrial governors for governing bodies	L		H	H	H	L	L		H	L	L	4	0	5
4.5	Consultancy for curriculum projects	L		H	H	H	M	L		H	H	L	5	1	3
4.6	Work experience / shadowing	M		H	H	H	L	H		H	L	H	5	2	2
4.7	Teacher / Company personnel exchange	M		H	H	M	M	L		M	M	M	3	5	1
4.8	Seconding company personnel to schools	L		H	H	M	L	L		M	L	L	2	2	5
4.9	Careers counselling and exhibitions (KWV)					H									

Notes

Respondents were initially hesitant to answer Item 4.0. The concept of education-enterprise partnerships was an unfamiliar concept to most of the respondents. Once the concept was elucidated, the respondents responded with enthusiasm. The researcher had to encourage respondents to attempt to respond to these items. The SAA respondent (No 2) admitted that he was unable to respond and referred the researcher to the SAA human resources department (cf personal interview, aero-superintendent, Derrill Papendorf, 6 April 1999).

- Schedule 5.7: EER & modularisation

Schedule 5.7 (Items 5.1 → 5.5) tabulated the data obtained from the criteria relating to modularisation of training in the workplace. The simple High, Medium and Low rating scale was applied as it was anticipated that this form of training would be unfamiliar to the respondents.

Schedule 5.7: Modularisation (cf Item 5.0)

Respondent number: (e.g. Engen = 1)		1	2	3	4	5	6	7	8	9	10	11	H	M	L
		Scores													
5.1	To improve levels of general education	M	L	H	H	H	L			H	H	H	6	0	2
5.2	Initial classroom-based vocational training	M	L	H	H	H	H			H	H	H	7	1	1
5.3	Continuing (or re-training) workplace education	H	L	H	H	H	M			H	H	H	7	1	1
5.4	Further education (certificate of diploma)	H	L	H	H	H	H			H	M	H	7	1	1
5.5	For slow learners, or disabled, disadvantaged groups	L	H	H	H	H	L			H	H	H	7	0	2

Notes

As was the case with the previous item, this item evoked a hesitant response from the respondents. The concept of modularisation in educational provision for the work-place is not a concept with which human resource managers in the work-place are familiar. Two respondents did not feel sufficiently confident to respond. The scores were similarly high to that tabulated in Schedule 6.

- Schedule 5.8: EER & education and workplace relevance

Schedule 5.8 tabulated the results of the conclusion to the survey. The criteria used in Items 6.1 → 6.8 summarised the various alternatives available to human resource managers in the education and training of employees. As was the case in Schedule 3 only the two extremes in respondent opinion, i.e. only the two ends of the ranking scales, were included in Schedule 5.8.

Schedule 5.8: Education and Workplace Relevance (cf Item 6.0)

No	Respondent number: (e.g. 1 = Engen, etc)	1	2	3	4	5	6	7	8	9	10	11	Score	
													✓	0
6.1	General secondary + OJT	0	✓		0						✓	✓	3	2
6.2	General secondary + technical / vocational college	✓	✓	✓			✓			0		0	4	2
6.3	General secondary + technikon	✓			✓	✓	✓						4	0
6.4	Vocational / technical secondary + other	✓	0			✓	0					0	2	3
6.5	General secondary + apprenticeship		✓		0	✓		✓				✓	4	1
6.6	General secondary + training centre		0		0	✓				✓	0	✓	3	3
6.7	General secondary + OJT + modules (external)		0			✓		✓		✓	0		3	2
6.8	Vocational / technical secondary + OJT		0	0		✓	0	0		✓	0	✓	3	5

✓ = high rank (1 or 2); 0 = low rank (7 or 8)

Notes

Schedule 5.8 required respondents to rank the types of secondary, or post-secondary qualifications that were relevant to their company. One respondent was not able to complete the questionnaire as he had spent too much time responding to the preceding items! He did however, comment repeatedly during the interview that the workers in his nursery were unskilled with little or no educational qualifications. Schedule 5.8 would therefore have contained items that were irrelevant in the context of his nursery (cf Rowles 2000).

(f) Findings

- Large Companies, Skills and Education

The training programmes in the Western Cape and KZN did not yield any significant differences. The problems with the education of new entrants to the labour market are the same in both provinces. The difference in the economic growth rate of the two provinces is therefore attributable to other non-educational factors.

Most large companies had developed quite sophisticated programmes of education and training and re-training for employees (cf Papendorf 1999). The large companies appoint "human resource consultants" or "training and development officers". These appointments indicate that the matter of education and training in the workplace is taken seriously. In this respect the South African (and KZN) system of education and training resembles the Japanese system more than any of the other systems included in this study.

There continues to be a large percentage of workers that fall into the unskilled and low-skill bracket in the large companies. This problem is corroborated by the almost universal "yes" to the question on skills shortage in the South Africa. Unskilled and low-skilled workers are still employed in some manufacturing sectors, and in the agricultural/horticultural sectors of the economy. The hotel and tourist industry appears to employ unskilled and low-skilled workers (cf personal interview, Brendan Lambrick, General Hotelier, Hotel & Tourism Industry, 12 April 1999). Ten out of the eleven respondents agreed that there was a shortage of skilled workers in South Africa and in KZN.

The on-going problem of skills shortage has clear implications for the formal education sector, in particular for the senior secondary phase and the technical colleges. The role of the vocational guidance educator in the secondary schools becomes very important. Liaison officers are required to bridge the gap between the school and the local business and industrial community (cf Lambrick 1999).

- New Employees, Training Programmes and Education

The high percentages scored in the on-the -job (OTJ) category (Item 1.7.2) confirms the conclusion that private sector industry-based training accounts for a very high percentage of training in South Africa and KZN. To express it differently, the distinct impression gained from the interviews was that employers didn't really care much about what happened in the schools (cf Layman 1999). "We don't have time, we are busy doing what we are doing" (Rickards 2000). OJT facilities have been developed in the large companies in

order to train workers. The problem of relevance in education and training therefore applies particularly to the SMMEs that do not have the financial resources to provide training for their workers.

“The needs of the medium-sized businesses are critical and completely different to that of the large corporations; the providers of education and training are too academic; some training programmes are good, but what we need are short programmes; short and to the point; a half-day release is all that we can afford; we are prepared to pay for the training if they will teach our staff what is relevant to our business; we don’t need professors; people try to sell us programmes that go over the heads of our employees; the INTEC courses seem to be just right; but we would prefer it if they trained our people on-site so that we also have some insight into the content of the programmes (cf personal interview, Neil Maytham, Proprietor, Jem Cutters cc, 11 July 2000).

The recognition of prior training received from one large company does not necessarily follow if positions in other companies are acquired. Portability of qualifications in South Africa does not take place (cf personal interviews Varley 2000; Ralph Fortman, Human Resource Consultant, Natal Building Society, 10 May 2000).

Two stages in the education and training of employees appeared to take place, viz a short course or qualification immediately after leaving school, either at a technikon, or a technical college, or elsewhere, and secondly, the company-based training programmes (that may include OJT plus classroom-based tuition at a college). It was of interest to note that the respondents were not always familiar with the pre-service qualifications of employees, It didn’t seem to matter where these qualifications were acquired as long as they were trainable within the company.

“They must be qualified when we get them. I don’t look at their qualifications. I really don’t know where they qualify” (Laten 1999). The remarks made by the Mondi respondent is of similar interest, “they have virtually been sifted by the time they get to the door”(Rickards 2000). This is probably the reason why the

NPC respondent indicated that there was not a shortage of skilled workers (Govender 2000).

The companies surveyed indicated a low number of indentured apprentices admitted annually, and by way of contrast a strong emphasis on non-contractual on-site training (OJT) emerged. However, there does appear to be an interest in OJT *and* technical college short courses. There was a reluctance by workers to acquire qualifications in their own time, hence day release, and block release in the companies' time appeared to be more popular (cf Laten 1999). Courses offered by the technical colleges therefore have to be relevant to the needs of the companies they serve.

- Employee Basic Skills

Schedule 5.4 confirmed the findings of Schedule 5.3. The H,M & L rating scale indicated high rating scores for the skills of basic competence, self-esteem and team-work. All the respondents regarded the skills of basic competence, reading, writing and computation as critical for the workplace. These skills were closely supported by the skills of human relations and adaptability. In a modern age of change, workers are expected to adapt rapidly to changing circumstances in the workplace. These skills are acquired by means of the general learning programmes of secondary schools, colleges and universities. Qualities such as self-esteem and teamwork featured very high in the list of the responses. All the qualities of basic workplace skills were regarded as important. This inference may be made from the comments made during the interviews, as well as marginal differences between the high, medium low scores. The general conclusion reached for both schedules is that the skills of basic competence are most adequately learnt *vis-à-vis* the general learning programmes of schools, colleges and universities. The focus then falls on the quality of the learning programmes offered by these institutions, and the problems associated with the transition from institutions of learning to the workplace.

One respondent indicated that employees must be prepared for on-going change in the workplace (Laten 1999). Human relations featured fairly high on

the ranking scale. Employers contend that the cost of resolving relationship debacles in the workplace is costly and can erode the profit margins of companies. Interestingly, the problem-solving item appears on the lower end of the ranking scale. Problem-solving is a critical issue in the formal school sector. Basic competence, adaptability and human relations are ranked higher than problem-solving as these issues are easier to develop in the workplace than skills of basic competence and poor patterns of human relations.

The Dunrobin respondent felt strongly about the value of the more human qualities for his organisation. He operated with a staff that was almost 100% illiterate and unskilled. He was of the opinion that skills of personal and group goal-setting, motivation and team work overcame the barriers of poor educational skills and low morale in the work-place (cf personal interview, Peter Rowles, Proprietor, Dunrobin Nurseries, 8 April 2000).

- Learnerships

For some of the respondents the learnership system was irrelevant to their organisation (cf Fortman 2000; Rowles 2000), or insufficient thought had been given to learnerships in the light of the Skills Development Act (Laten 2000), or the system of indentured learnership had become problematic and had been abandoned (cf personal interview, Charles Whitehead, Training & Development Specialist, KVV, Paarl, 13 April 1999). The companies that were applying an indentured system of learnerships only admitted a few new learners annually. Educational levels on admission were primarily Grade 12, but Grade 10 and 11 learners were also considered for learnerships in the hotel and tourist industry (cf Lambrick 1999). This applied to special school leavers as well. The success rates were all excellent. The classroom component of the training took place at the nearest technical college (cf Govender 2000; Varley 2000).

The actual numbers of apprentices admitted annually were very small (i.e. 10 or less), (cf Item 3.4). Learnerships as a means of education and training appears to be more prevalent in the traditionally male-orientated occupations. Some evidence of female learnerships emerged from the hotel and tourism

data (cf Item 3.5). No provision appears to have been made for persons with disabilities (cf Item 3.6). At the conclusion of the contractual period (3 - 4 years) (cf Item 3.10), some of the newly qualified workers leave the company. If no internal vacancies were available, the services of the artisan would be terminated six months after the completion of the contract. Other reasons for leaving the company at the conclusion of the contractual period include, employee poaching by other companies, career direction change, etc. Two companies comment that some learners apply to remain with the company and to work without a salary (Item 3.9)(cf Rickards 2000).

All indentured apprentices acquired their trade certificates by means of a trade test (Item 3.12). It was not possible to establish a trend from the question on indentured apprentices by racial group (Item 3.14). Given the distribution of population groups in the Durban region a slight predominance of representatives from the Indian community tended to apply and were accepted for indentured learnerships (cf Rickards 2000; Varley 2000). During the interview the NPC respondent, (Govender 2000) commented that it was company policy to train for the country, and not merely for the company. In many respects the implementation and experiences of the learnership system resembled that of the German system (cf Govender 2000; Varley 2000). The problem of loss of employment after the expiry of the contractual period is similarly worrisome in Germany as it is in KZN (cf Boehm 1999; Govender 2000).

- Partnerships

As stated in the notes to Schedule 5.6 on partnerships in education above, the respondents were hesitant to respond to these items as very little precedents appear to have been established in KZN (and possibly in South Africa) at the level of the secondary school. Examples of partnerships and co-operation exist at the level of the technical colleges, technikons and the universities (cf Whitehead 1999). Respondents were all familiar with work experience and for secondary learners. This exercise was frequently cited. When other types of partnerships were cited the respondents' replies varied from caution to enthusiasm. Reservation included the safety factor of the factories, as well as

the time factor to spend on learners, as well as the availability of expertise. Enthusiasm was expressed at the thought of being able to exercise influence in developing relevant learning programmes at senior secondary schools. "You cannot make good wine from bad grapes, we need good viticulturists in the field, so we have made a video that we have distributed to the schools" (Whitehead 1999). This approach stands in stark contrast to the provision-of-new-buildings approach, currently in vogue in South Africa (Fortman 2000).

- **Modularisation**

Respondents were similarly hesitant to respond to the items on modularisation professing insufficient experience in this field. The KVV respondent stated that the modular system was in existence but it was not "up to scratch yet in terms of credits and NQF levels; competencies are built into the modules, and we submit our modules to a SETA, and we issue certificates, but the system is not up and running, and we still have a long way to go (Whitehead 1999). The learnership programme used by the SAA was based on modules. Modular programmes suited the needs of the airline in respect of the stringency of safety and security of aircraft. The respondent commented that the safety policy of the airline was of paramount importance and that learners would not be permitted to leave a particular module until the required standard had been attained. Modules were used extensively during the initial period of training (Papendorf 1999). Two of the respondents were quite frank about their lack of knowledge in the field of modules and the possible benefit of modularisation for their company (Hanekom 1999; Varley 2000). Respondents were in general quite enthusiastic about modularisation. The scores were all biased towards the high-values, probably because respondents were unsure of themselves, and they preferred not to attribute low-values to an area of knowledge that they were not too familiar with. Modularisation therefore requires further research, and promotion with representatives of the large companies.

- Education and Workplace Relevance

No clear trend emerged from the responses to the concluding items. One possible explanation for this is that education and training requirements vary considerably from one company to another. The educational requirements of companies will have to be assessed individually. There was general consensus that a general secondary school-leaving qualification was a pre-requisite to other forms of training, and that OTJ training was the route that companies preferred to follow. Bellis (1998:158) is right in pointing out that the South African system is oriented towards industry-based training. In the same reference the author hastens to add that the quality of this system has ranged from “extremely good to perfunctory and ineffective”. A single factor that did emerge quite clearly was that more than one approach to education and training was required in the workplace, e.g. college *plus* OTJ. The vocational (or practical) aspects have to be matched with theoretical and classroom-based aspects of education and training. The absence of data gleaned during the Rowles (2000) interview is probably not accidental. This unskilled worker situation probably accounts for the majority of the working population in KZN (cf personal interviews, Southey 2000, Gumbi 2000, Naidoo *et al* 2001).

(g) Extracts from interview transcripts

A sampling of extracts recorded during the interviews is represented here as part of the process of drawing the findings of this survey to a conclusion.

“Globalisation can change everything we do”.

(Whitehead 1999)

“Should it not also be the other way round that schools, colleges and universities adapt towards the needs of business and industry”.

(Whitehead 1999)

“When I was at school I knew nothing about the hotel industry; at school we needed to be made more aware of different industries;

school-leavers tend to join a hotel group, they work in various departments, and they are paid next to nothing, this is cheap labour, and in the end when they leave the hotel group they have nothing; overseas they join a kitchen and can work their way up, like the German system; at least they become qualified through the apprenticeship system”.

(Lambrick 1999)

“Maths and Science is a requirement and at least one technical subject”.

(Papendorf 1999)

“High school education is irrelevant, it was great the sport and all that, but what we learnt did not really help me much, home economics was regarded as a girls’ subject, there are more boys doing home economics these days, there should be some sort of testing to see where a person’s interests lies; I could have cracked home economics at school; why do you have to go to a particular type of school to do home economics these practical type of subjects should be for everyone”. (Lambrick 1999)

“Some of the stuff the kids do at school is totally irrelevant; ninety percent of the children in a certain college here in Somerset West get work after they leave the college, because they are better prepared, not so from the school, the facilities they have at the college are better”.

(Laten 1999)

“We don’t have time, we are busy doing what we are doing...one of the problems we have is finding scholarship students..... we ask these applicants a simple question: if you built your house on a hill how would you manage to get water up from a river to your house? Many do not know, almost 100% of them don’t know that they would use a pump, these are matriculants. This then becomes problem. We accept that the black kids are not as familiar with things like drills and pumps like the white kids are

but it is still problem. Basic technical understanding is lagging behind rather sadly”.

(Rickards 2000)

“SAA has an affirmative action programme in place. Indians make good apprentices, but there has not been much success with the blacks yet. The standards of SAA will not be reduced, they will be given preferential treatment as far as acceptance is concerned, but the standards of the airline will not be reduced, they may not complete their apprenticeship, and at the end of the day the ratio will be different”.

(Papendorf 1999)

“There are distinct problems associated in employing people with low level skills. Sun international used low skill people, this was a cost issue. If you take people take off the street and put them alongside another person to learn the job in, for example a week, then they may be ready for the job you have in mind, but you don’t give them a broader picture of the entire job and the hotel industry as a whole and when that happens they have a very narrow understanding of the job”.

(Lambrick 1999)

(h) Conclusions

The focused interviews and the findings of the EER survey (as illustrated by the extracts above), indicated very clearly that consensus does not exist on the issue of relevance and school-based education. Respondents from the various work environments perceived relevance in different types of learning programmes. The following conclusions emerged from the EER survey:

- There is a strong demand for the skills and values of general education learning programmes that can be applied to the workplace; these desirable worker qualities are developed over a lengthy period of time and are optimally developed in the context of the liberal arts learning programmes.

- The role of the vocational guidance educators as liaison officers has not been sufficiently developed in the formal education sector; these educators have internal functions but their roles have not been developed in respect of their contact with the world of business and industry.
- Certain school-leavers lack the required technical background to apply successfully for positions that require technical experience.
- The problem of unskilled and low skill workers in the workplace is an on-going reality, this problem has direct implications for the relevance of general and vocational education in the secondary schools.

The second survey was conducted in order to further probe the relevance of the school-based learning programmes. The ambivalence of some of the views from the first survey indicated that no consensus existed on the issue of the relevance of liberal learning programmes *versus* vocational programmes. The survey focused on the younger primary school learners as these learners were the subject of the early / late election debate.

5.5.3.3 The learning programme relevance (LPR) survey for primary school learners

(a) Introduction

The survey was conducted in two primary schools in the Wentworth area of Durban. This region was selected because of the high population density. Many secondary learners are unlikely to consider tertiary or higher education as a post-school education and training option. In other words the transition for most learners will be directly into the work-place. Wentworth is a very multi-racial community. Unemployment and poverty is much in evidence. Van Riebeeck Park Primary is a former House of Assembly (Model B) school, while Assegai Primary is a former House of Representatives school. While Van Riebeeck Park still enrolls learners from the White population group, Assegai Primary has enrolments only from the Coloured, Indian and Black population groups. This school serves the primarily Coloured community of Austerville. The views surveyed in the LPR questionnaire were therefore highly representative of the KZN population (and that of South Africa). Furthermore,

two schools enrolled learners from a fairly wide area that included the Van Riebeeck Park and Grosvenor areas of the Bluff, the Austerville, Assegai areas of adjacent Wentworth, extending towards the very densely populated residential areas of Merewent, Clairwood, Lamontville areas that are situated around the Durban Airport. A fairly high percentage of the Van Riebeeck Park enrolment is drawn from Umlazi (i.e. 36,6 %). If it is assumed that learners at this stage of their school education tend to reflect the views of their families it can be concluded that the LPR Survey focused on a fairly wide community of young families that are very representative of racial and social strata of the KZN population.

(b) The instrument

The instrument was divided into four sections. Section A probed the learners' activity profile. The items included probed *everyday activities*. Learners were asked to choose one of two possible alternatives. The choice was between a more studious or academic activity, and a practical activity (viz knowing or doing). Grade 5s only completed Sections A and C.

Section B narrowed the choices down to *aspects* of learning programmes. No attempt was made to focus the items on specific learning programmes at this stage of the survey. Section C required the respondents to make a choice between a *secondary school* that focused on "knowing:" and a secondary school that focused on "doing".

Section D probed the top ten *specific subject preferences* of the learners. Respondents were permitted to select their "top ten" from any position in the table. Only one stipulation was included in the instructions: remember to include a language.

The responses were aggregated for each class, thereafter for each grade, and for all schools. The factors derived from repeated aggregating indicated learner preferences. Higher factors naturally indicated a higher ranking for a subject by the learners.

(c) The method

The surveys were administered to the respondents without copious instructions. Most of the items required a tick in the appropriate block to indicate respondent preference. The number of invalid responses were negligible. All respondents were eager to participate in the survey. A marshmallow mouse as a thank you gift duly rewarded their enthusiasm. The data gleaned from Sections A and B have been evaluated and displayed in Graphs 5.1 – 5.10. A sampling of comments made by the respondents (Section C) have been reproduced below. The tabulation of the data gleaned from Section D has been reflected in Table 5.25 and 5.26.

(d) Limitations of the survey

As with the EER Survey the LPR Survey was of limited scope and the findings ought therefore to be interpreted cautiously. However, in the context of this study the opinions and views of learners were relevant in respect of the critical issues relating to early and late selection of learners for vocational learning programmes. The survey further probed learner interest in their school subjects and the anticipated long-term value of what was being learnt at school.

(e) LPR survey evaluation

- Introduction

A total of 487 learners from two primary schools participated in the LPR Survey. A total of 9010 responses were yielded by the 20 items included in Section A (activity) and Section B (learning programme) of the survey. The evaluation of the data gleaned from the survey have been represented in tables, graphs, and in an unedited sampling of comments.

- Sections A & B: The Graphs

- Introduction

A graphical representation has been used to display the data gleaned from Sections A and B of the LPR Survey. Graphs are more pictorial, and the trends can be displayed visually. Interpretation is thus much easier. In each case the x-axis reflected the number of aggregated responses tabulated, while the y-axis reflected a profile of the learners' responses. The graphs compared the aggregated responses to the learners' profile in their respective grades, schools, and a combined regional response.

As indicated in the legend the graphs also compare the activity with the learning programmes. Sections A and B were designed to corroborate the selections made by the learners. As the respondents were fairly young it was viewed as being necessary to introduce a corroborating mechanism into the survey. Ideally the two graph lines ought to coincide with each other. As indicated in the legend, a profile of 1 indicated that the respondents were highly in favour of knowledge or content orientated learning programmes, while a profile of 10 indicated a very strong bias towards practically orientated activities or learning programmes. The median is 5. Nil responses were indicated in the survey, but for technical reasons these responses could not be recorded and had to be discarded.

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Sections A & B: The Graphs

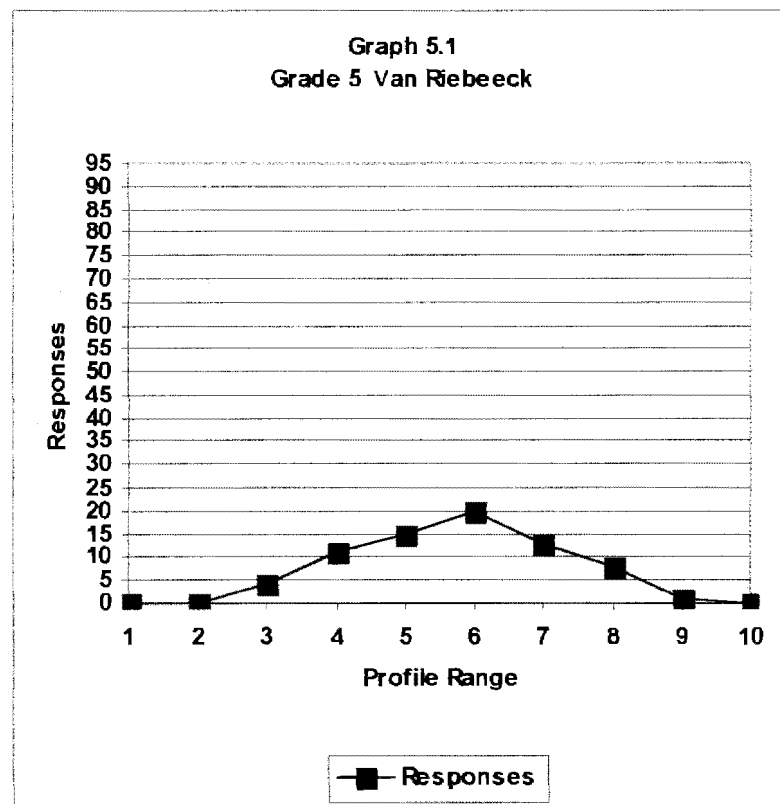
❑ Introduction

A graphical representation has been used to display the data gleaned from Sections A and B of the LPR Survey. Graphs are more pictorial, and the trends in the views being probed is displayed visually, interpretation of findings is thus much easier. In each case the x-axis reflected the number of aggregated responses tabulated, while the y-axis reflected a profile of the learners' responses. The graphs compared the aggregated responses to the learners' profile in their respective grades, schools, and a combined regional response.

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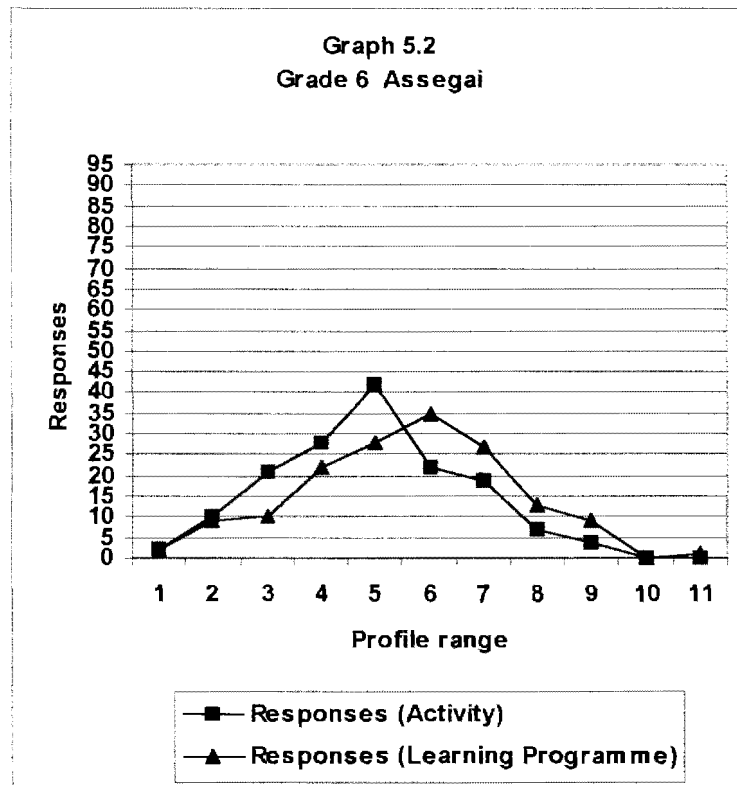
□ Graph 5.1: Grade 5 Van Riebeeck Park

The data indicated on this graph was collected from learners in Grade 5 from Van Riebeeck Park Primary School. Because of the very young age of these learners, the survey was administered verbally, using more age appropriate language than was used in the questionnaire. Only Sections A and C were administered. A total of 730 responses were recorded for this graph, gathered from 73 respondents. An average return is indicated in this graph, with a slight bias towards practical activities.



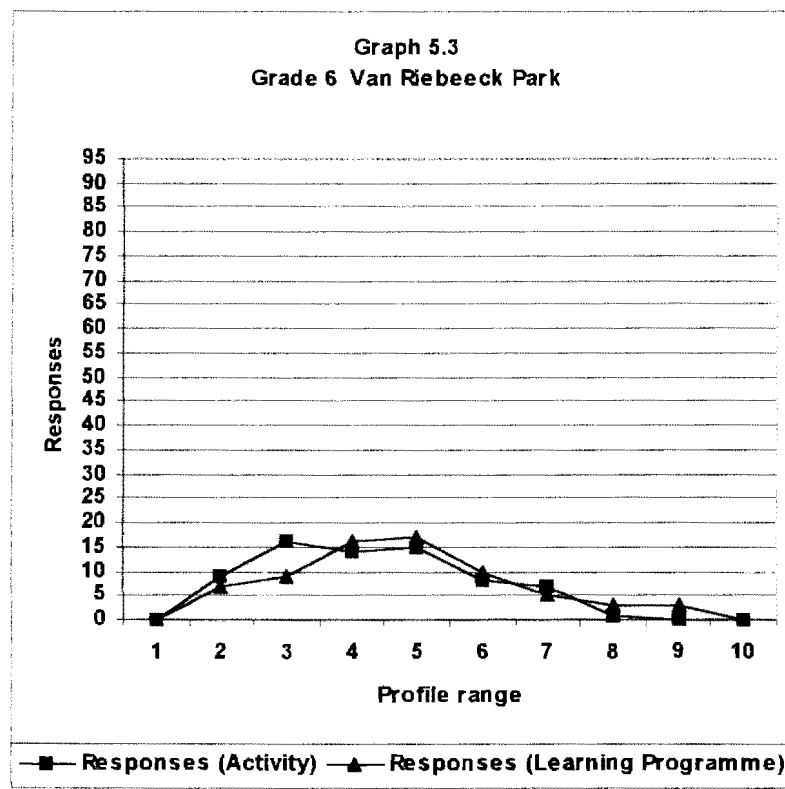
□ Graph 5.2: Grade 6 Assegai

There were 1520 responses to the Grade 6 Assegai activity profile recorded on Graph 5.2, and 1520 responses to the learning programme profile. The activity line indicates a peak towards the knowing or academic interests, while the learning programme line tends to correct this bias in the direction of the median.



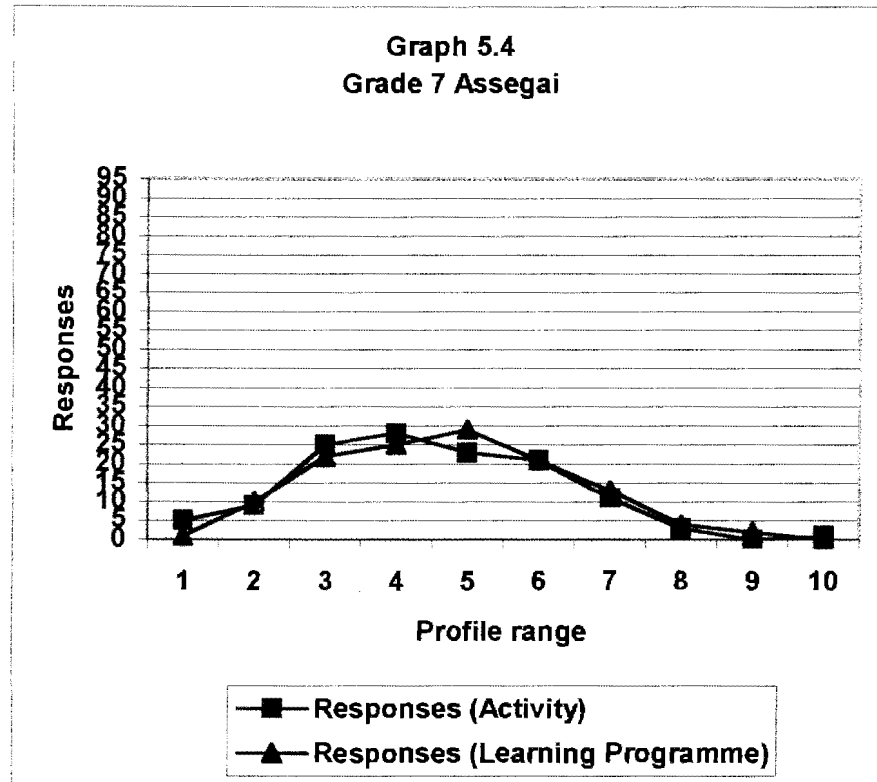
□ Graph 5.3: Grade 6 Van Riebeeck Park

There were 710 responses to the Grade 6 Van Riebeeck Park activity profile recorded on Graph 5.3, and 710 responses to the learning programme profile. A peak was indicated in the knowing or academic zone of the graph, while the learning programme line tended to corroborate the activity bias towards “knowing things” rather than “doing things” with a similar peak in the same zone.



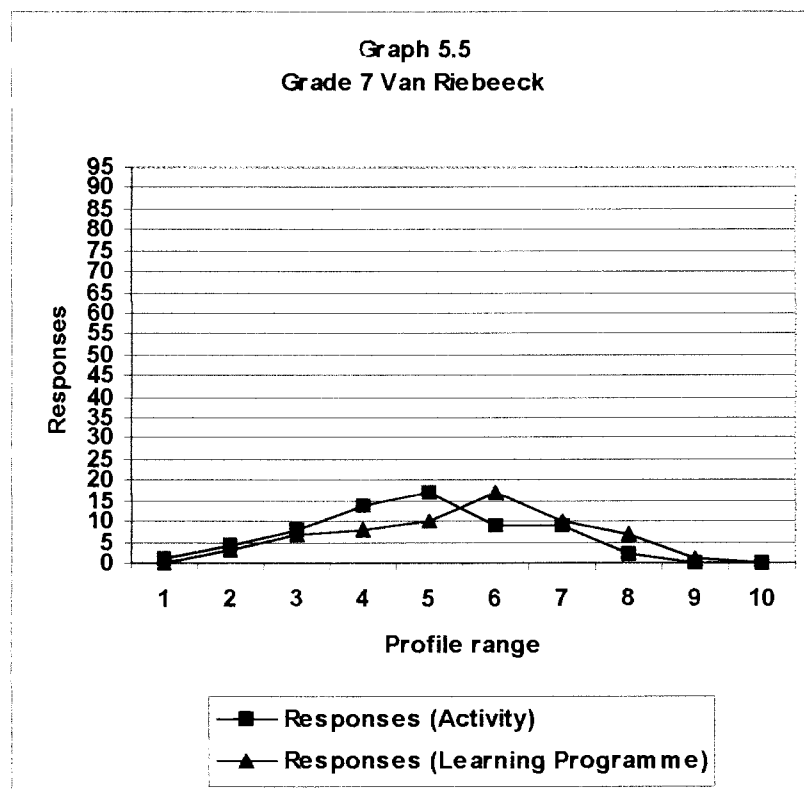
□ Graph 5.4 : Grade 7 Assegai

There were 1270 responses tot he Assegai activity profile recorded on graph 5.4, and 1270 responses to the learning programme profile. The activity line indicates a peak towards the knowing or academic interests, while the learning programme line tends to correct this bias in the direction of the median.



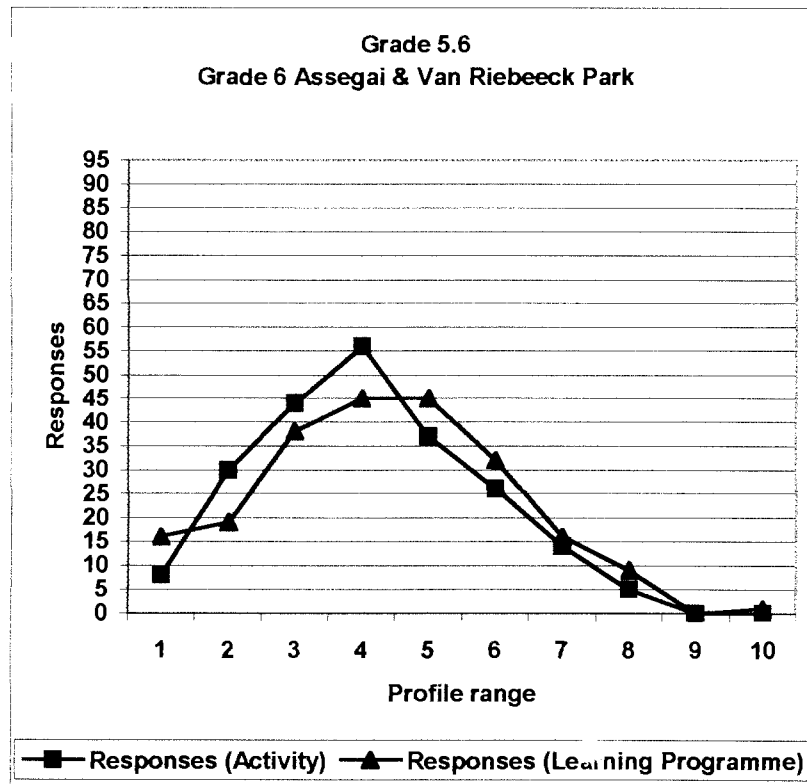
□ Graph 5.5: Grade 7 Van Riebeeck Park

There were 640 responses recorded on the graphs for both the activity and the learning programme profile. The activity line peaks on the median, while the learning programme line peaks on 6, which indicates a bias towards practical interests, and possible vocational pursuits in learning programmes.



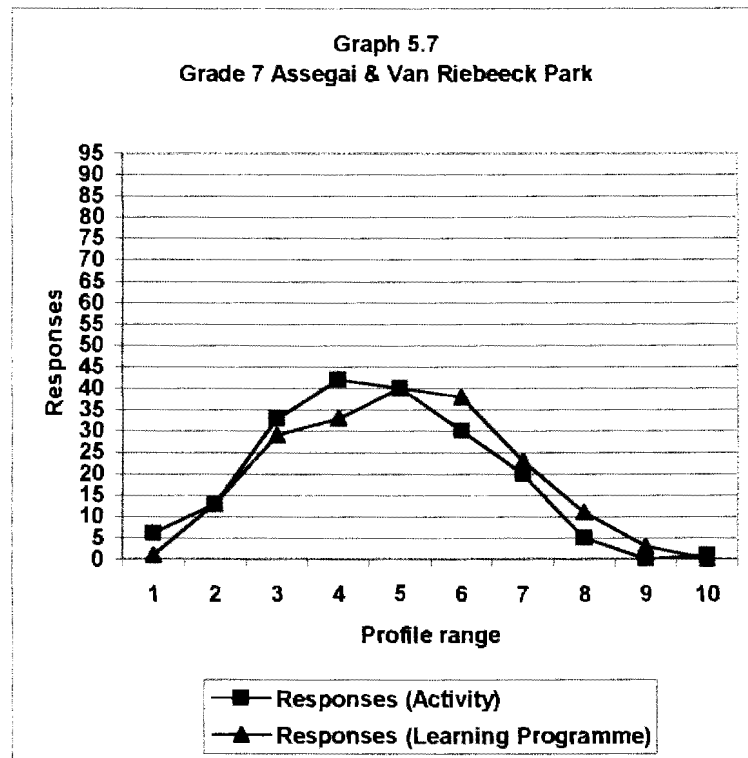
□ Graph 5.6: Grade 6 Assegai & Van Riebeeck Park

There were 2230 responses recorded on the activity line and 2230 responses on the learning programme line. The activity line peaks in the academic zone of the graph, while the learning programme line indicates a levelling out of interest in the academic zone that extends towards the median.



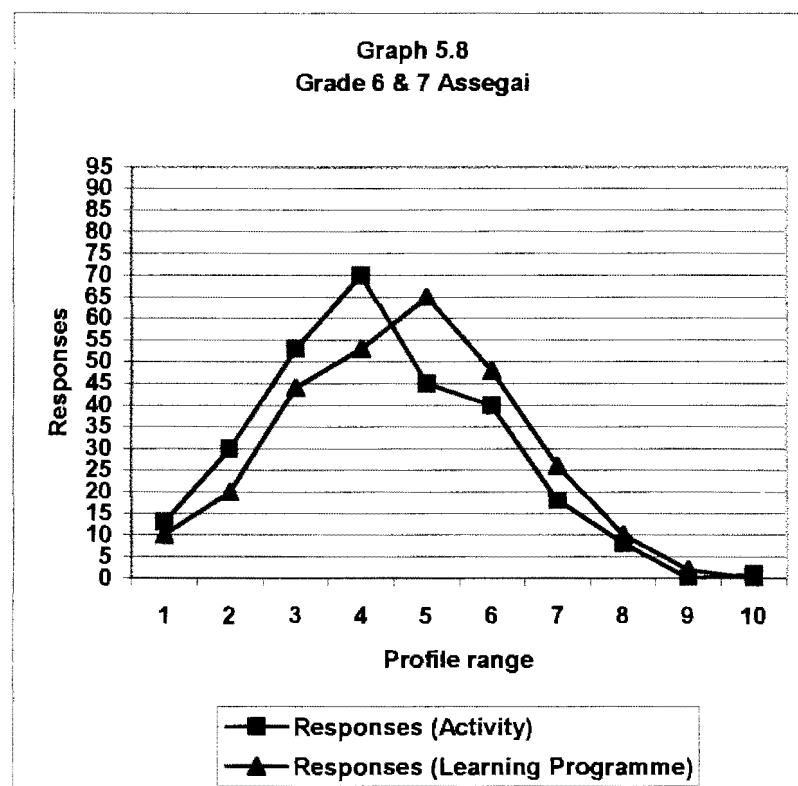
□ Graph 5.7: Grade 7 Assegai & Van Riebeeck Park

There were 1910 responses recorded on the activity line and 1910 responses on the learning programme line. The activity line peaks in the academic zone of the graph, while the learning programme line peaks in the practical zone. A bias is therefore indicated towards practical pursuits with the slightly older learners who are in the final stages of their primary school years.



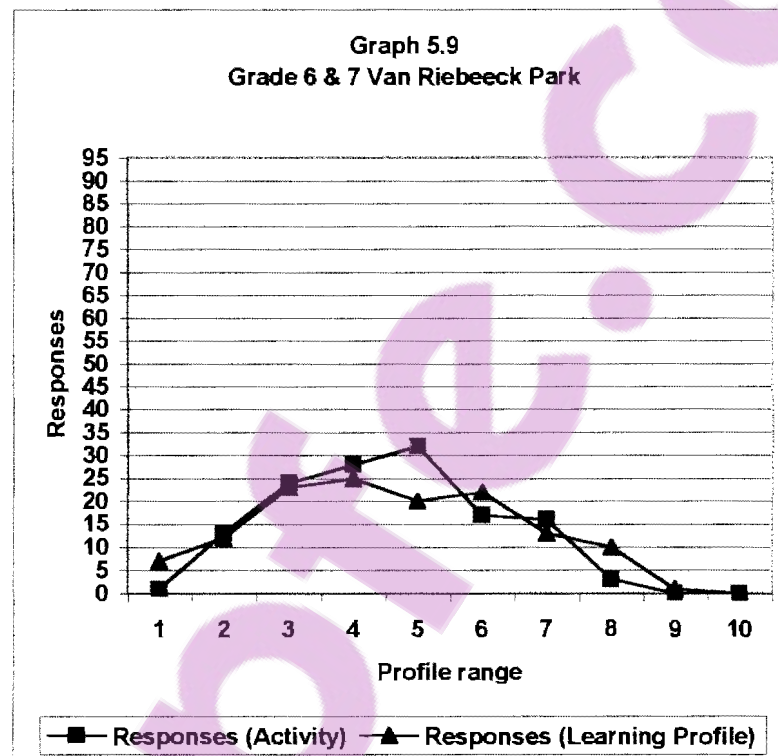
□ Graph 5.8: Grades 6 & 7 Assegai

There were 2790 responses recorded on the activity line and 2790 responses on the learning programme line. The activity line peaks in the academic zone of the graph, while the learning programme line indicates a peak on the median.



□ Graph 5.9: Grades 6 & 7 Van Riebeeck Park

There were 1350 responses recorded on the activity line and 1350 responses on the learning programme line. The activity line peaks in the academic zone of the graph, while the learning programme line indicates a substantial peak in the academic zone, with a second peak in the practical zone. A slight depression took place on the median for this graph line.



□ Graph 5.10: Grades 6 & 7 Assegai & Van Riebeeck Park

Graph 5.10 indicated the total of all the responses for all class groups, both grades and both schools. This graph therefore summarises the findings of the survey for the whole region and from the point of view of both grades. There were 4140 responses recorded on the activity line and 4140 responses on the learning programme line. As was expected the activity line peaked in the academic zone, while the learning programme line peaked on the median. Table 5.22 represents the same data in tabular form.

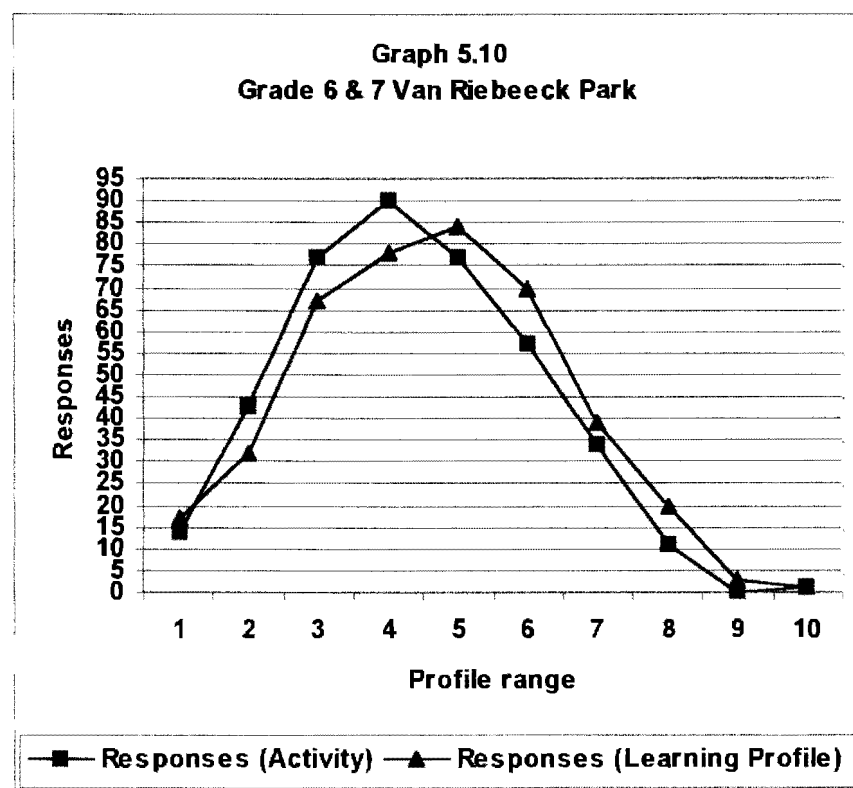


Table 5.22**Summary of number of learners and responses by grade and school**

Graph	Schools	Grade	Activity		Learning programme	
			Number	Response	Number	Response
1	Van Riebeeck	5	73	730	-	-
2	Assegai	6	152	1520	152	1520
3	Van Riebeeck	6	71	710	71	710
4	Assegai	7	127	1270	127	1270
5	Van Riebeeck	7	64	640	64	640
	Sub-total (Ass)	6 + 7	279	2790	279	2790
	Sub-total (Van)	6 + 7	135	1350	135	1350
6	Ass. + Van Rie.	6	223	2230	223	2230
7	Ass. + Van Rie.	7	191	1910	191	1910
8	Assegai	6 + 7	279	2790	279	2790
9	Van Riebeeck	6 + 7	135	1350	135	1350
10	Ass. + Van Rie.	6 + 7	414	4140	414	4140
	Grand Total	All grades	487	4870	414	4140

☐ Conclusion

It can be concluded that the slightly older learners who were preparing for their secondary school careers at the time of the survey had been exposed to more opportunities to think about different types of learning programmes that would prepare them for their possible future careers / vocations. Their natural academic abilities to cope with an academic orientation at secondary school level were therefore a bit more realistic. Relevance was not always perceived in the academic learning programmes of the normal secondary schools in the region. The Grade 6s indicated a greater acceptance of the academic orientations of the prevailing learning programmes. At this stage the Grade 5 bias towards practical orientations ought to be interpreted as a preference for a learning *activity*, rather than a choice between learning programmes and a decision on relevance.

❑ Section C: Knowledge versus Skills

• Introduction

A total of 397 learners responded to the Knowledge/Skills question in Section C. This question merely required learners to make a choice between academic orientations and vocationally orientated secondary schools.

• Summary of Responses

Table 5.23 summarises the responses of the 397 respondents. Table 5.24 represents the same data as simple ratios. A sampling of the verbal responses is contained in the next paragraph.

Table 5.23
Knowledge versus Skills (Numerical responses)

School	Grade	Knowledge	Skills
Assegai	6	108	43
Van Riebeeck	6	41	21
Assegai	7	93	30
Van Riebeeck	7	44	17
Sub-total	Ass: 6 + 7	201	73
Sub-total	Van 6 + 7	85	38
Grand total	All grades	286	111

Table 5.24
Knowledge versus Skills (Ratios)

Grade 6 Assegai	2.5 : 1
Grade 6 Van Riebeeck	1.9 : 1
Grade 7 Assegai	3.1 : 1
Grade 7 Van Riebeeck	2.5 : 1
Grade 6 + 7 Assegai	2.7 : 1
Grade 6 + 7 Van Riebeeck	2.2 : 1
All grades and schools	2.5 : 1

❑ Sampling of **Unedited** written responses

❖ Van Riebeeck: Grade 7

1. I sat this because you are first taught about it and then you do that thing. Pamela
2. I think gaining knowledge on something is far more important because if you know something you can gain both skills and knowledge. Sithembile
3. I choose the skills box and the knowledge box because you need skills and knowledge to get employed. Jennifer
4. If I had the knowledge what's the use of it if I cannot put it to use. Nomfundo.
5. Skills, because then you go out to work then you know how to do it. Sandra
6. Knowledge. Because they are the most easier things that I could possibly do. Sherylyne.
7. I ticked knowledge because when I leave school, people look for people who have knowledge (normally) not skills. Claire
8. I choosed knowledge because it's better to know than have skills. Rochelle
9. Knowledge is power. Without knowledge you can't do skills because you have to know what you are working with. Nikita.
10. The world is heading towards doing everything with computers. Anneline

❖ Assegai Grade 7

1. I want to be something that does not involve things like your hand. Jeandra.
2. It would make me a much more clever and improve my chances of getting a good job. Tristan.
3. I would rather learn than to do something that you do practically. Krystal.
4. I pated knowledge because without knowledge I would not be in grade 7c and writing this sentences. Thubsizwe

5. With knowledge you still have skills. Shernice.
6. So that I can have more knowledge and a good job. Bekezela.
7. I picked knowledge because you can learn skills from your mother and father. Felicia.
8. I choose the things to can't to do for MY Self. Pearl.
9. To improve my work and my brain. Henry.
10. Because they teach you respect and learn good things. Mellody.
11. Because you can lern a lot of Education and lern a lot of work. Graham.
12. You will be able to go many places whith knowledge. Marvin.
13. I chose knowledge because you need knowledge to have a skill. Avery.
14. I need to have knowledge to learn about skills. Cindy.

❖ Van Riebeeck Park Grade 6

1. I would defiantly choose the school with the skills I would choose it because I have to know but what good is knowing if you can't do it. Siyabonga.
2. I would rather go to vocational high school it would improve a lot of knowledge ad I would be prepeard for the world out there. Andre.
3. I would like to go to a school witch you cando a lot of things like make things. Channon.
4. I would choossee a school where they teach you practical work so if anything has to happen you would not have to think and wait to do something. Leigh
5. I whould like eto know a lot like learn how to work on a car or something or a computer. David.
6. I will choose a school that teaches me knowledge.....knowledge can help you with lots of thing a school just like Van Riebeeck Primary school. Sinthusethu.
7. I would choose a school wich taugh me knowledge So I would know what to do when I am big and whant to open a company. Craig.
8. I would like a school that would teach me knowledge and skills so I can be as clever as Mr Edwards. Genevieve.

9. I would go to a school that would teach me to do things with my hands. Andile.
10. I would like to go to a skilled school to learn how to be a Car Builder. Thabang.
11. I like to go to a school that teaches....how to run a business...Yogan.
12. I would pick a school you do something with your hands and use your skills. And were you learn and work with engines ect. Joel.
13. I would like to go to a school where you learn.....for insitnis if you go to buy a car and you want to buy one you don't know if he is steeling your money...so that is why I want to learn and read. Ethan.
14. I would like to go to a school that you can do these bussines when I get older I can do electronics on computers and all kinds of electronics. James.
15. I'd like to go to a school that you can learn with books, because I like reading and writing. Colleen.

❖ Assegai Grade 6

1. I don't like to know whow to do something I wanna do it so that is why I ticked skills. Venessa.
2. Because I like to do and make things with my hands. Quad.
3. Becwas if I don't find a job I will biwld thing so I can sale the things that I biwld. Mlandi.
4. So that I can do things others ca not do. Antonio.
5. Because if you don't know how to do enething no will high you for a job. Marisce.
6. So we can build thing like houses with your hands. Lee.
7. So that I could run my own Bisnesses. S'bis'usiso.
8. Because I like making and inventing things. Lee.
9. Skills can leed you anywere like to become a computer engineer, engieer, pharmsist....an all that you'd done can leed you to you victorie. Robert.
10. I love to do practical. Chanel.
11. So that I can work for money, I don't need to pay people to come fix something when it is broken I can fix it myself. Jermaine.

12. I am not good in mathematics I will study my skills and do well. Vanessa.
13. So if I get are job I know what to do. Zandile.
14. You can have your own business with skills. Sergio.
15. Because I can learn how to make things. Luigi.
16. Because I want to find my skill. Jarryd.
17. I like to draw and build things. Codie.
18. 18.I want to do Skills. Sue-ann.

❖ Van Riebeeck Grade 5

1. To know, because i hate it so much rite now. Siphiwe.
2. To do things so you fix thing a learn other nice things. Siyethemba.
3. I would go to a knowing school which teaches you history and science and maths and everything because you have to know things like these to get a good job these days. Kerina.
4. I would chies to do the during school because I do not think having a agukation is not so impotent and if you don't go to this skool you will not know how to do things with you hands. Terrence.
5. Doing school: because you will learn about stuf with your hands like fixing stuf like bycycle bilding stuf, making stuf like towers building and lots more. Shiloh.
6. I would like to know koweledge then be able to do things because you can't do things without knowledge. Kelvin.
7. If you go to a "how to do school" you will only do everything with your hand you won't get education and cleverness. Fortunate.

❑ Conclusions

The original spelling and grammar of the pupil's written responses were retained. The knowledge versus skills responses indicated higher responses for knowledge based learning programmes than for skills based programmes. The higher responses tended to come from the Grade 7 learners. This was particularly prevalent in the Assegai Primary School. This school was situated in the formerly disadvantaged suburb of Wentworth, these responses were

concluded to be a reflection of parental influence. A slight tendency in favour of skills orientated learning in the written responses persuaded the researcher to conclude that the written responses may in fact have contradicted the numerical responses. If this is indeed the case then the findings of his survey confirm again the critical importance of vocational counsellor appointments in all secondary schools, and that these appointments include liaison functions with the workplace, and all institutions of education and training.

□ Section D Specific Learning Programmes

- Introduction

Section D of the LPR Survey probed specific learning programme preferences of learners. The table included selections from traditional academic learning programmes (subjects) as well as selections from vocationally orientated programmes. Some very specific activities were also included, as possible distractors. These distractors were not designed to be entirely meaningless. Distractors could be part of broader learning programme designs; however, in isolation they were not expected to attract support in the context of an urban environment. Formal instructions were kept to a minimum, so as not to influence the respondents. Only one request was made: remember to include at least one language.

The responses were aggregated for each class group, grade and all schools. The factor derived from repeated aggregating indicated learner preferences. Higher factors naturally indicated higher ranking for a learning programme by the learners and conversely the lower the factor the greater the degree of rejection by the learners for a particular subject or subjects.

- The Responses

A total of 4012 responses were returned. The responses have been recorded and tabulated in Tables 5.25 and Table 5.26.

Table 5.25 summarises the “top ten” subjects per grade and for all schools. Only subjects where common rankings within a grade emerged have been indicated in the table. The highest common rankings scored were nine for Grade 6 Van Riebeeck Park Primary. Table 5.26 summarises the nil-response subjects per grade and for all schools. Only subjects where common rankings within a grade emerged have been indicated in the table.

Table 5.25
Summary of top ten learning programme choices

	Grade 6 Assegai	Grade 6 Van Riebeeck	Grade 7 Assegai	Grade 7 Van Riebeeck	Combined (all grades, all schools)
Subjects and ranking factor	5.7 Mathematics 5.0 Computer Skills 4.9 Art 4.4 French 3.8 Cooking	6.1 Mathematics 6.0 Computer Skills 4.3 English 4.3 Music 4.1 Art 3.4 French 3.1 Child Care 3.0 Biology 2.9 Physical Science	6.0 French 5.2 Computer Skills 4.6 Mathematics 4.5 English 4.2 Travel & Tourism 2.8 Accounting	6.3 Computer Skills 6.0 Mathematics 4.4 Small Business Skills 4.2 Travel & Tourism 3.9 French 3.7 Music	5.62 Computer Skills 5.60 Mathematics 4.4 French
Learners	148	72	121	64	405
Responses	1476	715	1257	564	4012

Table 5.26**Summary of learner nil-responses for subject choices**

	Grade 6 Assegai	Grade 6 Van Riebeeck	Grade 7 Assegai	Grade 7 Van Riebeeck	Combined (all grades, all schools)
Subjects nil-response	Cattle rearing Instrument mechanic Craftsmanship Sheep-keeping Structural engineering Conservation	Sheep-keeping Clock-making Cattle-rearing Bricklaying Plumbing Forestry Horticulture	Sheep-keeping Bricklaying Horticulture Craftsmanship	Sheep-keeping Ballet Cattle-rearing Bricklaying Plumbing Horticulture Craftsmanship	Sheep-keeping Cattle-rearing
Learners	148	72	121	64	405
Responses	1476	715	1257	564	4012

☐ Conclusions

The top-rankings in subjects provided an interesting insight into the thinking of young learners. No significant differences between the selections of the two schools were noted. No marked differences between the Grade 6 and 7 selections were noted. The top selections were the same. A slight tendency towards the inclusion of vocationally orientated learning programmes may have been evident in the Grade 7 selections. The subjects that were selected indicated support for the so-called relevant subjects of mathematics and computer skills. It is interesting to note the support for romantic subjects, art and French. The inclusion of cooking cannot be explained. The only explanation for the inclusion of music in the Van Riebeeck lists is the fact that the researcher is a fairly visibly musician in the context of the school! This environmental influence may have exercised a measure of influence in the respondents selection of music. Music did not feature in the Assegai responses. It is possible to conclude that the learner responses were totally random, and that environmental influences and romance played a significant role in respondent selections. The irony of the top two choices in the context of

the Wentworth-Austerville region is that the majority of the learners struggle with mathematics as a subject, and that many families do not possess a computer. Neither of the two schools has a computer centre for learners. The matriculation results for KZN indicates that slightly less than half of all learners who enter for the matriculation examination will not pass, and that while improvements in maths and science results in the over preceding years has been evident, a long road still lies ahead before the perceived relevance of these specific learning programmes will translate into reality.

The nil responses indicated interesting patterns of thinking. The learners were not persuaded to select “gimmicky” learning programmes or learning programmes that were too narrow in content (sheep-keeping and cattle – rearing). Furthermore there was also a clear indication that if learners did not know what was entailed in a subject they were not prepared to make a selection, e.g. plumbing, structural engineering, and horticulture, etc. The conclusion can be made therefore that the learners are conscious of the value of correct learning programme selections for their future. There does therefore appear to be a case for early selection, but with the provision that competent and qualified vocational guidance counselling is made available to guide learners and their families into making correct choices. The nil-responses tend to balance the conclusions from the top-rankings.

5.5.4 Reforms and future developments

Chapter 2 provided this study with the theoretical insights required for more specific examination in Chapters 3, 4 and 5. These insights were investigated and integrated through-out the study. This paragraph will examine the conclusions to Chapter 2 in respect of future developments in KZN education in the light of some of the salient conclusions that have emerged from this chapter.

5.5.4.1 Relationship between humans and society (cf para 2.2 & 2.9.1)

A relationship between humans and society exists. The dual foci of educational provision were identified as existing in the realm of the social and

personal relevance. South Africa has recently experienced an intense period of constitutional and educational reform. The South African legal framework has been substantially reformed, and a new dispensation of non-racial and more equitable educational provision has been entered into. In a sense the reform process has been completed. However, the country, and KZN in particular is still in the process of societal transformation. The problems of relevance in education persist. A disruption of the social relationship between the people of KZN and the political, economic and socio-cultural foundations of our society have occurred. Future developments will have to address this rupture.

5.5.4.2 Education as an agent of change (cf para 2.3, 2.4 & 2.9.2)

Education was described as a basic human need in Chapter 2. It is a critical role-player in the attainment of qualitative human living. The problems of the low-income and the high-income economies were concluded as being very different. Issues in the low-income economies were related to poverty and basic survival. The psycho-socio needs of human beings were prevalent in the problems of the high-income economies. KZN society includes both high-income and the low-income communities, hence, the provision of relevance in education in this region is an extremely complex issue. Future developments will have to address the needs of humans at all levels of existence.

5.5.4.3 Economic problems (cf para 2.5 & 2.9.3)

The economic problems of KZN were thoroughly investigated in this chapter. This chapter indicated that the problems of youth and unemployment overshadowed the entire school-to-work transition process, and even influenced the motivation of learners during the final years of their secondary schooling. The question of responsibility for relevance in education is a shared responsibility. Relevance in education cannot accrue in isolation. Future developments in education will have to address this critical insight.

5.5.4.4 Economics and education (cf para 2.6 & 2.9.4)

The socio-economic problems of this region were concluded to be essentially non-educational in origin. Education cannot be expected to broker and bring about complete societal change. The overlap of responsibility for the school-to-work processes devolves to educational providers and the strengthening of basic primary and secondary levels of schooling. The realities of an extremely harsh economic environment will have to take into account the specific needs of all KZN communities. Future developments will need to address the acute problems of all primary and the secondary schools of this region, in order to ensure that relevance in education does meet basic human needs.

5.5.4.5 The liberal and the vocational (cf para 2.7 & 2.9.5)

Chapter 2 concluded that the dichotomy between vocational and liberal learning programmes to be irrelevant to the basic needs of humans. The choice is not between general or vocational education, but whether education meets the basic needs of society. Future developments in KZN therefore ought to take into account the problems of communities that are struggling against the realities of poverty, illiteracy, and innumeracy, and poor skills development. The personal needs of all humans, rather than the social needs of policy-makers and politicians is to be prioritised. This is the bottom line of a basic human needs approach to development. The mediation of that theoretical relationship between humans and society will be further developed in the conclusions to this chapter and in the summary in Chapter 6.

5.6 CONCLUSIONS

5.6.1 Introduction

The conclusions to the KZN data will be in respect of the historico-legal, socio-economic and structure of education data, followed by the material that emerged from the trends, critical issues, and future developments. Barriers to relevance will be indicated. As this paragraph is integrally linked to the conclusions in Chapter 6, the data provided in this paragraph concludes the

comparative perspective. The emerging conclusions will be summarised in Chapter 6 together with the recommendations.

5.6.2 Historico-legal factors

5.6.2.1 Comparative

Comparative factors emerged from cultural traditions of the high-income economic country data. The transmission of values attributed to craftsmanship and life-long learning emerged from the German studies. Confucian educational values were viewed as a factor of relevance in the Japanese country data. The rapid recovery of the German and Japanese economies after World War 2 was attributable to the enabling legislative frameworks that existed in these national contexts. National determination to overcome the political and socio-economic set-backs played a vital role in the process of recovery. Commitment to relevant education was a factor of high relevance in the post-war national recovery processes. The Scottish comparative data indicated unique similarities with KZN. Similarities also emerged in respect of the constitutional union with the Westminster Parliament and the semi-dependence of the region on the English south. Further parallels were observed in the emergence of an enabling Scottish legislative code that had a positive influence on relevance in education. Legislative reform created an economic environment that was conducive to education-enterprise responsiveness. Scottish education-enterprise relevance developed within the wider framework of the free market system of the United Kingdom.

Comparative data from the low-mid-income economic studies indicated the prevalence of national commitment to pervasive and restrictive ideology. The Soviet-Russian country data indicated that educational relevance was not attainable until Communism had been completely dismantled. While Zionism provided the drive for the economic miracle of Israel this same ideology became a contributory factor to the on-going conflict in the Palestinian-Israeli region. The role of the international community was viewed as a relevant factor in the low-income economies. A political agreement with the Zionist state was critical before any semblance of relevance could accrue to

Palestinian education. The creation of an independent Palestinian state has emerged as a pre-requisite before the full realisation of educational relevance in the Palestinian Authority can occur.

The Soviet-Russian country data further indicated that educational recovery in a post-ideological context is long-term. The slow pace of societal recovery in the aftermath of ideological hegemony was noted in this study. Structural transformation of a society precedes the transformation. . The enabling nature of a new legislative framework is therefore viewed as factor of relevance. Relevance is hastened and enhanced however, in an environment of economic growth as stimulated by the principles of free enterprise.

5.6.2.2 KwaZulu-Natal

All forms of ideology, religion and cultural factors have interacted in the KZN regional context. Barriers to relevance were indicated in the KZN study by these factors. Apartheid, the role of the churches, the influence of trade unionism and socialism were factors in the history of the region that have interacted and retarded social and personal development in the region for many decades. The dependency factor in KZN history was viewed as a particular factor to have retarded relevance in educational provision region. The Zulu monarchy and the role of the *amakosi* in the provision of education in KZN were concluded to be another factor unique to KZN. The distinctive role of the traditional leaders in KZN society was noted, however the unresolved legal status of the *amakosi* was perceived to be a potential barrier to personal and societal development of the tribal trust lands, as such to the relevance of educational provision in these regions.

The social legacy of apartheid remains, the damage inflicted by this ideology on KZN society is incalculable. The historico-legal data indicated that legal and structural transformation had taken place in KZN society. Transformation at the personal level continues to elude reality. The emergence of a new ideology was viewed as a barrier to relevance. The reactionary trends of socialism and unionism as institutionalised in new legislation were perceived to be punitive in intent, with a propensity to regulate society. Immobility in

society inevitably restricts economic growth with equally restrictive consequences for the accrual of relevance in educational provision.

5.6.3 Socio-economic factors

5.6.3.1 Comparative

Comparative factors were yielded by the high-income economies in respect of the value of investment in human resource development. The high-income economies tended to reflect low rates of unemployment. Demographic data for the high-income economies indicated dense and homogenous population groups. Free enterprise encouraged vigorous participation of a strong private sector in local and world markets. This emerged particularly in the German and Japanese studies. These two economies adopted different approaches to the problem of the transition from school to work. Commonality existed in clear pathways to life-long learning. Literacy levels were high in all three national systems, and hence the educational and skills levels of the population were high. The transition from traditional technological industries accompanied the entry into the global markets.

The low-mid-income economies were not always organised according to the principles of free enterprise. Comparative factors that emerged from the low-income economic data indicated the poor performance of these economies. Poor economic growth resulted in high levels of poverty, crime, and social spending. The assistance of the international community emerged as a relevant factor in supporting the struggling low-income economies. The Russian county data indicated the transition of the Russian (and former Soviet) economy from a command economy to a mid-low-income market economy. The economic indicators of the post-communist Russian economy were characteristic of the low-income economies. One of the critical factors that emerged from the low-income economic data was the prevalence of high unemployment rates, particularly among the youth.

The low-mid-income economies were not socially homogenous populations. Multi-culturalism in the low-mid-income economies was evident. Immigrant

and refugee populations were features of the Palestinian-Israeli comparative data. The provision of education in these types of economies was found to be complex and problematic. Economic factors play a significant role in the provision of relevance in education in the general and vocational education sectors. Barriers to relevance were found to be more acute from the socio-economic perspective where the national states were engaged in armed conflict with one or more national states. The low-mid-income data yielded evidence in respect of the relevance of the application of the principles of supply and demand in provision of vocational education. These principles of basic economics determined logical starting points for education and training. Any other approach stood the risk of flooding the labour markets with irrelevant skills and exacerbating the problems of unemployment.

The responsiveness of education and training to the market was an important principle that emerged from the socio-economic data, hence the decision to examine the KZN socio-economic data in depth. The cardinal conclusion yielded by the comparative socio-economic data indicated that the most logical starting point for an examination of relevance in education and training was with the markets. The comparative data indicated beyond dispute that the strong link between education and the economy was a highly relevant factor.

5.6.3.2 KwaZulu-Natal

The KZN country data indicated a marked growth in the population of the region. Some sub-regions are densely populated; this applies to the PNE-region. The population increase has taken place primarily in the Black/African population group. Indicators such as the Gini Co-efficient concluded poor human development for the region. Poverty, declining levels of literacy were evident from the emergent data. KZNs political and economic dependence on the South African economy emerged as a problematic factor. The poor world competitive rating for South Africa had consequential implications for KZN.

The KZN market indicated a growing economically active population, with only marginal growth predicted for the region. The growth of the informal and unemployment sector emerged as the single biggest problem in the region in

respect of economic growth. Problems experienced by the KZN economy were similar to those of the low-middle-income economies. KZN, and South Africa, was concluded as being a mixed economy in a socialistically orientated free market system, probably more akin to the Israeli economy than to that of the post-communist Russian state. Anomalies were therefore to be expected in the economy. These anomalies will have implications for the provision of relevance in education.

5.6.4 Structure of education factors

5.6.4.1 Comparative

The high-income countries had established structures for education with long traditions. Two distinct approaches to relevance emerged. The German approach emphasised the value of sound general educational preparation, followed by early selection into streams (or tracks) with varying degrees of vocationalism. The Japanese system construed early vocational selection to be a barrier to relevance. Relevance was attributed to sound general or liberal education as a preparation for work.

The German secondary school and post-compulsory system was concluded to be relevant to the needs of the densely populated German communities. Variety in models of vocational schooling provided communities with several alternatives. The *Abitur* and the 13th year in the German study assumed greater significance in the light of the demand for critical and lateral-thinking skills required by the modern workplace. Flexibility and adaptability were skills to be acquired *vis-à-vis* general educational learning programmes. Rapid technological changes in society required employees who were able to adapt to change. The Scottish data concluded further the high value of flexible learning as factors of relevance. Based on a national qualifications framework the emphasis on core skill learning was critical in the Scottish data. The modularisation of learning, emerged as a factor of relevance in the Scottish country data. Modularisation created opportunities for workers to “catch up” on aspects of learning not acquired during the compulsory or pre-employment

years. The accumulation of credits towards a formal qualification was a further factor of relevance.

The high-income data indicated a trend towards more general education as a preparation for employment in the modern technological world. The value attributed to liberal (or general) education by the Japanese created a definite place in society for the Japanese junior colleges. Relevance in work-preparation in the Japanese system is *vis-à-vis* university qualifications. The emergence of the Miscellaneous Schools on the other, emphasised distinct trends in Japanese approaches to relevance, and highly specialised preparation for work. The youth safety net in Germany and in Israel viewed as a factor of relevance. Compulsory apprenticeship and vocational school attendance ensured that youth unemployment remained at reasonably low levels.

The low-mid-income data indicated structures of education that were basically the same as those in the high-income economies. Differences emerged more in respect of the processes of teaching and in the administration of education. The Israeli vocational secondary schools emerged as a feature of Israeli relevance. Relevance in the Palestinian country data was severely restricted by the fragmentation of provision. A unified structure was viewed as a prerequisite to relevance.

The authoritarian style of teaching evident in Soviet-Russian study was a distinct barrier to relevance. The relevance of private providers of education emerged in the Russian and in the Israeli data. ORT schools and colleges in Israel provided highly specialised education with a scientific and technological orientation in Israel. The over-all relevance of the Israeli approach to education may be concluded in respect of the transition from a low-income to a high-income economy. Relevant factors that emerged were the emphases attributed to computers, science, and technology in national learning programmes. The responsibility for secondary education in Israel was devolved to the local authorities. Israeli rural education was addressed *vis-à-vis* the relevance of *kibbutz* education.

5.6.4.2 KwaZulu-Natal

The structure of education in KZN was not found to be markedly different from the structures in the comparative studies. The KZN system of education is dependent and integrated with that of South Africa. The value attributed to the matriculation examination in South Africa overshadows all considerations of relevance in South African education. The KZN system of education is structured according to a national qualifications framework. Curriculum 2005, a nationally designed outcomes-based approach to teaching and learning in South African classrooms, emerged as a critical factor in the provision of relevant and qualitative learning in KZN.

The amalgamation of five former departments of education in KZN resulted in the present unitary system of administration. Disadvantage persists in provincial education. The legacy of disadvantage in some communities is deep, akin to the situation of emergency discerned in the Palestinian data. Administration takes place *vis-à-vis* in the eight regions of the province. The problems in the provision of education were not discerned in the structures *per se* but in the administration of education and in the processes of providing relevance.

The provision of pre-school education emerged as being problematic. No clear direction existed for the provision of pre-school education. The administration and funding of pre-school education was at the time of writing was undefined.

The value attributed to general education as opposed to vocational education is a factor that emerged from traditional South African and KZN education. The former departments of education that administered education in KZN did not provide vocational education in the secondary schools of this province. This reflects the attitudinal bias in respect of relevance with undisputed racial over-tones. The legacy of vocational prejudice is still evident in the "Cinderella status" of the technical colleges.

The matriculation examination continues to dominate the provision of education in the general education band. The compulsory first band in the

KZN structure of education is followed by the provision of FET. This NQF band includes the provision of education on Levels 2 to 4. The region is served by eight institutions of higher education. An imbalance exists between the enrolment of the technical colleges and the institutions of higher education. This imbalance was concluded to be problematic and a barrier to relevance in the FET sector.

5.6.5 Trends in educational provision

5.6.5.1 Comparative

International trends in educational provision vary considerably. This study found that generally international trends were related to, *inter alia*, productivity, the global markets and the relevance of local economies for international participation. Traditional methods of education and training for the workplace have been critically reviewed by the high-income economies in order to remain globally competitive. The low-income economies aspired towards relevance and global participation.

The approaches towards relevance varied in the German and Japanese country data. German stakeholders asked critical questions about the cost of investment in training. Conflicting interests among stakeholders resulted in tensions. Higher productivity over-ruled all other considerations. In the German study the dominance of the employers emerged as a significant factor, while the Japanese data yielded relevant factors in respect of the vital role of the private sector in relevant education. In the Scottish study the education sector lead the way in pursuit of relevance in education. Trends in the Japanese data indicated a preference for the values of a broad liberal education in preparation for work on the premise that this approach was more cost-effective. The Japanese argument held that the general education approach produced workers who were more suited to the rigorous demands of the modern business world. An international trend for more theoretical education emerged. The demand for more theory for a technologically orientated market is best acquired in the degrees and diplomas offered by colleges and universities.

The Scottish data indicated the confluence of two major trends in pursuit of relevance, viz the relevance of life-long learning processes for economic development, and the relevance of partnerships in the process of achieving economic growth. The mobilisation of Scottish enterprise was a noticeable trend in the Scottish country data. The development of the further education sector emerged as distinct trend in the Scottish reform. The development of flexible qualifications in all areas of work and a system of life-long learning emerged as trends that characterised the Scottish system. The Scottish approach to relevance has been *vis-à-vis* an integrated system of partnerships.

Different types of tensions exist in the low-income economies. An imbalance between graduates from the higher educational and tertiary institutions were problematic to emerging economies. Trends in respect of the demand for intermediate level skills emerged from the Russian data. A further trend in post-communist Russia was a general decline in the standards of educational provision. Trends to strengthen ties between schools and communities were evident in the low-income data. This was noticeable in the Palestinian country data. Community-based education emerged as a factor of relevance, the relevance of community colleges was a further trend in the Palestinian data. The argument in favour of modules in learning focused on the benefits for the labour markets. Modules were able to adapt to the needs of the labour market more rapidly.

The Israeli study yielded relevant data in respect of attitudes towards work, especially blue-collar work. Further, healthy attitudes towards science and technology were viewed as factors of high relevance. Integrated approaches to science and technological development were indicated to be a relevant trend in the Israeli data. Factors of relevance emerged when the study of science and technology were contextualised in education for work on the Israeli *kibbutzim*. The study found that the lack of financial resources tended to restrict the provision of relevant learning programmes in the senior secondary schools of the low-income economies. The Israeli data indicated a national determination to strengthen the senior secondary education *vis-à-vis* the vocational secondary school sectors to be a costly exercise. The higher cost

factor was knowingly waived in favour of the perceived benefits to the state and the economy. The development of vocational secondary schools emerged in the high and low-income comparative data as a clear and definite international trend. The privatisation of education emerged as a trend in the Russian data. The market and the economy introduced new dimensions to the education market. These market related trends had a positive influence on issues of relevance.

5.6.5.2 KwaZulu-Natal

The trends in the provision of education in KZN followed fairly similar patterns to the international trends. The trends in KZN education were preceded by an evaluation of the trends in the quality of human life in the region. These trends were ostensibly non-educational in nature. One of the conclusions of the study is that the quality of life has everything to do with the provision of relevant education. Education for intrinsic value becomes a non-sensical educational aim when learners have not had food to eat for days, or when homes do not have electricity, or domestic water supply and sanitation, or children live in permanent fear for their personal safety. The economic indicators demonstrated that a large percentage of people have not benefited from enough education. The skill profiles of KZN society were consequently low. Education had become irrelevant to the economy, hence the perpetuation of poverty. A discordant relationship between education and skills development thus emerged, with the problems associated with the provision of basic human needs as being foundational to the problem of relevance. The irony is that the popular trend has emerged to critically examine the relevance of educational provision and in particular to question the relevance of the traditional matriculation examination as an adequate preparation for entry to the labour market.

The other trends in the KZN data included the entry of SAQA into the field of human resource development. The SAQA trend was construed as a factor of relevance; however, concern was expressed at the esoteric and inaccessible nature of SAQA-ish concepts and language. The FET sector was identified as a potential factor of relevance. However, developments in this field had not

transpired into reality. The senior secondary school emerged as an institution that held great potential for the development of relevance in education. The challenge of developing learnerships in the senior secondary school was concluded to be an undeveloped area of potential relevance. Other FET providers included the private providers. There was potential for the private sector to become involved. The thirteenth year was undeveloped, and held potential for the preparation of learners who intended studying further. This year however, was construed to be potentially more suited to the community college campus than the secondary school. The GET band was considered from the point of view of the introduction of Outcomes-Based Education into the schools of KZN. Curriculum 2005 was concluded to hold great potential for the region. Serious reservations however, were expressed at the idealism of the programme, particularly for the disadvantaged regions of KZN. It was concluded that the success of OBE teaching was inextricably linked to the resourcefulness of educators and the availability of a variety of materials and equipment. Areas under the control of the *amakosi* and traditionalism were particularly at risk.

5.6.6 Critical issues in educational provision

5.6.6.1 Comparative

The critical issues of the high-income economies appeared to emerge primarily as a result of globalisation. International competitiveness and the potential problems for high-income societies of economic downturns were concluded as critical factors. The problems of youth in the high-income data were concluded as critical issues for economic development and educational relevance. The comparative data indicated that the problems were related to the transition from school to work, youth unemployment, as well as personal problems. The on-going demands of technology and the poor image of the vocational school were critical problems that had to be addressed in Germany. The Japanese data indicated problems of poor discipline, fear of failure, and the *yugami* phenomenon. The Japanese comparative data concluded that *yugami* resulted from the pressures of a university dominated society. Japanese society was driven by an obsession to succeed. Admission to

prestigious universities was perceived as symbols of success. The academic standards of Japanese universities were therefore also questioned. The problems of 'examination hell' were concluded as one of the critical factors in the Japanese data. The Scottish system was a more recent system that was designed to respond to the needs of a society with a small population. Clear pathways of flexible learning established by the Scottish qualifications framework set the tone for self-motivated progress and lifelong learning. The Scottish economy was concluded to be semi-dependent on the high-income economy of the United Kingdom. This semi-dependent status was concluded as being a potentially critical barrier to relevance in Scotland. In summary, the critical issues of the high-income economies were concluded to be the issues that related to the responsivity between education and work, and the preparation of learners/students for the labour market.

Poor or slow economic growth set parameters for relevance in the low-income economies. Barriers to relevance in education were perceived in factors such as the spread of illiteracy, poverty, high rates of youth unemployment, as well as the critical problems associated with lack of funding for education. The decline in standards of education emerged as a critical factor in the Russian country data. The low-income data did not indicate that inappropriate administrative structures for education were barriers to relevance *per se*, rather the implementation of relevant learning programmes emerged as potentially more critical. The provision of educational basics was critical factors for the accrual of relevance in low-income country classrooms. In this respect international funding was viewed as a factor of relevance. External sources of funding were able to stimulate and aid curriculum development.

The low-income economic data indicated that a clear distinction had to be made between economic problems and educational problems. Education could not act as a broker for all the problems of society. The Israeli "second best option" illustrated this conclusion. The cost of supporting a particular approach to relevance may be costly, especially if the aim of relevance in education was to support a social policy of a national state. Potential factors to relevance may arise; however, critical problems could invalidate anticipated relevance. The low-income comparative data established this conclusion quite

unequivocally. The expectation of education to support ideology or social policies, or a national state's engagement in conflict may find relevance an elusive commodity. The expected advantages from programmes of relevance may yield critical issues of proportions that cancel out the factors of relevance altogether.

5.6.6.2 KwaZulu-Natal

The critical issues that emerged from the KZN data mirrored some of the issues that emerged in the comparative data yield. In KZN the critical issues that emerged became focused on the problematic relationship between education and enterprise in KZN. The EER Survey addressed this critical issue. The findings of the survey re-enforced the critical need for dialogue and greater articulation between these two sectors. Company-based training was concluded to be adequate in the large companies, however, the SMMEs were neglected. The skills shortage in KZN had clear implications for the formal education sector. The appointment of vocational guidance officers with external functions emerged as a critical factor in addressing the problems of education-enterprise articulation. While some employers advocated vocational education the survey concluded that much support existed for the relevance of liberal values for the workplace. Un-developed learnership programmes required attention in conjunction with the Department of Labour. Partnerships between education and enterprise was a feature that was not clearly understood, neither were the values of modular learning *vis-à-vis* colleges of further education (or technical colleges) correctly understood. The second survey focused on critical issues confronting learners in the learning processes at school.

The learner relevance survey indicated that the problems of disadvantage were deep and that the options available to educators in respect of introducing relevance into learning were limited. In other words there were more problems than solutions. Learners were not ignorant of the need for technological and mathematical education; however, many would not be able to aspire to achievement in these disciplines. The LPR survey *per se*, did not provide a clear indication of support for either the general or the vocational educational

options. However, when other factors were taken into account, e.g. the abundance of problems experienced by learners, a critical need then emerged to consider early vocational selection, as an alternative to general learning programmes. This would be particularly relevant in the densely populated regions where greater articulation between education and enterprise was possible. The conclusion was reached that these alternatives may have to be considered with urgency. Alternatives included unfortunate drop-out from school at an early age, with no safety net to guarantee skills training. The perpetuation of the cycle of unemployment, semi-skilled labour, poverty, and poor quality of living into the next generation, is the only other unfortunate certainty of education irrelevance.

5.6.7 Future developments

5.6.7.1 Comparative

Reforms and developments in international systems of education vary considerably. However, the high-income economic data concluded that systems of education required fine-tuning in order to remain relevant to ongoing societal change. Reforms in the high-income economies were on the foundations of established traditions and legal infrastructure. The adaptability of systems of education was concluded to be critical for long-term relevance. The absence of reform as a result of political rigidity tended to result in societal stress and outbreaks of delinquency among youth. Reforms were concluded in quality initiatives in the provision of general education. No major restructuring of general educational programmes was yielded by the country data, however, the assurance of quality in general education emerged as a development in more than one national system. Specific issues that emerged included, *inter alia*, the extension of the school day, addressing the problems of ethnic and cultural minority absorption into mainstream society *vis-à-vis* educational initiatives, and science and technology developments in school education. The problems of funding education emerged in more than one system as an issue that required future reform.

The low-income economic data concluded the long-term disadvantage to society of post-ideological legacies. In the wake of the dismantling of Communism, the reforms and future developments were obliged to address the issues of feeding and clothing the nation. Educational implications are closely linked to these socio-economic issues. Building infrastructure for the accrual of relevance in any educational system was concluded in the eradication of poverty. The long-term prognosis for relevance in the low-income economies did emerge as being bleak. The value of on-going empirical research was thus concluded to be a factor of high relevance for future development. Research initiatives were perceived to be more relevant when conducted at regional levels. Inter-disciplinary research topics were perceived to hold particular relevance for regional and sub-regional development.

5.6.7.2 KwaZulu-Natal

South Africa has recently experienced an intense period of constitutional and educational reform. The South African legal framework has been substantially reformed, and a new dispensation of non-racial and equitable educational provision has been entered into. So in a sense the reform process has been completed. However, the country and the province of KZN is still in a transition process, and the results of reform have not yet been experienced in respect of the basic needs of the people at grass-roots level. Communities are still seeking relevance in respect basic provision of relevant education. This has become abundantly clear from the conclusions in this chapter. Issues that remain unresolved may yet remain as such for many decades. The need for on-going empirical research has been indicated in this study. The problems of the deterioration of discipline in the classrooms of KZN, quality assurance in education, ethnic and cultural integration in the schools and mainstream of KZN society, the problems of funding of education, the dichotomy between “examination hell” and automatic passing, the role of the *amakosi* in the provision of relevance of education in rural KZN, are but some of the issues that require careful research. The problems of skills development and the role of the secondary school are other issues that require urgent research.

Anticipated future developments in education are integrally linked to the final conclusions and the recommendations of this study. The comparative data yield of this final paragraph will now be integrated into the summary of the conclusions and recommendations of Chapter 6.

CHAPTER 6: CONCLUSIONS

6.1 INTRODUCTION

This chapter is essentially a summary of the conclusions that have emerged from the problem investigated in this study. The relevance of the current provision of education in the province of KwaZulu-Natal was thoroughly investigated in this study. In view of the fact that this was a comparative study the problem statements were formulated as follows:

- What are the international trends in respect of the provision of education?
- What are the current trends in the transformation of the provision of education in South Africa in general and how do our KZN initiatives compare with international trends?
- How relevant are these current trends in education to the socio-economic circumstances of KZN?
- How should education in KZN be restructured in order to satisfy local and international demands?

The research aims were:

- to make a thorough study of the problem of relevance in educational provision in Germany, Japan, the former Soviet Union and Russia, Scotland and the Palestinian-Israeli region;
- to explore the problem of relevance in educational provision in KZN in comparative context;
- to draw conclusions and to make recommendations for the restructuring of educational provision in KZN, in order to enhance the relevance of education in the province.

Being a comparative study a variety of strategies were applied in the data gathering process. Field research was conducted by means of interviews, conference attendance, and by means of the two empirical surveys. Modern technology was employed quite extensively in order to access data not readily available in South Africa. The data reduction process was cyclical and on-going. The integration of the raw data with the emergent data yield provided a

logical flow of meaning and added a sense of holism to the study. The analytical format that emerged from the theoretical insights of the second chapter were rigidly applied through-out the study. All research strategies and considerations were integrated into the analytical framework. The study was essentially a qualitative study; however, the socio-economic component of the study required the inclusion of quantitative data. The quantitative data were similarly integrated into the analytical framework with stringency. The application of the multiple strategies undoubtedly suited the aims of the study and the resultant data yield was rich and enhanced the findings and validity of this study.

This chapter will summarise the conclusions to the study and make recommendations for the restructuring of educational provision in KZN.

6.2 HISTORICO-LEGAL DATA

6.2.1 History

6.2.1.1 Conclusion

The historical, cultural and religious values of nations are transmitted over many centuries. These values influence present-day attitudes towards education and production. The study concluded that historical traditions could be either barriers to relevance or factors of relevance. Attitudes towards race and culture are historical legacies that have indisputable roots in our long history of racial polarisation. The problems associated with racial attitudes were concluded to be major barriers to relevance in education.

The institution of the Zulu monarchy with its powerful historical traditions is a unique KZN cultural institution. The study concluded that the monarchy continued to enjoy the unwavering support from a large constituency in the province, with implications for relevance in educational provision in these regions of KZN.

The dependency of KZN on the legislation and policies of the national government influences the development of the province. Historical factors

have had a decisive influence on the provision of education in the region. The historical problems associated with inequitable funding in historical perspective have resulted in a sad legacy of poor educational provision. The study concluded that these inherited factors impose the parameters within which relevance in education is able to accrue in the community (cf para 5.6.2.1 & 5.6.2.2).

6.2.1.2 Recommendations

Education cannot change political, social and cultural structures. Positive attitudes however, are developed when learners learn and work together. The development of healthy attitudes in respect of inter-cultural tolerance falls within the ambit of all educators and at all levels of provision. It is recommended that all educators be equipped with skills to deal with the problems of racial tensions. It is recommended that all educators be enskilled with conflict resolution skills during initial and in-service training. More than that we cannot do (cf para 2.2, 2.3, 2.4 & 4.3.6.5 (c)).

6.2.2 Ideology

6.2.2.1 Conclusion

The study concluded that the apartheid ideology had imposed barriers to relevance in education. Post-apartheid socialist and trade unionist influences in KZN society have become neo-ideological barriers to the natural development of society, and the development of relevance in education. The paradox of relative relevance may be aptly applied to the new legislation. The quality of human life has not improved in the region. The conclusion was therefore reached that by espousing neo-ideological foundations for the post-apartheid era the provision of relevant education for the most disadvantaged communities in this region has been sacrificed (cf para 5.6.2.1 & 5.6.2.2).

6.2.2.2 Recommendations

It is recommended that the South African national state distance itself from all forms of ideology. It is further recommended that all legislative processes be

free of historical, cultural and religious bias. This recommendation applies particularly to legislation in respect of labour and employment in education (cf para 3.3.5.2; 3.3.5.5(b) & 4.2.6.2).

6.2.3 Legal Framework

6.2.3.1 Conclusions

The new legislative framework abolished the racial discriminatory laws of the former era. The social transformation of KZN society may have been addressed by the new legislation. The study concluded that transformation at the personal level of relevance in respect of basic human needs was not a present reality. Furthermore, a void existed in respect of the regulation of stakeholder unity in the provision of education and training. The semi-dependent nature of KZN was concluded to be a distinct barrier to relevance. The study concluded that barriers to relevance existed in aspects of national legislation regulating the relationship between the national state and the provincial parliaments (cf para 5.6.2.1. & 5.6.2.2).

6.2.3.2 Recommendations

The relevance of the new legislation for countries may not emerge until the efforts of all stakeholders are regulated in national and regional councils. The regulation of all stakeholders in the provision of FET in the region is an essential feature of the provision of relevant education. It is recommended that politicians and policy-makers examine the German BIBB – model with a view towards the institutionalisation of councils that are representative of all stakeholders from all levels of provision in the province and the country. The recommendation is further extended to include in the councils on-going research functions in respect of the human resource development. This recommendation includes further a call for an urgent initiative to address the relationship between the national and the provincial legislatures. In particular the relationship between the national and the provincial departments of education need to be addressed. This recommendation implies the possibility of a legislative amendment (cf para 3.2.5.2 & 4.3.9.5 (d)).

6.3 SOCIO-ECONOMIC DATA

6.3.1 Nature of the economy

6.3.1.1 Conclusion

The study concluded that the KZN economy is correctly described as a mixed economy. The large tribal trust areas under the control of the traditional leaders of the province are still organised along traditional concepts of economics. National policy is influenced by the principles of Communism and unionism. The study concluded that traditional or non-democratic economic principles usually indicate poor economic growth, or economic stagnation. The industrial heartland of KZN is situated in the sub-regions of Durban, Pinetown, Pietermaritzburg, and in the Richards Bay industrial complex. The growth of the informal sector and the economic stagnation of KZN rural sub-regions were concluded in the economic data (cf para 5.6.3.1 & 5.6.3.2).

6.3.1.2 Recommendation

It was stated repeatedly in the study that the problems of socio-economic development *per se* were not direct educational problems. Relevance can accrue to socio-economic development vis-à-vis relevant qualifications and education-enterprise responsivity. It is recommended therefore that the integration of educator expertise with that of other stakeholders in the field of human resource development be expedited. A multi-stakeholder approach to macro planning and policy formulation in KZN has the potential to infuse relevance into learning programmes of schools and colleges (cf para 3.2.5.2; 3.4.6.5(a); 4.2.6.3 & 4.3.9.3).

6.3.2 Provincial dependence

6.3.2.1 Conclusion

KZNs dependence on the economy of South Africa emerged as a significant factor in the economic development of the province. The parameters for economic development in this region have been established in the

Constitution. The comparative country data indicated that independent economic development was a distinct possibility in the context of constitutional dependence. Participation in the world markets by a semi-dependent region held distinct possibilities for the economic growth of a region (cf para 5.6.3.1 & 5.6.3.2).

6.3.2.2 Recommendation

It is further recommended that new provincial legislation focus on enabling multi-stakeholder participation in human resource development at global, regional and community levels. The association of public and private educational providers at all levels of regional planning is strongly recommended (cf para 3.4.6.5 (a) & (b)).

6.3.3 Demographic factors

6.3.3.1 Conclusion

Rapid urbanisation of the industrialised sub-regions has taken place. The population density varies considerably. The population statistics indicated a strong majority for the Black African population group. The 20 –29 year age-group indicated the greatest bulge in the population. These findings were construed to be of critical importance for the provision of relevant education in the urban sub-regions of KZN. This conclusion has particular significance for post-secondary institutions (cf para 5.6.3.1 & 5.6.3.2).

6.3.3.2 Recommendation

It is recommended that planners and policy-makers survey the educational and economic needs of the densely populated regions of the metropolitan sub-regions as a matter of urgency. The strengthening of FET in these regions, as an alternative to higher education is recommended. This recommendation includes a strong call for specific emphasis on the development of technological and scientific programmes (cf para 3.2.5.3 & 4.3.6.5 (b)).

6.3.4 Human Development

6.3.4.1 Conclusion

The human development indicators included South Africa and KZN among the poorer nations of the world. Evidence emerged of poverty preventing primary school children from attending school. Early drop-out from school was related to poor human development. Literacy rates were low in some regions. This was directly related to inadequate access to educational facilities (cf para 5.6.3.1 & 5.6.3.2).

6.3.4.2 Recommendation

It is recommended that providers of education adapt learning programmes to meet the needs of specific communities. Relevant programmes that address local issues of small business development and the informal sector ought to be included in these programmes. The second recommendation in this paragraph includes the strengthening of secondary education in all sub-regions. It is recommended that, as a service to their communities, all secondary and post-secondary institutions offer basic literacy classes *vis-à-vis* community colleges (cf para 4.3.6.5(c) & 4.3.9.5 (c)).

6.3.5 Unemployment

6.3.5.1 Conclusion

The study concluded that the problems of unemployment exerted an acutely negative influence on the motivation of senior learners to achieve scholastically. This included the acquisition of the matriculation certificate as well as post-school qualifications. The study concluded further that the problems of the unemployed were exacerbated by low-skill profiles. Irrelevant skills were symptomatic of job losses. Poor general educational levels usually accompanied low and un-skilled profiles (cf para 5.6.3.1. & 5.6.3.2).

6.3.5.2 Recommendation

This recommendation points once again to the relevance of the secondary schools. Greater diversification in secondary school learning programmes is recommended. An increase in the number of secondary school models is further recommended. Investment in human resource development must be stimulated. It is recommended therefore that the links between the secondary schools and colleges (or FET institutions) be strengthened. A “safety net” for early drop-outs from school is recommended (cf para 3.3.5.2 ; 3.3.5.3; 3.2.5.5 (a) & 4.3.6.4).

6.3.6 The private sector

6.3.6.1 Conclusion

It was concluded that KZN had a strong private sector. Most large companies were self-sufficient in providing for the training needs of their employees. This was not the case with the SMMEs. It was also concluded from the comparative data that production for the global markets required more than company-based training. Technological expertise that was accompanied by relevant theory could only be acquired at colleges and universities. Post-secondary institutions would be required to supplement company-based (cf para 5.6.3.1 & 5.6.3.2).

6.3.6.2 Recommendation

This recommendation calls for the private sector to demonstrate strong leadership in the facilitation of relevance in educational provisioning. Relevance in education will only accrue once the potential relevance of KZN has been harnessed. The private sector in KZN has the capacity to lead. It is recommended therefore that stakeholder unity be prioritised in the region (cf para 3.3.5.3 & 4.2.6.2).

6.3.7 Rural Development

6.3.7.1 Conclusion

It was concluded that agricultural activities contributed towards the livelihood of a significant percentage of the population. General educational levels were low in the rural areas. Secondary schools were not always within reach of communities. Drop-out from school occurred during the transition from primary to secondary school. The relevance of shorter courses for farmers and labourers emerged from the agricultural data. The findings indicated that no consultations existed between educational authorities and agricultural representatives at regional and sub-regional levels. The data indicated also that the approach to farming was very individualistic. Co-operation only took place at the level of sharing large items of machinery or equipment *vis-à-vis* the co-operatives. Joint ventures in respect of companies or along the lines of the Israeli *kibbutzim* were alien to the South African outlook. This applied to the tribal trust land farmer as well. It was concluded that much of KZN was rural, and very poor. There was an acute need for the intervention of relevant education (cf para 5.6.3.1 & 5.6.3.2).

6.3.7.2 Recommendations

It is recommended that the problems of the rural learners be addressed in a similar manner to that recommended above *vis-à-vis* regional and sub-regional councils. It is further recommended that the role of the secondary school in the rural regions be strengthened in respect of accessibility to all learners. It is recommended that the relevance of itinerant FET (or community) colleges with an agricultural orientation be considered. This recommendation includes the implementation of modular programmes that address specific issues of relevance to the farmer and the labourers. The upgrading of literacy and numeracy levels ought not however, to be overlooked in modular programmes (cf para 3.4.6.3; 3.4.6.5 (a); 4.3.6.5 & 4.3.9.5).

6.4 STRUCTURE OF EDUCATION

6.4.1 Administration and educational structure

6.4.1.1 Conclusion

The system of education in KZN is structured along the lines of the national qualifications framework. The structures in education in South Africa and KZN are not markedly different to the systems of education examined in the comparative studies. The accommodation of the Grade 7 year in the primary school emerged as an anomaly. Devolution of administration of the secondary schools to local / community levels emerged as a factor of relevance for local communities (cf para 5.6.4.1 & 5.6.4.2).

6.4.1.2 Recommendation

The inclusion of the Grade 7 year into the secondary schools of KZN is recommended. Advantages exist in respect of earlier exposure to workshop equipment and experience. Decisions relating to careers and appropriate school placement can be addressed by vocational guidance councillors, currently only appointed to secondary schools. It is recommended that greater devolution of administrative functions to the secondary schools and the local communities be investigated and implemented (cf para 4.3.4.1(e); 4.3.4.3 & 3.2.3.2(b)).

6.4.2 Education

6.4.2.1 Conclusions

(a) Pre-school Education

It was concluded that pre-school education had been tragically neglected in KZN. The responsibility for this critical area of learning had been assumed by governing bodies and private providers. No standardisation and quality control was possible. The vision of one-year compulsory pre-primary education had not materialised (cf para 5.6.4.1 & 5.6.4.2).

(b) Outcomes-based education

The conclusions to the compulsory educational data indicated the assumed relevance of the outcomes-based education reform of the general educational learning processes in KZN (cf 5.6.4.1 & 5.6.5.2).

(c) The South African Matriculation Examination

Furthermore, the continued dominance of the South African matriculation examination emerged as a distinct barrier to relevance in the study (cf 5.6.4.1 & 5.6.4.2).

(d) Further Education and Training

The emergence of the FET band was concluded as an area of learning that was potentially very relevant to the needs of the region (cf para 5.6.4.1 & 5.6.4.2).

(e) Higher Education and Training

An over-supply of institutions in the higher education sector was concluded for KZN. The perception of the under-utilisation of the technical colleges, indicated an imbalance. More graduates were being generated in the higher education sector. The study indicated that a skills shortage existed in the intermediate sector. The technical colleges were eminently suited to address this problem (cf para 5.6.4.1 & 5.6.4.2).

6.4.2.2 Recommendations

The following recommendations are made in respect of the above conclusions (cf 6.4.2.1 (a) – (e)):

- (a) It is recommended that the one-year compulsory pre-primary education vision for South Africa be re-visited with immediate effect (cf para 3.3.5.4).
- (b) It is recommended that the South African traditional matriculation be re-conceptualised. The present system does not cater for relevant learning

for all learners; it merely serves as a selection process for higher education. It is recommended that the current higher-grade examination become dissociated from the standard-grade examination. It is recommended that the standard-grade school-leaving certificate become more work-orientated with greater emphasis on continuous practical assessment and an orientation towards the technical colleges. It is recommended that higher-grade university entrance becomes more orientated towards the academic pursuits of selected learners with an additional advantage accruing to students *vis-à-vis* a thirteenth year (cf para 3.2.5.4; 3.3.5.4; 4.2.6.5 (b) & 4.3.6.4).

- (c) It is recommended that the under-utilisation of all technical colleges be investigated with urgency. It is recommended that this situation be addressed *vis-à-vis* the management structures of secondary schools *and* technical colleges. Meaningful partnerships with the private sector in this respect are also recommended (cf para 4.2.6.5 (b)).

6.5 TRENDS IN EDUCATION IN KWAZULU-NATAL

6.5.1 Quality of Life

6.5.1.1 Conclusion

The impoverishment of the quality of life was a growing trend in KZN. The educational levels of the population were too low to expect meaningful development of skills. The Black population was the most disadvantaged, and the socio-economic gulf between the PNE sub-region and the remainder of the province was profound.

It was concluded that these qualitative human factors had a profound impact on learning and had to be addressed before learners could be expected to concentrate and benefit from teaching and learning processes. A general decline in the standards of educational attainment was concluded (cf para 5.6.5.1 & 5.6.5.2).

6.5.1.2 Recommendation

The problem of quality of life in KZN is not an educational problem *per se*; this has been stated repeatedly and emphatically. The impact of poor socio-economic circumstances on learning is nevertheless acute. Poverty and deprivation has an irreversible effect on a learner's capacity to learn. The provision of vocational alternatives is recommended as an emergency measure to encourage more schooling. This recommendation further calls for the vocationalisation of the curriculum in the primary school in certain sub-regions (cf para 4.3.9.5 (b)).

6.5.2 SAQA

6.5.2.1 Conclusion

The creation of a national qualifications framework for South Africa was concluded to be a highly relevant trend in this study. The study found that not all qualifications had received equal recognition on the framework. The calibration of vocational qualifications in particular had not been accorded the same profile on the framework, as had academic qualifications. Short courses that were in demand by the agricultural and business sectors were not recognised. Company-based training, an important area of education and training in South Africa, has not been addressed. The lack of relevance in the framework was thus concluded in respect of articulation, progression and portability of qualifications (cf 5.6.5.1 & 5.6.5.2).

6.5.2.2 Recommendation

This recommendation focuses attention on the critical need to integrate the qualifications of companies with that of other providers, to ensure that portable qualification are awarded at the end of a period of learning. It is further recommended that accredited providers assume responsibility for the integration of company-based education and training, and that credit be given for units of learning completed that would in time assume the status of a certificate, or a diploma. Progress through the different levels of learning will therefore be possible. It is further recommended that SAQA accord a higher

profile on the framework to vocational qualifications, including modern learnerships (cf para 3.4.6.2).

6.5.3 Further Education and Training

6.5.3.1 Conclusion

It was concluded that the development of the FET sector was a current trend that held great relevance for the province. It was further found that relevance had not permeated down to the level of the consumers of education. Technical college learning programmes were very narrow, and too vocationally specific. Greater variety of learning programmes, including the development of learnerships, was a critical requirement. In this respect the inefficiency of the KZN department of education was cited as a prime barrier to relevance. Attitudinal problems towards “blue-collar” work appeared to underlie much of the prejudice in the communities in respect of technical college qualifications. The image of the technical college sector needed to be improved. There was a need for more private providers of FET to enter the education market (cf para 5.6.5.1 & 5.6.5.2).

6.5.3.2 Recommendation

It is recommended that the status of vocational qualifications at FET institutions must be raised in the community. Public relations and marketing strategies of qualifications must be vigorously embarked on. It is recommended that FET institutions offer a greater variety of qualifications. It is recommended that the providers of FET to address the imbalance between FET and HET with equal vigour (cf para 3.3.5.5 (c); 3.4.6.2 & 4.3.9.5 (c)).

6.5.4 General Education and Training

6.5.4.1 Conclusion

The problems associated with the provision of qualitative GET were concluded to be a critical trend in KZN. The conclusions indicated that the problems of funding educational provision were critical to the issue of relevance in

educational provision in the province. The decline in standards of education was perceived to be critical to the future development of this province. The introduction of an outcomes-based education approach to general educational provision was thus concluded to be controversial and thwart with problems relating to implementation. The trend towards private education (including home schooling) was concluded as being a significant trend in KZN. This trend is motivated by a concern for quality in education. The Thirteenth Year was concluded to be another trend, yet undeveloped, that had the potential to strengthen learner / student preparation for higher education (cf para 5.6.5.1 & 5.6.5.2).

6.5.4.2 Recommendations

It is recommended that curriculum development become community based, with nationally agreed criteria for core learning. It is further recommended the higher-grade matriculation examination be strengthened in order to re-coup the esteem it once held in the community. It is recommended that the place and role of the 13th Year to be explored thoroughly in relation to the higher-grade examination as a preparation for success in institutions of higher education. It is recommended that the providers of HET vigorously address the imbalance between HET and FET (cf para 3.3.5.5(c) & 4.3.9.5(c)).

6.6 CRITICAL ISSUES IN THE PROVISION OF EDUCATION IN KWAZULU-NATAL

6.6.1 Conclusion

The conclusion was reached that a problematic relationship existed between education and enterprise. It didn't seem to matter to future employers what happened in the schools. There was no consensus among employers about the relevance of general educational as opposed to vocational programmes for the long-term future in the workplace. Lack of insight by some future employers into the potential relevance of modern learnerships, partnerships, and concepts such as modularisation was concluded to be a worrisome feature. Education and training for the workplace in KZN was concluded as being firmly company-based but very fragmented. The conclusions from the

points of view of the young learners included in the learning programme survey tended to indicate that critical issues were at stake in the learning processes in the schools of KZN. It was possible to conclude that a need for early selection to vocational education would be a factor of relevance in education. The study concluded that there was a critical need for more vocational guidance officers to be appointed to the schools with internal and external functions (cf para 5.6.6.1 & 5.6.6.2).

6.6.2 Recommendation

It is recommended that on-going dialogue between education and enterprise is encouraged *vis-à-vis* provincial economic forums, regional councils, chambers, etc. Large companies have become very autonomous in their training programmes, and changes in practice are unlikely to occur if the mistrust between education and enterprise is not addressed.

It is recommended that the education department prioritise the status of and quality of technical college education (or FET Colleges). This implies a further recommendation, *viz* that the KZN Education Department give urgent attention to the development of the functions of the Provincial Directorate for Further education and Training, e.g. an immediate increase in the appointment of full-time permanent staff, the appointment of vocational guidance officers to all secondary schools be effected (cf para 3.2.5.3 ; 3.2.5.5(a) (b) ; 3.4.6.2 ; 3.4.6.3; 3.4.6.4 & 3.4.6.5 (a)).

6.7 FUTURE DEVELOPMENTS

6.7.1 Conclusion

It was concluded that future developments in this region would have to address the problems of a highly problematic education department. The study has concluded however, that the strength of the private sector in KZN was a factor of high relevance. It was concluded that education-enterprise responsivity would not accrue while a situation of dissonance exists.

The findings of this study point towards the possibility of unresolved critical issues retarding development in this region. The turning point for KZN hinges on the critical issues in education and enterprise. If meaningful intervention does not take place further decline of standards of education and the transition of an already unstable mixed economy towards that of a low-income economy will be inevitable. The study concluded the distinct possibility of rapid socio-economic decline for a region that has not addressed relevance in educational provision at the personal n at the social level (cf para 5.6.7.1; 5.6.7.2 ; 4.2.6.3 & 4.2.6.5(c)).

6.7.2 Recommendation

It is recommended that future developments centre on the leadership of the private sector and the capacity of this sector to assume the lead in bridging the gap between education and enterprise. This recommendation, resulting from the bleak outlook of the above conclusion, calls for the introduction of research units in the fields of human resource development. These units would be ideally attached to universities or technikons, and would serve the on-going needs of the region. It is recommended that these units work very closely with the private sector, the providers of education and the provincial government. The need for on-going research is absolutely critical for the future development of this region (cf para 3.3.5.5 (b)(c) & 4.3.9.5(d)).

6.8 LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

No attempt was made to consider financial implications of the funding programmes of providers of education. The researcher acknowledges that major implications exist for relevance in education when financial constraints are linked to educational provision. This applies particularly to the technical colleges and the new programme based formula for funding.

This study was essentially a one-person study. No personal visits to the countries included in this study were possible. The data gathered were primarily by means of personal interviews, e-mails, and document collection. The limitations of this method of gathering data are acknowledged. The author wishes to acknowledge that developments in education are rapid, and

changes take place almost everyday. The observations, conclusions and recommendations may be out-of-date before the page on which the data has been recorded is printed. The author has therefore endeavoured to avoid being too specific. Generalisations have therefore had to be considered in place of overly specific conclusions to order to avoid irrelevance.

This study was conducted within the parameters of the research aims. The study indicated a need for on-going research. The following possible topics have been suggested by this study:

- The impact of deteriorating discipline on the provision of relevant education in KZN schools.
- The problems of educational provision in the territories controlled by the *amakosi* in KZN.
- Quality assurance in the provision of relevant education in KZN.

6.9 CONCLUDING REMARKS

This study was an in-depth examination of relevance in the provision of education in KwaZulu-Natal . The study commenced with an introduction of the formulation of the problem statements and aims of the research. In essence the problem centred on the relevance of the matriculation examination and the bleak outlook for employment of our school-leavers.

Chapter 2 examined the problem from a theoretical perspective. A basic needs approach was adopted for the study. The twin-concepts social and personal relevance emerged from the theoretical discussion. It was concluded that the dual foci of relevance in education were inherent to educational provision. The liberal and the vocational focus points of education were examined in this study for relevance.

Chapter 3 examined three high-income economies for factors of relevance. The German, Japanese and Scottish systems of education were examined for factors of relevance in emergent historic-legal, socio-economic and structure of education data. A more analytical approach was adopted for critical analysis in the categories trends, critical issues and reforms or trends in the provision of education.

Chapter 4 examined three low-middle-income economies for factors of relevance. The Soviet-Russian and Palestinian-Israeli systems of education were examined for factors of relevance in emergent historico-legal, socio-economic and structure of education data. A more analytical approach was adopted for critical analysis in the categories trends, critical issues and reforms or trends in the provision of education.

Chapter 5 examined the Kwa-Zulu-Natal system of education for factors of relevance. The examination took place in respect of factors of relevance that emerged from historico-legal, socio-economic and structure of education data. A more analytical approach was adopted for critical analysis in the categories trends, critical issues and reforms or trends in the provision of education.

One of the features of this study has been the integration of the raw data into the chapters. The process of data reduction was cycle, concurrent, and on-going. The conclusions emerged from the on-going process of data reduction. This technique accounted for the greater depth of Chapter 3,4 and 5. The comparative component of this study was concluded towards the end of Chapter 5. Chapter 6 summarised the conclusions from the preceding chapters.

This study has been a study in the provision of relevance in education. If there has been one single thought that has emerged from the many pages of this report then it is the unequivocal conclusion that relevance in education and the quality of human life in a region are inextricably linked. The provision of basic needs precedes relevance in education, however, education cannot ignore developments in allied disciplines. A partnership-approach between all caregivers in a region will achieve more than singular efforts to address the problems of spreading poverty and illiteracy. Human beings have basic needs: food, shelter, clothing, health and education. Any process of growth that does not lead to the fulfilment of these needs - or even worse disrupts them - is a travesty of the idea of development (cf Ghai 1977:6). At the outset of the twenty-first century these words resound among the green-hills of KwaZulu-Natal as the people of this fair province seek to improve the quality of their lives.

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Gillian Hutchings, Director, Membership & Communications, National Business Initiative, 25 June 2001.

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Hirimitsu Mutu, Professor of Human Resources Development, Tokyo Institute of Technology, 12 September 2000.

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Liora Glazerson, ORT-South Africa, 16 June 1999.

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ANNEXURE 1

INTERVIEWS CONDUCTED

1. Professor Dr Hans Bühler. 27 February 1999. Teacher Education Unit. University of C.D.W, Oldenburg.
2. Mr Derrill Papendorf. 6 April 1999. Aero Superintendent. South African Airways, Durban.
3. Ms Lynne Hanekom. 6 April 1999. Training Superintendent. Engen Refinery, Durban.
4. Professor Ulrich Boehm. 9 April 1999. Department of Economics. University of Bremen.
5. Professor Willie Rautenbach. 10 April 1999. Nuclear-Physicist. Koeberg Nuclear Power Station. Cape Town (formerly Department of Physics, University of Stellenbosch).
6. Mr C. Ruben Laten. 12 April 1999. Senior Training Officer. Vynide Chemicals, Strand.
7. Mr Brendan Lambrick. 12 April 1999. General Hotelier. Hotel and Tourism Industry, Cape Town.
8. Mr Charles Whitehead. 13 April 1999. Specialist Training and Development Specialist, KWW, Paarl.
9. Ms Louise Moore. 5 May 1999. Department of Labour, Durban.
10. Ms Tatiana Kogergina. 7 July 1999. First Secretary. Embassy of the Russian Federation, Pretoria.
11. Mr Hans Labuschagne. 19 July 1999. Principal, Pinetown Technical College, Pinetown.
12. Professor Irina Filatova. 28 July 1999. Department of African Studies. University of Durban-Westville (formerly University of Moscow).
13. Mr Sadao Nomura. 2 August 1999. Co-Ordinating Director. Toyota S.A. Manufacturing. Prospecton, Durban.
14. Mr Andrew Patricio. 21 September 1999. Managing Director. KwaZulu-Natal Small Business Partners, Westville.
15. Mr Andrew Layman. 23 September 1999. Director. Pietermaritzburg Chamber of Business and Industry.
16. Dr Alvin van Niekerk. 27 September 1999. Chairman : NSB01 (Agriculture and Forestry). Independent Consultant, Pietermaritzburg.
17. Ms Tal Forber. 30 September 1999. Zionist Youth Recruitment Officer. KwaZulu-Natal Zionist Council, Durban.
18. Mr Gavin Chapman. 30 September 1999. Principal : Cato Manor Technical College, Durban.

19. Ms Iris Colyn. 13 December 1999. Acting-executive director, ORT-SA, Johannesburg.
20. Ms Juanita Wilkins. 14 December 1999. Assistant Director, Quality Assurance. South African Qualifications Authority, Pretoria.
21. Mr Hamdi Abu-Ali. 14 December 1999. First Secretary; Embassy of Palestine, Pretoria.
22. Mr Richard Southey. 28 March 2000. KwaZulu Natal Agricultural Union (KWANALU), Pietermaritzburg.
23. Ms Noeleen Levin. 12 April 2000. Chairperson : APEK Counsellors Subject Association. New Forest High School, Durban.
24. Mr Rick Rickards. 13 April 2000. Training and Development Manager : Mondi Paper, Durban.
25. Ms Elsie Varley. 17 April 2000. Public Relations Officer : Natal Motor Industries, Prospecton.
26. Ms Nami Mchunu. 25 April 2000. Acting Chief Education Specialist, Education Psychological Services, South Durban Region.
27. Ms Bongzi Nzimande. 2 May 2000. Vocational Guidance Educator, Ogwini Territorial High School (COMTECH), Umlazi, Durban.
28. Ms Tanya Daya. 3 May 2000. First Education Specialist, Educational Psychological Services, North Durban Region.
29. Ms Patricia Meyer. 3 May 2000. First Education Specialist, Educational Psychological Services, North Durban Region.
30. Mr Peter Rowles. 8 May 2000. Proprietor Dunrobin Nurseries, Botha's Hill.
31. Mr Ralph Fortman. 10 May 2000. Human Resources Consultant, Natal Building Society, Durban.
32. Mr Brian Cadir. 1 June 2000. Principal, Swinton Road Technical College, Jacobs, Durban.
33. Mr Phumlani Gumbi. 29 June 2000. Deputy Director, Professional Services, Department of Agriculture and Environmental Affairs, South Eastern Region, Pietermaritzburg.
34. Mr Neil Maytham. 11 July 2000. Member, Jem Cutters cc, Cake Decorating, Manufacturing and Marketing, Pinetown.
35. Mr Siva Govender. 18 July 2000. Human Resource Practitioner, Natal Portland Cement, Durban.
36. Mr G. Naidoo, P. Gumede, H. Mdluli, & V. Nzimande. 26 April 2001. Representatives, Department of Agriculture and Land Affairs, South Eastern Region, Inchanga.
37. Ms Heather Wilson, Principal, Carrington Heights Junior Primary School, 15 August 1995 (Interview MEd dissertation).

ANNEXURE 2

P O Box 1186
KLOOF
3640

Confidentiality Undertaking

Dear _____

I, Ian Phillip Edwards, a bona fide doctoral student of the University of South Africa (264-184-4), do hereby declare that all information imparted and opinions expressed by the interviewee during the ensuing interview will remain strictly confidential. All data gathered from the interview will be used for bona fide research purposes only, and will not be published without the prior consent of all participating companies and interviewees. Should it be the wish of a company and/or an interviewee the data gathered from this interview may be recorded and analysed anonymously.

IAN EDWARDS



ANNEXURE 3

THE INTERVIEW SCHEDULES

GERMANY/ RUSSIA/ ISRAEL/ PALESTINE/ JAPAN

1. Please elaborate on the structure of your education system.
2. What do you consider to be the strengths of your national system ?
3. What do you consider to be the weaknesses ?
4. May we talk about your system of vocational education?
5. Do you feel your system is relevant ?
6. Tell me about your economy ?
7. Do your educationalists interact with representatives from business and enterprise ?
8. From the perspective of your country, do we need more general education in order to develop the critical skills, as required by modern technology. Can we achieve critical thinking skills by way of vocational education ?

AGRICULTURAL INTERVIEWS

1. Why are there so few agricultural secondary schools in the province?
Do you feel there ought to be more schools of this kind in the province?
2. Is there a need for more agricultural colleges in the province?
3. Do you think the standard of education of school-leavers that enter the agricultural sector is adequate?
4. Do you think these school-leavers require more general education?
5. Do you think these school-leavers entering the agricultural sector require more practical experience in their secondary curriculum?
6. Do you think farm schools could be developed into partners in developing the vocational curriculum in respect of agriculture?
7. The kibbutz-system, in respect of education and work, do you think it could be implemented in South Africa?
8. Is there a role for learnerships in agriculture?
9. Have you found that the new developments in respect of SAQA, SETAs National Skills Authority (etc) has changed anything in your sector?

10. What would you like to change in your sector (in respect of education and human resource development) if you were given such an opportunity?

LABOUR [also the chamber, NSB01, etc interviews, with variations to the questions]

1. What level of education are the applicants who approach your department for assistance?
2. Is there a need for greater co-operation between the departments of labour and education? At what level, and with what purpose in mind?
3. What is the nature of your relationship with organised business and industry in respect of vocational educational (e.g. Chamber of Business and Industry)?
4. Would you describe the education being provided by the KZNDEC as being relevant in respect of labour? Please elaborate.
5. Do our secondary schools need to provide more general education.
6. Do our secondary schools need to provide more vocational education? Please elaborate on your reply.
7. What is your response to the Westridge model for secondary education in the province? Would you say this model is more relevant than that of a normal academic secondary school?
8. Why do you feel vocational education has not featured on the curriculum in KwaZulu-Natal in the past?
9. The majority of your training programmes focused on high, medium, or low-level skills training? Please elaborate.
10. What kind of strategies in respect of education and training are you implementing in dealing with KwaZulu-Natal's unemployment problem?
11. Is your department dealing with the registration of modern learnership? Please comment on the success rate of the training *vis-à-vis* the learnership system.
12. Does the education department play a role in the education of learnerships? Do we provide a relevant service in this respect?
13. Please comment on developments in the implementation of SETAs, the National Skills Authority, and ETQA accreditation. Do you think developments these fields will result in greater relevance in respect of education and training in KwaZulu-Natal?

GUIDANCE / COUNSELLORS

1. What developments are taking place in your subject in order to remain relevant to the world of work?
2. Does your subject impact in any way on developments taking place in the FET band?
3. What alternatives are available to you when you are dealing with a potential academic dropout in Grade 9?
4. What alternatives do you have at your disposal in dealing with non-achievers in Grade 8?
5. How do you react to the idea of early vocational selection? For example at the end of Grade 6 or 7?
6. What reaction would you get from parents if you recommend a technical college enrolment as an alternative to matric?
7. Do you ever have a request for information on learnership?
8. Do you have any partnership agreements with business and industry in respect of training, curriculum development, or partnership-training, etc.
9. Do you feel your subject is as relevant as you would like it to be in the current climate of unemployment and economic decline?
10. Do you have any dealings with officials from the department?
11. Do you have an external function (in respect of business and industry) as well as an internal function?
12. Do you feel there is a need for a third option in the field? (Vocational option as opposed to the special and remedial schools).

ANNEXURE 4

NAME: GRADE: BOY / GIRL:

TO DO OR TO KNOW?

Choose the activity you would prefer to do (all practical obstacles such as money or time excluded).

In each case put a tick ✓ in the box of your choice.

Section A (activity)

1.	Draw and colour	OR	Write an essay
	<input type="checkbox"/>		<input type="checkbox"/>
2.	Feed horses	OR	Watch a good T.V. programme
	<input type="checkbox"/>		<input type="checkbox"/>
3.	Read a good book	OR	Build a toy model
	<input type="checkbox"/>		<input type="checkbox"/>
4.	Do a reading study	OR	Do a project in which <u>you</u> find out about something interesting
	<input type="checkbox"/>		<input type="checkbox"/>
5.	Do a dissection of a fish	OR	Read a good book about a fish
	<input type="checkbox"/>		<input type="checkbox"/>
6.	Do a science experiment	OR	Read up about it in a good book
	<input type="checkbox"/>		<input type="checkbox"/>
7.	Spend 30 minutes on a computer	OR	Repair your bicycle
	<input type="checkbox"/>		<input type="checkbox"/>
8.	Bake a batch of cupcakes	OR	Read an exciting book
	<input type="checkbox"/>		<input type="checkbox"/>

9.	Polish a car and improve the bodywork in the process	OR	Design the interior of a room in your house
	<input type="checkbox"/>		<input type="checkbox"/>
10.	Look after fish in a fish pond	OR	Learn about slaves, gatherer hunters and the early Cape farmers
	<input type="checkbox"/>		<input type="checkbox"/>

Section B (learning programmes)

11.	Restore furniture	OR	Learn about other cultures
	<input type="checkbox"/>		<input type="checkbox"/>
12.	Design a pool and garden	OR	Study rock formations in the mountains
	<input type="checkbox"/>		<input type="checkbox"/>
13.	Sort fruit into grades	OR	Study the botany of fruit orchards
	<input type="checkbox"/>		<input type="checkbox"/>
14.	Do practical first aid	OR	Study the anatomy of the human body
	<input type="checkbox"/>		<input type="checkbox"/>
15.	Design, plant and maintain a flower garden	OR	Study aspects of pollination and flower reproduction
	<input type="checkbox"/>		<input type="checkbox"/>
16.	Learning how to be self- employed	OR	The history of Shaka's kingdom
	<input type="checkbox"/>		<input type="checkbox"/>
17	Computer programming	OR	The study of acids and bases
	<input type="checkbox"/>		<input type="checkbox"/>

	OR	Study of a foreign language
18 Entrepreneurial skills (i.e. how to run a business)		<input type="checkbox"/>
<input type="checkbox"/>		
19 Child care or diesel mechanics	OR	Economics of supply and demand
<input type="checkbox"/>		<input type="checkbox"/>
20 Mathematics (algebra, geometry, trigonometry)	OR	Commercial mathematics (i.e. everyday maths of the world of work)
<input type="checkbox"/>		<input type="checkbox"/>

Section C:

What kind of high school would you like to go to: a high school that taught you to know something (i.e. lots of knowledge) **OR** a high school that taught you how to do something (i.e. lots of practical skills)?

Put a tick in one of the two boxes provided.

☐
Knowledge

OR

☐
Skills

Briefly, say why you choose the box you ticked.

.....

.....

.....

Section D:

Tick ✓ your ideal learning programmes for high school. Choose your Top 10 from any column or any row.

Remember to include a language. “Practical” subjects all include workshop experience or field work.

Biblical Studies	Electronics	Hair Dressing	Motor Mechanics
Toy Making	English	Geography	Travel & Tourism
Child Care	Zulu	French	Radio & T.V. Repairs
Cooking	Chemistry	Physical Science	Horticulture (flowers)
Sheep Keeping	Accounting	Art	Hotel keeping & catering
Religious Studies	Sign Writing	Xhosa	Commercial (practical maths)
Clock Making	Afrikaans	Bricklaying	Technical Drawing
German	Computer Skills	Sea Craft	Small Business Skills
Maths	History	Plumbing	Metal Work (Welding etc)
Ballet	Music	Forestry	Sewing & Embroidery
Paramedics	Graphic Art	Biology	Structural engineering (building structures)
Diesel Mechanics	Cattle rearing	Panel Beating	Secretarial skills & office routine
Horse racing & horse care	Electrical Engineering	Interior Decorating	Anthropology (study of cultures, races & religions)
Design & Technology	Cake Decorating	Instrument Mechanics	Craftsmanship (e.g. furniture making)
Drama	Information Technology		Conservation & environmental restoration

Thank you for your help.

Enjoy your day.



ANNEXURE 5: QUESTIONNAIRE FOR COMPANIES IN RESPECT OF EDUCATION AND TRAINING OF EMPLOYEES

Name of respondent: _____

Position: _____ Date: _____

1.0 General Questions

1.1 Name of company: _____

1.2 Nature of business: _____

1.3 Sector: _____

1.4 Size of company in respect of employees:

1.4.1	Micro	Micro = 1 - 5
1.4.2	Small	Small = 5 - 20
1.4.3	Medium	Medium = 20 - 100
1.4.4	Large	Large = 100 →

1.5 From your company's point of view, would you agree that there is a national shortage of skilled workers?

Yes ☐

No ☐

Comments: _____

1.6 Description of your work-force by skills (excluding administrative, managerial, clerical staff).

- 1.6.1 Unskilled
- 1.6.2 Low-level skills
- 1.6.3 Mid-level skills
- 1.6.4 High-level skills

Approximate % of total work-force

Brief definition of each category:

Unskilled: Some general education, performs routine ; skills are mainly manual.

Low-level skills: Slightly more general education than "unskilled" workers; workers become proficient at elementary routinised tasks.

Mid-level skills: Higher level of general education; rely on manual dexterity but application is dependant on theoretical knowledge.

High-level skills: Post-school general or technical education; problem-solving skills required as well as higher order thinking skills when dealing with abstract symbols at a conceptual level.

1.7 What type of training do you use for new employees? (Excluding administrative, managerial, clerical staff).

	Choose one or more	Approx. % of total work-force
1.7.1	Indentured apprenticeship	
1.7.2	On-site training (non-contractual)	
1.7.3	On-site plus college/technical college, day release	
1.7.4	On-site plus college/technical college, block release	
1.7.5	On-site plus college/technical college evening classes	
1.7.6	On-site plus technikon	
1.7.7	Training Centre	

2.0 **Basic skills of production and service delivery in respect of skilled employees**

2.1 Rank importance of its employee basic skills

Rank the following categories of basic skills in respect of skilled employees, in order of importance from the point of view of your company.

Ranking scale: 1 – 7 (1 = Top; 7 = Bottom)

	Ranking Order
2.1.1	Skills of basic competence: reading, writing, computation
2.1.2	Adaptability: knowing how to learn the ability to accept change
2.1.3	Creative problem-solving skills
2.1.4	Good oral communication and intelligent listening skills
2.1.5	Personal management:
2.1.6	Human relations
2.1.7	Leadership skills

2.2 The value of basic skills

How valuable would you rate each of the following employee basic skills from the point of view of your company?

Rating: H = high value M = medium value L = low value

Place a tick in the box of your choice, using the simple value rating scale next to each item.

		Rating Scale		
		H	M	L
2.2.1	Skills of basic competence: reading, writing, computation			
2.2.2	Adaptability: knowing how to learn the ability to accept change			
2.2.3	Creative problem-solving skills			
2.2.4	Good oral communication and intelligent listening skills			
2.2.5	Personal management:			
2.2.5.1	Good self esteem			
2.2.5.2	Good motivation			
2.2.5.3	Good personal goal setting			
2.2.6	Human relations			
2.2.6.1	Interpersonal skills			
2.2.6.2	Negotiation skills			
2.2.6.3	Team-work skills			
2.2.6.4	Conflict resolution skills			
2.2.7	Leadership skills			
2.2.7.1	Ability to communicate basic values of company through personal example			
2.2.7.2	Group goal setting			
2.2.7.3	Organisational skills			
2.2.7.4	Motivational skills			

3.0 Firm-based training : the apprenticeship system

3.1 Do your employees serve a period of indentured apprenticeship as a means of acquiring essential skills for employment in your company?

Yes ☐

No ☐

If yes proceed with 3.3, if no, answer 3.2 and omit the remainder of 3.0, proceed to 4.0.

- 3.2 Would you support a system of indentured apprenticeship as a means of acquiring essential skills for production in your company?

Yes ☐

No ☐

Comment: _____

- 3.3 Number of apprentices admitted annually? _____

- 3.4 Total number of indentured apprentices? _____

- 3.5 Male / Female ratio (%), e.g. 100:0. _____

- 3.6 Provision made for disabled persons to serve an apprenticeship?

Yes ☐

No ☐

Approximate number: _____

Comment: _____

- 3.7 Level of education on entry to apprenticeship system:

3.7.1 Grade 7 or below

3.7.2 Grade 8 and 9

3.7.3 Grade 10 and 11

3.7.4 Grade 12

3.7.5 Post-matric

3.7.6 Special School

Choose one or more	Approx. % of total work-force

- 3.8 Indentured apprentices who successfully complete their contract, and stay on in the company?

3.8.1 Grade 7 or below

3.8.2 Grade 8 and 9

3.8.3 Grade 10 and 11

3.8.4 Grade 12

3.8.5 Post-matric

3.8.6 Special School

Approximate % of indentured work-force

3.9 Reasons for leaving the company on completion of contractual period?

- 3.9.1 Pay not good enough
 3.9.2 Poaching by other companies
 3.9.3 Career direction change
 3.9.4 Other

Choose one or more

3.10 Duration of apprenticeship time (approximate) _____ months/years?

Comment: _____

3.11 Apprenticeship curriculum:

- 3.11.1 On-site 100% of time
 3.11.2 On-site plus college/technical college/day-release
 3.11.3 On-site plus college/technical college/block release
 3.11.4 On-site plus college/technical college/evening classes
 3.11.5 Other

Choose one or more	Approx. % of indentured work-force

Comment: _____

3.12 How do the indentured apprentices acquire their trade certificates?

- 3.12.1 Effluxion of time
 3.12.2 Trade test

Choose one or more

3.13 Pass rate of apprentices writing trade tests?

Choose one or more	Less than 30%	40 – 50%	50 – 60%	60 – 70%	70 – 80 %	80 – 90 %	90 – 100 %
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Comment: _____

3.14 Indentured apprentices by racial group.

- 3.14.1 Asian / Indian
- 3.14.2 Black / African
- 3.14.3 Coloured
- 3.14.4 White

Approximate % of indentured work-force

Comment: _____

4.0 Education, business and industry partnerships (encouraging employers to become involved in work with schools)

Rate the anticipated interest your company may express in each of the following regionalised partnership activities, see the following simple interest rating scale:

High interest = H
 Medium interest = M
 Low interest = L

		Rating Scale		
		H	M	L
4.1	Assisting schools in curriculum development			
4.2	Company support for enterprise orientated activities (e.g. a one week project focused on economic and industrial awareness; or a "design a new soft drink" – type of project).			
4.3	Tutoring and mentoring individual students			
4.4	Recruitment and training of industrial governors for school governing body posts			
4.5	Company consultancy for senior scholar projects and assignments			
4.6	Work experience and work shadowing			
4.7	Joint training for teachers and company personnel (teachers share training with industrial counterparts)			
4.8	Seconding company employees to work in schools and colleges (to aid personal and professional development of company staff)			

4.9 Other activities that would appeal to your company? _____

5. Modular training as provided by a college for further education and training

Module: A self-contained teaching unit on a specific subject, usually of fairly short duration.

What value would you attribute to the use of modules in training from your company's point of view?

Place a tick in the box of your choice using the simple value rating scale next to each item.

H = High value

M = Medium value

Low = Low value

- 5.1 In respect of improving levels of general education.
- 5.2 In respect of initial vocational training requiring classroom based teaching.
- 5.3 In respect of continuing vocational education (or retraining).
- 5.4 In respect of acquiring additional qualifications, vocationally orientated modules leading to a certificate or diploma.
- 5.5 In respect of specific groups of people, e.g. slow learners (those who have had a disadvantaged education), the disabled; those groups requiring specific training in specialised vocationally orientated skills.

Rating Scale		
H	M	L
H	M	L
H	M	L
H	M	L
H	M	L

6.0 Conclusion

Rank the following categories of training in order of importance, from the point of view of your company, in respect of skilled employees.

Ranking Scale: 1 – 8 (1 = Top; 8 = Bottom)

- 6.1 A general secondary school curriculum plus on-site training
- 6.2 A general secondary school curriculum plus technical college / vocational college
- 6.3 A general secondary school curriculum plus technikon
- 6.4 A vocational / technical secondary school curriculum (pre-vocational) plus post-school training
- 6.5 A general secondary school curriculum plus an apprenticeship

Ranking Order

