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Abstract

The low literacy levels of the majority of first-year students at tertiary institutions in South Africa have been a major cause of concern. Various attempts have been made to assist students to develop their academic literacy levels – especially academic reading. However, most of these attempts are solely cognitive-oriented, even though there has been increasing acknowledgement of the relationship between socio-affective factors and students' academic reading abilities. The purpose of this research was to explore a socio-affective approach to improving the reading abilities of first-year students at the University of Pretoria (UP). The following questions guided the research:

(1) Is there a significant relationship between socio-affective factors and students' academic reading abilities?

(2) Which socio-affective factors best predict tertiary students' academic reading abilities?

(3) How can knowledge of socio-affective factors be used to design a more effective reading intervention?

(4) How effective is a reading intervention programme that incorporates socio-affective factors?

A mixed methods design was used for the study which was conducted in four phases. The first phase consisted of an exploratory study in the form of a questionnaire survey that elicited information on first-year UP students' reading background, socio-affective reading levels and the use of reading strategies in relation to their reading proficiency levels, as determined by the Test for Academic Literacy Levels (TALL). ANOVA tests were used for the analysis of TALL results while a Cumulative Logit (regression) analysis was conducted to determine the socio-affective factors that best predict these students' reading ability. ANOVA tests showed a robust relationship between students' social and affective reading background on one hand, and their reading proficiency levels on the other. The regression analysis showed that self-efficacy was the best predictor of students' reading ability, followed by intrinsic motivation.

Based on the empirical results, and an adapted model of Guthrie and Wigfield (2000), an intervention programme that served as enrichment to the existing Academic Reading module, and aimed at improving the reading abilities of students by focussing on socio-affective issues in particular, was designed (as phase 2) and implemented (as phase 3) of

the study. Two control groups and two intervention groups of *At Risk* and *Low Risk* students were used for the study. Questionnaires on affective reading levels and strategy use were administered before and after the intervention.

In phase four, quantitative analysis using t-tests (independent and paired t-tests) with effect sizes were performed on the pre- and post-intervention questionnaire responses. Results showed significant improvements in affective levels for reading in the intervention groups compared to the control groups. In addition, qualitative data were collected via interviews on the socio-affective teaching techniques used for the intervention, and analysed qualitatively using content analysis. The results of the qualitative study were used to support the quantitative findings in terms of the measure in which the teaching approach contributed to the improvement in students' socio-affective levels in reading, which according to research, correlates with students' reading ability. Based on the findings, recommendations are made at the classroom and institutional levels. The significance of the study in terms of enriching theory and designing innovative support to improve students' reading ability serve as a conclusion to the thesis.

Keywords: Socio-affective factors, reading comprehension ability, academic reading, reading literacy, engagement, motivation, attitude, interest, self-efficacy, strategy use, engaged reading, L2 reading, tertiary level.

Chapter 1: Introduction

1.1 Introduction

Academic reading is widely regarded as a major determining factor in academic achievement. In the United States, studies by Guthrie, Wigfield, Metsala and Cox (1999), Guthrie and Wigfield (2000), Janzen (2007), and Stanovich and Cunningham (1993) have shown a consistent relationship between reading and academic achievement; good readers cope academically, while poor, unskilled readers show poor academic performance. South African studies by Cliff, Ramaboa and Pearce (2007), Pretorius (2000; 2007), Pretorius and Mampuru (2007), Scheepers (2008), and Van Wyk (2008) at primary and tertiary levels, demonstrate similar results.

Various ways of improving academic reading abilities in students have been advocated as a means to improve students' academic success, the majority of which have focused on the cognitive processing of print information (e.g. Anderson 1999; August 2006; Cipielewski & Stanovich 1992; Dreyer & Nel 2003; Shultz 2005; Worden 2005). However, a number of scholars in the field of reading research and reading pedagogy have pointed towards the important role of social and affective factors in both facilitating and hindering successful academic reading (Alderson 2000; Grabe & Stoller 2002; Greaney 1996; Guthrie & Wigfield 2000; Pretorius 2007; Verhoeven & Snow 2001; Wallace 2003). Various studies have shown that high affective levels in reading correspond with good reading ability and low affective levels relate to poor reading ability.

While not denying the importance of cognitive processing in reading, the purpose of the current study is to investigate the relationship between socio-affective factors and the academic reading abilities of first-year undergraduate students, and to devise pedagogical strategies to enhance these factors to students' advantage.

On the basis of gaps identified in socio-affective reading research and the lack of empirically based interventions at tertiary level, desiderata for research that considers socio-affective issues in reading abilities and the design of reading interventions are proposed. These in turn constitute the rationale for the research aims and the hypotheses of the present study (§ 1.8, 1.9, 1.10).

The purpose of this chapter is to explore the notion of Academic Reading and the possible reasons for students' inadequate academic reading abilities. These reasons, discussed in three subsections below, relate to problems originating from the social and cultural environment, from the current schooling system and from the demands and constraints of higher education. An overview is then given of university-level responses in South Africa and abroad, with particular reference to the University of Pretoria (henceforth UP). The aims of the research are identified and the research design for investigating socio-affective factors in academic reading, as well as designing and testing an intervention for a particular target population at the University of Pretoria, is briefly set out. In conclusion, a preview is given of the remaining chapters of the thesis.

1.2 Academic reading

Academic reading is briefly explained in this section, but the topic is examined in greater detail in the literature review in Chapter 2.

In this 21st century of information abundance and knowledge seeking, reading underlies all aspects of academic activities, and is crucially important for students. They read to gather information and acquire new knowledge; to learn for tests and examinations; to write assignments, projects, and so on. As reading is fundamental to writing (Alderson 2000; Belcher 1990:220; Butler 2007:18), and writing is the channel through which students' academic performance is assessed, students largely depend on proficient reading to succeed academically.

Reading comprises various constituents, for example, basic decoding of information as well as comprehension. It can serve various purposes, including: scanning (reading for specific information), skimming (reading to obtain an overview of text), reading for general comprehension, reading to learn, reading for pleasure, and reading to integrate and evaluate information from texts (Alderson 2000; Grabe & Stoller 2002; Pretorius 2000:15).

At tertiary level students predominantly engage in reading to learn, which goes beyond basic decoding and involves comprehension reading, as well as reading to interpret, integrate and evaluate information (also referred to as critical reading). Comprehension

reading requires students to get an overview of texts, to have a good grasp of main ideas and supporting details, to understand content and to relate main ideas to background knowledge in an appropriate way. Reading to learn involves all aspects of comprehension reading, and in addition, requires students to recognise and build rhetorical frames that organise the information in the text as well as to link the text to the reader's knowledge base using highly demanding inferencing skills. It further requires students to understand and remember content in order to learn. Critical reading on the other hand, requires students to understand and develop concepts, to distinguish between fact and opinion, to recognise author intention, to interpret texts and to evaluate information. Critical reading also involves synthesis or integration, which requires the restructuring of a rhetorical frame to accommodate information from multiple sources (Grabe & Stoller 2002:14). For effective synthesis, the reader will have to establish a more critical set of goals, remember points of comparison or opposition, assess the relative importance of the information and construct a framework in which the information will be organised (Grabe & Stoller 2002:11). This type of reading, predominant in the educational environment is also referred to as Academic Reading. Essentially, it taps into higher order reading skills and involves generalising, sequencing, hierarchical ordering, contradiction, understanding, comparisons, cause-effect relationships, doing applications, synthesising and solving problems (Anderson 1991:461).

It is necessary to distinguish between reading as mere decoding, which occurs at lower levels of processing, and reading as a reasoning activity which requires higher order skills. Merely decoding the meanings of words and sentences does not include reasoning and critical thinking. The academic reading that is required at tertiary level demands that students move beyond decoding to operate at higher levels of comprehension which involve critical and reasoning ability as outlined above. At this level, students need to operate on three reading levels (Alderson 2000:7, 8). Not only should they read the texts/lines for meaning of the printed words (decoding) but they should be able to read between the lines by inferencing and also read beyond the lines by critiquing and evaluating texts. Reading to learn and critical reading both involving the skills and abilities outlined above, constitute academic reading and are crucial for academic success (Alderson 2000; Anderson 1991; Grabe & Stoller 2002).

However, a large number of students have difficulty in operating at this higher level of reading (Cliff et al. 2007:46; Pretorius 2000:12; Yeld 2009:78). Pretorius (2000) gives an account (through case studies) of how first year psychology students have problems in accessing information effectively and meaningfully from texts. Cliff, Ramaboa and Pearce (2007) report on the poor academic literacy levels of students, which are manifested in various literacy tests. Many tertiary institutions in South Africa now require first-year students to complete an academic literacy test in order to identify students who are academically vulnerable or at risk of failure. Yeld, in her 2009 National Benchmark Test Project [1] (NBTP) report, reveals that more students fall within the basic and intermediate bands than in the proficient band. Students on the proficient level are deemed to be academically literate, whereas those on the basic and intermediate levels are identified by the test as being likely to face challenges in their academic studies. At tertiary level, these students would need academic literacy support, especially those on the basic level who would require extensive and long term support (Yeld 2009:77). Similarly, the Test for Academic Literacy Levels (henceforth abbreviated as TALL), which is used as a placement test at the University of Pretoria, shows a large number of students falling in the *At Risk* and *High Risk* groups.

The reading problems that students encounter, and the way and manner in which the problems manifest will be discussed later in the chapter. The next section discusses the possible causes of these problems. The causes or reasons that have given rise to students' reading problems range from wider socio-political situations to specific individual home and school factors.

1.3 Possible causes of inadequate academic reading abilities of university students

Many reasons have been given for students' poor academic reading habits, both in South Africa and other parts of the world. Among these reasons are adverse home circumstances, print poor environments, a poor home literacy environment (deemed the single most critical factor in reading,) e.g. Greaney (1996:13), poor literacy conditions in schools, inappropriate methods and approaches for teaching reading in general, and negative

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[1] The NBTP was commissioned by Higher Education South Africa in response to the challenges of student (under)preparedness and was designed with the overarching aim of assisting higher education to increase its graduate outputs (Yeld 2009:76).

cultural influences on reading (Alderson 2000; Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007; Pretorius & Mampuru 2007; Scheepers 2008). Administrative issues at school and national levels, such as poor school governance and poor educational policies, have also contributed to students' poor reading ability (Grabe & Stoller 2002; Pretorius 2007; 2008). These social, cultural and educational issues have adverse effects on students' reading habits and are discussed in more detail below.

1.3.1 Causes related to the social and cultural environment of the learners

Although reading has been primarily construed as a cognitive-linguistic accomplishment, it is also a socially constructed phenomenon. It is a form of human behaviour and a social practice (e.g. Street 1995). In other words, the environment, family or social community of which an individual is part influences his/her reading behaviour and reading development. The home environment and the larger community, as well as cultural practices, all have a bearing on students' ability to read proficiently.

Firstly, the home environment exerts a great influence on learners' reading ability. Homes that are print poor (that is, with few or no books) will have adverse effects on learners' reading habits. Children from print-poor homes are not consistently exposed to print material and have limited exposure to print before starting school. Usually such children are not inculcated into the habit of reading at a young age and tend not to find reading pleasurable. Consequently, at tertiary level they find reading burdensome, and do not read much. An International Association for the Evaluation of Educational Achievement (IEA) study identified the home environment as the single most critical factor in the development of literacy (Greaney 1996:13). In addition to the effect of print-poor homes, it has been contended that having parents, siblings and significant adults who do not engage in reading or do so sparingly, strongly influences the importance that students attach to reading. Both conditions are usually the result of poverty. Families of low socio-economic status (SES) usually struggle to make ends meet and as a result purchasing books is a luxury that is not considered. Such families are usually headed by low-literate parents who may neither appreciate the worth of purchasing books for children to read, nor the importance of children visiting the local library – if indeed there is one in the community. Those who may wish to take children to libraries are short-changed by financial constraints.

In South Africa libraries are also not easily within reach for many of the students living in townships or 'locations', which are far from social amenities. In fact, researchers have found a strong link between poverty and low SES on one hand, and poor reading habits and abilities on the other (Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007; Pretorius & Mampuru 2007; Scheepers 2008). Children from such homes are hardly read to as children and scarcely come into contact with print during preschool and school years. Research indicates that children who are often read to and are exposed to print material at home develop pre-reading skills, such as phonemic awareness (recognising letter shapes and sounds), awareness of shapes, patterns, letters and words; sequencing, predicting and even creativity and imagination before the start of school, which assists in later reading development (Greaney 1996:19).

In their analysis of the 2006 Progress in International Reading Literacy Study (PIRLS) report, which points to South Africa as the lowest performing participant among 40 countries, Taylor and Yu (2009:75) assert that in South Africa SES plays a major role in students' academic achievement and reading ability. They explain that SES influences reading achievement directly through the home environment and indirectly through the quality of education, as a result of the family's socio-economic status. They state that "[t]he impact of SES on educational achievement is particularly severe in South Africa by international standards" (Taylor & Yu 2009:75).

Besides these home conditions, the influence of the social community and the effects of culture on students' reading habits, are significant. Some communities perceive the printed word as authority not to be questioned, as the Bible was years ago. Others do very little reading for pleasure – if at all – and view reading as solely for utilitarian purposes (Carstens 2004b:19) and do not read for pleasure – an activity that greatly contributes to the development of reading proficiency. To students from such communities, where texts are not questioned and where texts serve utilitarian purposes, critiquing and evaluating texts is a completely unfamiliar exercise. In other communities individuals' frequent immersion in a book may be frowned upon and is said to encourage laziness. In one rural

community the practice of an individual sitting alone absorbed in a book is viewed suspiciously and associated with witchcraft [2](Pretorius 2009).

These conditions lead to limited exposure to print material, few opportunities to read, and hence not developing good decoding skills that influence reading speed (Carstens 2004a:463), resulting in incorrect and inappropriate use of strategies, limited vocabulary, limited and poor use of background knowledge, and lack of metacognition. Consequently, this results in poor reading comprehension, which affects learning and academic achievement.

1.3.2 Causes related to primary and secondary education in South Africa

Reading problems that become prominent at tertiary level are said to be rooted in primary and high school education (Pretorius 2007:104). A 1992 study by the IEA showed that students in participating developing countries (countries with high illiteracy and high poverty levels) performed below the expected performance levels (Elley 1996). This finding points to the low literacy levels of a number of students in primary schools in developing countries, mostly in Africa. The situation has not changed much in the intervening twenty years. African countries that participated in the 2006 PIRLS performed the worst out of forty countries (Taylor & Yu 2009; Van Staden & Howie 2010).

In South Africa the reading situation is compounded by the schooling crisis, evidenced by the poor educational environment at primary and secondary levels. At primary and secondary levels a considerable number of students do not receive appropriate and adequate reading instruction (Pretorius & Mampuru 2007; Venter & Howie 2008). This has been attributed to unqualified teachers, poor teaching methods and inadequate instructional materials, among others (Van Staden & Howie 2010). Children passing through the school system have shown very low reading and numeracy proficiency levels. These students display poor comprehension of texts and inadequate knowledge of grammatical structures, which hinders comprehension (Ayliff 2012; Lemmer & Manyike

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[2] Anecdotal evidence relayed to Lilli Pretorius by postgraduate students in rural Limpopo province.

2012). The Department of Education's systemic evaluations in 2005 showed poor performance in Grades 3 and 6 pupils' reading. Pretorius (2007:107) reports that the Department of Education's (2005) systemic assessment of reading and writing in Grade 6 showed a national mean of 38% in the language of learning and teaching. Sixty-three percent of the learners, she reports, were found to be performing in the 'Not Achieved' band. She states categorically that the results indicate low literacy accomplishments (Pretorius 2007:107). The Southern and Eastern African Consortium for Monitoring Educational Quality (SACMEQ) also indicated that children from Grades 1 to 6 were reading two grades below their own level (Murimba 2005), and the PIRLS 2006 study of Grades 4 and 5 revealed South Africa in the last position out of forty participating countries (Venter & Howie 2008). These results have been attributed to the following factors: poor instructional methods at primary levels that focus on skills, with little attention to meaning, comprehension and enjoyment; emphasis on decoding skills which are often in oral chorus and poorly taught at primary levels; poorly resourced classrooms; non-existent or poorly resourced school libraries; little or no emphasis on reading in schools; lack of encouragement of risk-taking and questioning of information (important factors in reading development); and the erroneous assumption that at the end of the Foundation Phase (i.e. Grades 1 – 3), students are capable of reading to learn and do not need instruction in reading (Currin & Pretorius 2010; Zimmerman & Long 2008).

In South Africa a bimodal system of education has emerged. That is, there are two separate distributions in literacy performance that correspond to two differently functioning parts of the school system (Taylor & Yu 2009). This has created a concentration of poor learners in poorly performing schools, and this further aggravates students' reading challenges. As pointed out by Taylor and Yu (2009:67), studies have shown that a socio-economic mix of peers is an important school resource for achievement.

For many students from impoverished socio-cultural backgrounds the school is the only means of literacy development. When this educational environment fails them, which is evident from the research quoted (Murimba 2005; Pretorius 2007; Venter & Howie 2008), they remain seriously handicapped in reading development and educational achievement.

1.3.3 Demands and constraints of the tertiary education sector

The changing socio-political situation at tertiary level is no consolation either. The recently reduced funding of universities as a result of throughput rate funding instead of the previous funding according to intake system, as well as the merging of universities and technikons, have given rise to various logistical problems. For example, the funding policy has led to a number of universities facing financial crises, and the mergers have led to institutional and curriculum challenges. In addition, the poor reliability of matriculation results to predict university success (Cliff et al. 2007:34; Yeld 2009:78), and the newly introduced school leaving qualification which is still to be tested, all contribute towards the challenges relating to students' reading abilities or proficiency at tertiary level. This consequently poses numerous challenges for teachers of academic literacy.

At tertiary level, the main academic operations of students are reading and writing, with reading being fundamental to writing, and influencing writing to a large extent. At this level, students are required to read to understand concepts (with or without prior knowledge), make inferences from context, perceive relationships between parts of texts, apply relevant information to new situations, and be able to synthesise information. Students are also required to synthesise, integrate and evaluate the texts they read. In addition, students are required to read large quantities of printed materials, usually involving large volumes of academic texts, and to do so within limited timeframes. They are also expected to read and understand high-density and abstract texts comprising mostly specialized disciplinary vocabulary.

However, a large number of students in many of South Africa's tertiary institutions lack reading comprehension abilities necessary for academic reading. As a result of the poor reading background from primary and high schools, these students encounter considerable problems in dealing with academic reading demands. They struggle to meet the reading requirements, cannot make meaning from texts, and are what Alderson (2000) refers to as 'poor readers'. Such students have low reading speed; have difficulty in extracting main ideas and supporting details from texts; struggle with paraphrasing and summarizing; use coping strategies such as translation, plagiarism, and memorization; and generally find reading laborious and opt for short-cut strategies such as doing as little reading as possible or only reading the summary sections of texts. These reading difficulties ultimately translate into poor writing. As writing is the main means of assessing students' academic

performance, these poor readers become low achievers, take longer to complete their education or obtain a degree, and a number even abandon their academic pursuits due to consistent failure. This is evident in the low graduation rates in South African Universities. In South Africa, the graduation rate is 15%, one of the lowest in the world (DoE 2001; Letseka & Maile 2008).

1.4 Evidence of poor reading ability

As may be evident in other South African institutions, a number of first-year students at the University of Pretoria who enrol for first-year courses in the Unit for Academic Literacy (UAL) demonstrate the reading deficiencies mentioned above and display inappropriate use of strategies. The TALL is used to identify students deemed to be *At Risk*, in order to be given academic literacy support by the Unit. Almost a third of them fall into the *At Risk* and *High Risk* categories. In 2010 and 2011 the TALL assessments, which are highly dependent on reading proficiency (Weideman 2007), showed that of 5,060 students who wrote the English test (TALL) in 2010, 1,647 (31%) were deemed to be *At Risk* or at *High Risk* of failure, and of the 4,977 who wrote in 2011, 1,559 (32%) were categorised as *At Risk* or *High Risk* (UAL unpublished results). In both 2010 and 2011, 51% and 57% respectively, were deemed to be at *Low Risk*, with only 18% (2010) and 11% (2011) categorised as having negligible or no risk. Table 1.1 gives an overview of students' performance on TALL for 2010 and 2011.

Table 1.1: Categorisation of students' performance in the TALL FOR 2010 and 2011

	2010	2011
Total number of students who wrote the TALL	5,060	4,997
At Risk and High Risk	1,647 (31%)	1,559 (32%)
Low Risk	2,580 (51%)	2,848 (57%)
No or negligible Risk	910 (18%)	549 (11%)

The figures are higher when the results of the Afrikaans version of the test (TAG) are included. Based on communication with fellow lecturers, it is evident that a large number of these first-year students have low reading speed; are vocalised and subvocalised readers (i.e. they mouthe words or sound out words as they read); struggle with paraphrasing; have difficulty in reconstructing authors' ideas, making inferences, and extracting main and supporting ideas. They also struggle with connective devices such as anaphoric

referencing, substitution and discourse markers, let alone the synthesising and evaluation of texts that are frequently required at this level. These reading problems translate into writing problems, with students exhibiting poor writing skills that contribute to low performance and failure.

Many of these students can be termed non-traditional (August 2006). In other words, they have little or no reading background in their first language (L1) and/or have poor reading background in the second language (L2), which is the language of learning and teaching (LoLT). A number of these students are also from poor SES backgrounds, have had poor education and are from homes with no reading culture (Boakye 2007; Pretorius 2000). These characteristics have also been reported by Greaney (1996) and Pretorius (2007) at primary school level. Thus, the challenges are evident at primary school level and continue through to tertiary level. These adverse conditions are known to have a negative influence on students' love and desire for reading, which limits their exposure to texts and consequently prevent them from developing the efficiencies in reading that will make them proficient readers (Elley 1996; Grabe & Stoller 2002; Greaney 1996; Pretorius 2007).

1.5 Responses to the problem of students' inadequate academic reading abilities

As a result of the above-mentioned problems the need to find efficacious ways to improve students' reading abilities has become an educational priority. Dreyer and Nel (2003:350), in discussing the reading challenges that tertiary students face and the solutions that need to be put in place, state that

> [I]n order to meet the reading demands of students within the 21st century, educators [and researchers] are pressed to *develop effective instructional means* [my emphasis] for teaching reading comprehension and reading strategy use.

1.5.1 Intervention programmes

Due to the poor reading skills and comprehension abilities that students display from primary to tertiary levels, various attempts have been made at improving their reading comprehension abilities, especially academic reading at tertiary level. At South African institutions various intervention and support programmes have been introduced to assist students to succeed academically. These include academic literacy and language proficiency programmes, such as the English Academic Language course at the University

of the Free State; the English for Professional Purposes course at the University of the North-West; and the English for Academic Purposes course at Walter Sisulu University, to mention a few. These interventions and support programmes, among many others, report to have achieved a degree of success (Dreyer & Nel 2003; Van Wyk 2008). For example: Dreyer and Nel (2003) report that they observed improvement in the use of strategies of *At Risk* students at tertiary level after the teaching of reading strategies and reading comprehension within a technology-enhanced learning environment. Van Wyk (2008) also reports improvement in tertiary students' reading comprehension test marks after the English Academic Language course comprising extensive reading, intensive reading and vocabulary study. At UP, students on the Academic Reading programme have, through self-report, stated better application of reading strategies after increased awareness of the use of reading strategies (students provided the information in answer to a reflective question for an assignment).

At the University of Pretoria a curricular reading intervention programme is housed in the Unit for Academic Literacy. The intervention programme of the Unit is aimed at improving students' academic literacy to enable them to cope with academic demands. Students who are assigned to this programme are identified by TALL to be at risk or at high risk academically, due to their low academic English proficiency level. They are required to take two semester modules in Academic Literacy, EOT 110 and EOT 120, in order to minimize the risk of failure. On the other hand, students who are identified by the test not to be at risk or to have low risk, academically, are exempted from these modules. A large number of the *Low/No Risk* students voluntarily register for other language electives offered by the Unit to meet the language requirements of their various faculties. These courses, which are aimed at improving specific academic and professional skills, are: Academic Reading (EOT 161), Academic Writing (EOT 162), Legal Discourse (EOT 163) and Communication in Organizations (EOT 164). However, even on these courses aimed at *Low Risk* learners, the reading comprehension abilities and the overall academic reading skills of a number of students are found wanting, and effective means of improving their academic reading skills are required.

1.5.2 Limitations of previous and current reading intervention programmes
Many intervention and support programmes worldwide, from primary to tertiary level, including those outlined above, are focused mainly on cognitive and linguistic aspects in

improving students' reading abilities, for example: vocabulary acquisition (Anderson 1996; Scheepers 2008), strategy training (Anderson 1999; Dreyer & Nel 2003; Elley 1996; Worden 2005), extensive reading (Stanovich & Cunningham 1993) and metacognition (Academic Reading support at UP, Pretorius, Van Dyk & Boakye 2009). Other interventions have focused on text structure, discourse organisation, and speed reading, among others (Chard, Vaugh & Tyler 2002; Meyer & Ray 2011; Williams 2003, 2007).

However, these programmes, as well as many others reported on in research studies, are limited in that they usually focus on a restricted number of isolated features of students' reading abilities (Boughey 2006). Reading, as will be expounded in Chapter 2, is a complex process requiring the integration of linguistic, cognitive, metacognitive and affective factors. In addition, the majority of these studies and intervention programmes have focused only on the linguistic and cognitive aspects of reading, including speed reading, syntactic parsing, summarizing, vocabulary exercises, strategy instruction and hours of extensive reading (e.g. Anderson 1999; Dreyer & Nel 2003; Elley 2000; Rasinski, Blachowitz & Lems 2006; Stanovich & Cunningham 1993; Wagner, Muse & Tannenbaum 2007). Such cognitive exercises aimed at improving reading abilities are useful but limited. An adequate programme for improving reading abilities should be holistic and encompass both cognitive and socio-affective aspects.

1.6 Desiderata for holistic interventions

The limited successes of the above research studies and interventions could, I believe, be improved upon. Higher and more widespread gains across the target student population could be obtained if an integrated approach were adopted. An integrated approach to reading is an approach that encompasses the **cognitive**, the **social** and the **affective.** An integrated approach to teaching reading should comprise the teaching of cognitive and metacognitive strategies through a socio-affective approach. Affective factors, such as motivation and interest, have been identified by many current researchers as important aspects of reading development (Grabe & Stoller 2002; Guthrie & Wigfield 2000; Verhoeven & Snow 2001). Also, the fact that reading motivation declines as children move up the educational ladder (Gallik 1999; Guthrie & Wigfield 2000), makes motivation an important point of focus in improving reading abilities at higher educational levels. Besides, students at tertiary level have limited time and cannot afford to engage in the

training of one aspect of reading at a time, as may be undertaken in the intervention programmes cited above. An integrated approach is believed to confront the situation holistically, hopefully leading to optimal gains.

Given the importance of socio-affective factors in reading development, a pilot study was conducted at UP as a preface to the current study, to shed more light on students' reading background. The pilot study, using a questionnaire adapted from Grabe and Stoller (2002), was conducted on students' reading background in relation to socio-affective factors, in 2007. The findings showed that in general, first-year students on the Academic Reading course tend to have had limited exposure to texts. In other words, these students are infrequent readers with a poor reading history related to home and formal schooling, and display low engagement with texts. In more detail, the English additional language students, most of them non-traditional students, display an impoverished literacy background and prefer to read shorter texts (magazines and newspapers) in their free time than English first language (L1) students. Furthermore, English L1 students read books (novels) more often, read across genres and on different topics, whereas most additional language speakers limit their readings to topics of their interest. Research in the USA has shown that fluent readers who are also engaged readers read across genres and topics, and have a devotion to reading that spans across time (Guthrie & Wigfield 2000:404).

The 2007 UP study further showed that the additional language group consisted of students with varying skills and competency levels, as well as differing attitudes towards and motivation for reading. This finding is in line with Cliff et al.'s (2007:34) assertion that the trends towards greater diversity of educational background and experience in student intake has resulted in higher education institutions admitting students of differing academic (and presumably also socio-affective) levels. They add that there is a need for Higher Education Institutions (HEIs) to be responsive to the educational backgrounds of students in a 'learning and teaching' sense (Ibid). It therefore seems necessary that an attempt at improving students' reading abilities should, in addition to instruction, develop their desire, love for and interest in reading. It should also consider the different competencies and the varying affective levels of these students. In other words, the affective issues cannot be ignored in attempts at improving students' academic reading abilities. According to Ehrlich, Kurtz-Costes and Loridant (1993:365) motivational variables, such as self-perceived competence (self-efficacy), emerge as influential factors

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determining reading performance. Grabe and Stoller (2002:56) point out that students' reading abilities are largely influenced by socio-affective factors. Alderson (2000:25) takes this point even further, and includes cultural differences as influencing reading abilities. However, as stated above, these dimensions are still largely unresearched (Bernhardt 2005), and will be discussed in greater detail in the literature review in Chapters 2 and 3.

1.7 Gaps in existing research

Socio-affective factors, though recognised as being significant in reading development, have received little attention in reading research (Grabe & Stoller 2002; Guthrie & Wigfield 2000). Although research on affective factors such as motivation, interest, attitudes and self-efficacy has received attention, the role of these factors in reading research has been under-researched. Yet, as Guthrie & Wigfield (2000:403) point out, readers are decision makers whose affects as well as their language and cognition play a role in their reading practices. They argue that people read not only because they have the ability but also because they are motivated to do so. Furthermore, the few researched experimental intervention programmes on reading that focus on socio-affective factors have been focused mainly on learners in primary and secondary schools, and those that have been conducted at tertiary level deal with first language (L1) students. In addition, research has not been seriously pursued in multilingual tertiary contexts, such as UP, even though socio-affective factors may be more pronounced in contexts accommodating large numbers of non-traditional, second language (L2) users of English (August 2006). The current research therefore differs from other research studies in higher education which use mainly cognitive-oriented approaches. This study is novel in that it uses a cognitive foundation that is embedded in a socio-affective approach, adopted from Guthrie and Wigfield's (2000) affect-oriented model (cf. § 3.4 for a more detailed discussion).

1.8 Methodology

This section provides a brief discussion of the research methodology, including the research questions, aims and objectives, hypotheses and the research design.

1.8.1 Research questions

In relation to the issues discussed above, four research questions were formulated for the purpose of this study.

1. Is there a significant relationship between socio-affective factors and students' academic reading abilities?

2. Which socio-affective factors best predict tertiary students' academic reading abilities?

3. How can knowledge of socio-affective factors be used to design a more effective reading intervention?

4. Is a reading intervention programme that integrates socio-affective factors effective, and if so, how effective is it?

1.8.2 Aims of the present study

The aim of the research project on which I report in this thesis was to explore a socio-affective approach to improving reading proficiency of first-year students at UP. The main objectives are to:

1. explore the relationship between socio-affective factors and the academic reading ability of the target group;

2. identify the socio-affective factors that best predict these students' academic reading ability;

3. design and implement an intervention programme to improve the reading skills/abilities of students by focusing on socio-affective issues in particular;

4. evaluate the effectiveness/efficacy of the intervention.

1.8.3 Hypotheses

Research questions 1 and 4 can be formulated as testable hypotheses:

Hypothesis 1: There is a significant relationship between socio-affective factors and students' academic reading ability.

Hypothesis 2: There is a significant difference in affective levels between students who participated in an intervention reading programme that incorporated socio-affective factors, compared to those who did not.

The main hypothesis of the study (Hypothesis 2) relates to Question 4: that a reading intervention programme which incorporates socio-affective factors, and actively addresses these issues in reading instruction, will lead to higher socio-affective levels in reading and

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provide higher reading achievements than one that does not, and should enable students to improve their academic performance.

The remaining questions: Questions 2 and 3 are exploratory research questions.

1.8.4 Research design and procedure

The research design and research procedure used for the study are briefly discussed in this section, with a detailed discussion following in Chapter 4.

1.8.4.1 Research design

A mixed methods design was used for the research project. The main method of analysis was quantitative, with a qualitative dimension added to gain greater insight. This type of mixed methods design can be characterised as a QUANqual design (Ivankova and Creswell 2009:138). According to Ivankova and Creswell (2009) a mixed methods approach allows for a more complete understanding of the research problem, and gives the researcher an opportunity to obtain an overall picture and greater insights into the issue under investigation. The design allowed the findings of the primarily quantitative data (questionnaires) to be probed in more depth, using a qualitative approach via interviews. The results of the two analyses were then related to each other for drawing conclusions.

1.8.4.2 Research procedure

The study was organised in four phases:

Phase 1: Obtaining and analysing data pertaining to socio-affective factors and reading abilities, using a socio-affective questionnaire and the TALL results to answer Research questions 1 and 2;

Phase 2: Using the results from phase 1 to design an intervention programme in answer to Question 3;

Phase 3: Implementing the intervention programme, which entails quantitative analysis of questionnaire data and qualitative analysis from interviews (Question 4);

Phase 4: Evaluating and drawing conclusions from the results of the quantitative and the qualitative research, first separately and in relation to each other in answer to Question 4.

1.8.4.2.1 Phase 1: Pre-intervention phase of research (questions 1 & 2)

In this exploratory phase of the study, a questionnaire comprising three sections was completed by more than 1000 first-year students. The first two sections were to identify salient social and affective aspects pertaining to students' reading proficiency, while the third section was to elicit students' use of reading strategies.

In order to examine the relationship between socio-affective factors and reading proficiency, a two-way ANOVA test was used to analyse the results of the socio-affective reading questionnaire and students' performance in TALL. In order to identify salient socio-affective factors that best and strongly predict students' reading ability, a Cumulative Logit (regression) analysis was performed, using the socio-affective reading questionnaire results and students' performance in TALL.

1.8.4.2.2 Phase 2: Designing and administering the intervention (question 3)

Phase 2 was largely dependent on phase 1. Based on the survey results from the questionnaire on socio-affective factors and the theories expounded in the literature review, a socio-affective reading intervention programme was designed, and then implemented over a period of 14 weeks for the *High/At Risk* group and 7 weeks for the *Low Risk* group.

1.8.4.2.3 Phase 3: Pre- and post-intervention and cross-intervention analyses (question 4)

In order to determine the effectiveness of the intervention programme, quantitative analyses of pre and post-intervention questionnaire responses from both intervention and control classes were done, using t-tests. Paired t-tests were used to compare for differences within groups. Specifically, students' responses before and after the intervention were compared to see if results changed after the intervention, and whether the change was statistically significant. Independent t-tests were applied to test for differences between groups. In other words, the tests compared the improvement of intervention and control classes to see if there were differences between the groups. Academic reading tests were also written before and after the intervention, but for reasons to be expounded in Chapter 4, the results were not used for comparison.

In order to gain more insight into the relationship between socio-affective factors and reading proficiency levels, and to determine the efficacy of the intervention non-

statistically, interviews were conducted with selected students from the intervention classes, and the responses were analysed qualitatively.

1.8.4.2.4 Phase 4: Evaluation and integration of analysis

As the study used a mixed methods design (Ivankova & Creswell 2009; Teddlie & Tashakkori 2003), the results of the intervention were analysed, first quantitatively and then qualitatively. The quantitative analysis was conducted to determine the efficacy of the intervention in raising affective levels in reading. Thereafter, qualitative analyses using interview responses on the teaching techniques were done. The results of the two analyses were then related to each other for drawing conclusions.

The materials, sampling, respondents, methods of data collection and analysis, as well as ethical issues, are elaborately discussed in Chapter 4.

1.9 Conclusion

This chapter has briefly outlined the concept of academic reading as comprising reading to learn (highly dependent on comprehension reading) and critical reading (which involves reasoning, integration, interpretation and evaluation). The research problem of students' inadequate academic reading abilities was stated, and followed by a discussion of the possible reasons for the identified reading inadequacies. In addition, an overview of the attempts at redressing students' reading problems, both internationally and nationally, has been given with particular reference to the University of Pretoria. Based on the fact that socio-affective factors are important in students' reading proficiency, desiderata for research, which incorporates socio-affective issues in improving reading abilities and the design of reading interventions, have been proposed. Finally, the chapter has outlined the research aims, hypotheses, appropriate methodology, and the specific research problem of investigating socio-affective factors in academic reading as well as designing and testing an intervention that incorporates socio-affective factors.

1.10 Structure of the thesis

The literature review spans Chapters 2 and 3. **Chapter 2** discusses relevant theories of reading in relation to reading proficiency, whereas **Chapter 3** identifies and discusses a number of social and affective factors influencing reading proficiency. The outcomes led

to the construction of an appropriate questionnaire for eliciting information on students' reading background, social and affective reading behaviour, as well as the strategies they employ in reading. This chapter further discusses Guthrie and Wigfield's (2000) engagement model and framework, and finally presents an adapted model for tertiary reading instruction in the South African context. **Chapter 4** provides detailed information on the research methodology, while **Chapter 5** discusses the survey results of phase 1 of the empirical research to determine the relationship between socio-affective factors and students' reading ability. Based on this exploratory survey that identifies salient socio-affective factors in students' reading, a reading intervention using a socio-affective approach is presented in **Chapter 6**. **Chapter 7** reports on the quantitative analysis of students' evaluation of the intervention, while **Chapter 8** reports on the analysis of students' qualitative evaluation of the intervention. **Chapter 9** integrates the results from quantitative and qualitative analyses for corroboration and differences, and **Chapter 10** concludes the thesis by evaluating the extent to which the research questions have been answered, as well as outlining the limitations of the study.

Chapter 2: Theories of reading and reading comprehension ability

2.1 Introduction

The previous chapter gave a characterisation of academic reading and identified the skills required to engage in this type of reading as required at tertiary level. The reading problems that students face while attempting to operate at this level of reading were also identified, and a number of contributing factors to the problems were discussed. The state of the academic reading levels of first-year University of Pretoria students was also discussed. In addition, the chapter introduced the specific research problem to be investigated in this study.

This chapter focuses first on discussing the importance of academic reading, then providing an account of the relevant literature on reading theories and their relation to reading development. The purpose of the review is to provide a theoretical context within which the reading process and its relationship to reading development are explained.

2.2 Importance of academic reading

The main academic activity for students in tertiary education is the processing of information, mainly through reading and producing academic information in appropriate and relevant ways for assessment. To this end, academic reading and writing abilities are central to students' academic performance. However, reading is the more fundamental of the two and is said to be at the heart of academic success (Belcher 1990:220; Gallik 1990:480; Pretorius, 2000, 2002). Thus the centrality of reading in academic performance is echoed by a number of reading researchers. Niven (2005:778) quotes Baijnath's (1992) assertion on the issue:

> [W]ith unsuccessful writers there is a poverty of input at the reading stage […] This results in the development of inadequate text worlds, lacking the richness of understanding and insight that is necessary to deliver a competent piece of writing […] Consequently, the [poor] quality of the product is determined at this stage. Students' academic writing is therefore preceded by their academic reading of texts, which determines the depth and quality of their writing.

The importance of reading as a phenomenon worthy of study has given rise to extensive research into this area. Researchers have proposed various theories with the aim of gaining a better understanding of the reading process while assessing the difficulties that students encounter in reading, and devising various ways to address these reading problems. In the section that follows a number of reading theories will be reviewed and their significance in addressing students' reading problems will be discussed.

2.3 Reading theories

Various reading theories have attempted to explain the reading process and account for successful reading ability, or the lack thereof, in relation to the beliefs of the reigning paradigm: The cognitive theory of reading explained reading purely as a mental process; in the 1980s reading was explained as a social activity that involved other external factors; during the humanistic era of the 1990s reading was explained in terms of affective or response theories; whereas current theories on metacognition and New Literacy Studies focus on the use of strategies and socio-cultural practices, respectively. The different theories and views on reading are briefly discussed below.

2.3.1 Cognitive views of reading

Reading was perceived primarily as a cognitive activity for most part of the 20th century (1950 – 1985). Theories of Behaviourism and Cognitivism during this era influenced reading theories and reading instruction (cf § 2.3.1.1 and § 2.3.1.2). Predominant theories of reading that emerged within this era include bottom-up as well as top-down approaches.

2.3.1.1 Bottom-up approaches

Bottom-up approaches, predominant from about 1950 to 1965 (Alexander & Fox 2008), emphasise skills and explain reading as decoding of individual sounds to derive the meaning of words. This approach is typically associated with Behaviourism and with 'phonics' approaches to the teaching of reading (Alderson 2000:17; Alexander & Fox 2008; McLaughlin 2008). It describes the word by word, sentence by sentence patterning of the text by the reader to create meaning. The bottom-up theory rests on the central notion that reading is basically a matter of decoding a series of written symbols into their aural equivalents; translating from one symbolic representation (letters/graphemes) to another (sounds/phonemes) to derive meaning (Nunan 1991:64). The perception attached

to this approach is that once a reader has gone through the processing steps and mastered the various skills, meaning would be obtained. Alderson (2000:16) states that the bottom-up approach posits that the "reader begins with the printed word, recognises graphic stimuli, decodes them to sound, recognises words and decodes meaning".

The text is the most critical feature in this understanding of reading, and readers are perceived to be passive recipients of information in a text (Urquhart & Weir 1998). Notable in this cognitive, bottom-up approach is LaBerge and Samuels' (1974) Shared Capacity Theory. In accordance with the views of this approach to reading, LaBerge and Samuels' theory explains how information is sent to the brain for processing, and explains that reading fluency is obtained mainly through automaticity in decoding. This has implications for memory and attentional capacity. If too much cognitive energy and processing time is taken up decoding words, there is too little memory and attentional capacity for comprehension. Automaticity frees up the mind so that attention can then be given to comprehension. Automaticity only develops through practice – hours and hours of reading. Reading is perceived as an individual, skill-oriented, cognitive activity in which certain processing steps are followed. In other words reading is perceived solely as an intrapersonal, problem-solving task that takes place inside the brain. Cambourne's (1979) illustration of the step by step processes involved is presented by Nunan (1991:64) as below:

Print ➔ Every letter discriminated ➔ phonemes and graphemes matched ➔ Blending ➔ Pronunciation ➔ Meaning

According to this model the reader processes each letter or grapheme individually and matches letters with the phonemes (units of sound) of the language. The phonemes and the graphemes are blended to form words in order to derive meaning. Meaning is derived by translating one form of symbolic representation to another: from letter to sound and then to meaning (Nunan 1991:64; Urquhart & Weir 1998:40).

The underlying assumption of the phonics approach is that once a reader has blended the sounds together to form a word, that word will then be recognised and its meaning obtained. It is therefore assumed that the reader already possesses an oral vocabulary (in the language of the text) which is extensive enough to allow decoding to proceed. This assumption cannot be made with regards to many L2 learners who begin reading

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instruction simultaneously with learning the L2. Also, with students from poor socio-economic backgrounds and print-poor home environments, the sounds may be as foreign as the letters they see. In addition, some children are able to decode print, as explained by the model, without actually extracting meaning from the text. Casper et al. (1998) report of second grade students who were strong readers phonemically but were unable to demonstrate comprehension. This points to the inadequacy of the bottom-up explanation of reading, although it does account for part of the process.

As much as decoding is fundamental, and therefore important in reading, fluent reading for meaningful comprehension does not occur solely in this manner (Grabe & Stoller 2002:33). Yet, many teachers are mainly influenced in their teaching by this approach to reading. This may also explain why many students become vocalised and subvocalised readers. They are only able to achieve meaning through sound. Niven's (2005:782) study indicated that early reading at a number of rural schools in the Eastern Cape province of South Africa was associated with memorisation and recitation. Reading was taught by means of rote-learning and drills. This form of teaching influences students' understanding of reading. They perceive reading primarily as decoding rather than as comprehension. Niven (2005:782) states that they become sound-centred readers instead of meaning-centred. Such students, she adds, "have an excessive reliance on the graphophonic cueing system as a way of comprehending texts, which ironically results in quite poor comprehension" (Ibid).

As argued by Brunfaut (2008:7) the bottom-up approach does not cover the full picture of the reading process. Rumelhart (1985) criticised the bottom-up approach to reading by reporting on research projects that indicate that letters are often perceived in clusters and word perception is sometimes influenced by meaning. Although Nunan (1991:77; 78) identifies a number of strategies used by good readers, which may be taught to poor readers, a sole reliance on the teaching of skills, as suggested by bottom-up processes, would not alleviate the reading problem. Also, based on the results of his study, Elley (1996) argues that voluntary pleasure reading rather than L2 reading instruction based on skills and drills was a better promoter of reading proficiency.

2.3.1.2 Top-down approach

In view of the inadequacies of the bottom-up approach, the top-down approach to reading became predominant between 1966 and 1975 (Alexander & Fox 2008). Goodman (1971; 1976) and Smith (1971; 1973; 1978), cited by a number of reading researchers (Alderson 2000:14; Alexander & Fox 2008; Anderson 1991; Grabe & Stoller 2002; McLaughlin 2008), were strong proponents of this approach to reading. Proposed as an alternative approach, the top-down model posits that reading proceeds through the processing of larger units of language. The reader rather than the text is at the heart of the reading process. In other words, the focus is on the knowledge a reader possesses. The model explains that readers bring other knowledge sources into the reading process. Rather than perceiving readers as passive decoders of meaning, as in the bottom-up explanation, readers are seen as reconstructing meaning from text. The interaction of the reader and the text is central to the reading process. The reader interacts with the text by forming hypotheses and making predictions. Instead of decoding words, the reader uses goals and expectations to derive meanings from text. The reader formulates hypotheses, and confirms expectations based on background knowledge. Goodman (1971) as reported in Alderson (2000:17) referred to reading as a Psycholinguistic Guessing Game in which the reader guesses or predicts the text's meaning on the basis of textual information and existing background knowledge (Alderson 2000:17). The more predictable a text is in terms of background knowledge, the easier the text can be processed.

The emphasis of the top-down model is on the construction of meaning. In order for the reader to achieve comprehension, he/she has to reconstruct and reorganise a text mentally, linking new information to that already stored in memory, and forming new coherent mental pictures. The reader interacts with the text by bringing his/her background knowledge of the subject, as well as knowledge of and expectations about how language works to the content of the text (Grabe & Stoller 2002:8; Nunan 1991:66). Using relevant existing schemata (networks of information stored in the brain, which act as filters for incoming information) readers map incoming information onto existing information. To the extent that these schemata are relevant, reading is successful (Alderson 2000:17; Rumelhart 1985).

During the top-down era Schema Theory was used to explain how background knowledge guides comprehension processes. According to Nunan (1991:68) Schema Theory suggests

that the knowledge we carry around in our heads is organised into interrelated patterns, which are constructed from our previous experiences of the experiential world, and this guides us as we make sense of new experiences and enables us to make predictions about what we might expect to experience in a given context. Without the appropriate schemata, comprehension will be difficult and may result in wrong interpretations and poor inferencing. Wilson and Anderson (1986:33) also provide an explanation of how the reader's existing knowledge affects comprehension. They state that "a reader comprehends a message when she is able to activate or construct a schema that gives a good account of the objects and events described" (Wilson & Anderson 1986:34).

In the top-down approach and its related Schema Theory, the link between linguistic forms and knowledge of the world is foremost in explaining the reading process. The more predictable a sequence of linguistic elements, and the more familiar the subject matter or the contents of the text, the more readily the text will be processed. In fact, it has been found that familiarity can overcome text difficulty (Alderson 2000:17). Nunan (1991:69) shows the effect of background knowledge when reporting on a 1985 study undertaken to test whether background knowledge affected readers' perception of textual relationships. He used two groups of L2 speakers, with one group having had a longer exposure to the L2. Nunan (1991:70) found familiarity to be more important than text density in achieving comprehension, for both groups. Specifically, he found that his subjects perceived textual relationships to be significantly easier in the familiar, but syntactically more difficult, passage, although the group with longer exposure performed better than the group with less exposure to the L2. He concluded that

> schema theory suggests that reading involves more than utilising linguistic and decoding skills, […] and that background knowledge was a more significant factor than grammatical complexity in determining the subjects' comprehension of the relationships in question (Ibid).

In other words, readers find grammatically complex texts more comprehensible if they are familiar with the subject matter/contents, or if they can apply appropriate schemata. In this view reading skills do not depend solely on knowledge of the linguistic elements that make up the text. Rather, reading is a dynamic process in which the text elements interact with other factors outside the texts to produce meaning. These outside factors are important and determine or influence comprehension. Comprehension breakdown may therefore result from inadequate or a lack of background knowledge.

However, the top-down approach and its related Schema Theory lay strong emphasis on background knowledge to the exclusion of decoding skills. Goodman's Psycholinguistic Guessing Game, which is a classic example of a top-down model, has been greatly criticized (Gough & Wren 1999; Pressley 1998; Stanovich & Stanovich 1999). Contrary to Goodman's model, good readers do not simply guess, and they make less use of context while engaged in fluent reading (Alderson 2000; Grabe & Stoller 2002; Stanovich & Stanovich 1999). Goodman's model also claims that readers do not really read everything but 'sample' the text as they go along. Studies that track eye movements during research repudiate this quite robustly. Skilled reading seems to involve quite a high degree of accuracy and precision (Alderson 2000; Grabe & Stoller 2002). Besides, as Stanovich (1980) explains, the type of hypothesis generation proposed by the proponents of the top-down approach will be even more time consuming than the decoding involved in the bottom-up approach. Although the model has been used to support suggestions for reading instruction (e.g whole word and whole language approaches to reading instruction), these instructions have not been particularly beneficial to students' reading development (Grabe & Stoller 2002:34).

A mainly bottom-up (skills) view of reading does not adequately explain the reading process, nor does it correctly guide reading instruction. Similarly, a solely top-down approach that acknowledges the application of prior knowledge to the exclusion of decoding and automatic processing of words does not give an adequate account of the reading process. In addition, both the bottom-up and top-down reading theories do not distinguish between reading at the beginning stages (learning to read) and reading at a more advanced level (reading to learn). The fact that fluent readers recognize words by sight does not mean that beginning readers should be taught in that way. Such differences between beginning and mature readers need to be accounted for by any theory of reading. Yet the top-down model sometimes fails to distinguish adequately between beginning readers and fluent readers.

2.3.1.3 Interactive approach

The inadequacies of both bottom-up and top-down theories indicate that an appropriate explanation of reading cannot be obtained by any one theory. Instead, an explanation of reading that integrates both approaches seems to be a more plausible approach. Bottom-up processes and top-down processes are both necessary. An interactive approach that

integrates both theories posits that readers process texts from several levels. Van Dijk and Kintsch's (1983) Discourse Comprehension Model, which is usually classified as interactive, posits that reading is a continuous interaction between the visual perception of letters, the understanding of words, the understanding of structure and meaning of a sentence, and the understanding of sentences and text (Brunfaut 2008:12). Stanovich's (1980) Interactive Compensatory Model, which is a classic example of an interactive model, posits that deficiencies at one level can be compensated for by drawing on knowledge at other levels. In other words bottom-up and top-down processes interact to make up for deficiencies at each level. For example, when readers lack the resources at the lower level, higher level processes such as background knowledge take over. Similarly, lower level processes make up for deficiencies at higher levels. Second language readers would frequently apply higher level processing to compensate for lack of linguistic resources at lower levels if faced with difficult texts (Alderson 2000:19; Grabe & Stoller 2002:33-35; Stanovich 1980:35).

The interactive and compensatory activities explained above are absent in the two earlier models. Whereas the bottom-up model assumes that the initiation of higher level processes, such as the use of background knowledge, should await lower level decoding processes, the top-down model, on the other hand, does not take cognisance of lower level processes. The interactive approach acknowledges the essence of both theories and is supported by linguists, in particular Alderson (2000); Grabe and Stoller (2002); Maria (1990); and Stanovich (1980; 1986; 2000 cited in Grabe & Stoller 2002:35). It involves interaction between top-down and bottom-up processes, as well as interaction between the reader and the text (Grabe & Stoller 2002:35). As an example of this model, Stanovich's Interactive Compensatory Model (1980, 1986, 2000) posits that when reading difficulties occur, interaction is increased and compensatory strategies, such as guessing from context, occurs more regularly (Grabe & Stoller 2002:35). According to Nunan (1991:67) poor reading skills at lower levels, for example inadequate vocabulary and non-automatized, low decoding skills, would rely more on other sources of knowledge (e.g. extralinguistic elements and cues).

Given the deficiencies of lower level bottom-up processes of poor readers, there may be a heavy reliance on higher level top-down processes, such as background knowledge application. However, according to Grabe and Stoller (2002) this heavy reliance of poor

readers on background knowledge may lead to inappropriate application of background knowledge leading to erroneous interpretation and unsuccessful comprehension of texts. Aslanian's (1985) study, reported in Nunan (1991:69), shows that schematic knowledge structures can either facilitate or inhibit comprehension depending on whether they are over- or under-utilised. Quoting Aslanian (1985), Nunan (1991:69) states:

> If readers rely too heavily on their knowledge and ignore the limitations imposed by the text, or vice versa, then they will not be able to comprehend the intended meaning of the writer.

Rumelhart (1985) has also stated that if our schemata are incomplete and do not provide an understanding of the incoming data from the text, readers will have problems processing and understanding the text. The latter two cognition-based views of reading comprehension, i.e. Top-down and Interactive Theories, apply Constructivist Theory in explaining the comprehension process. The reader actively interacts with the text using background knowledge to construct meaning from text. But the explanation has been considered inadequate in explaining the reading process comprehensively, as it does not give a full account of how and when, exactly, particular interactions take place (Brunfaut 2008:13).

Despite the inadequacies of the top-down and bottom-up theories, they have not lost complete support. Renewed interest in the traditional form of reading comprehension has emerged (Alderson 2000; Urquhart & Weir 1998). Research has shown the importance of decoding skills (accurate and effective decoding) and their contribution to the development of comprehension skills instead of the other way around. However, these research studies cannot be generalised as they involve children and are therefore restricted. Urquhart and Weir (1998) also caution against over emphasis on the slightly modified bottom-up approach, stating that while it may provide an explanation for word recognition, and probably syntactic processing (as this is not exactly clear), it does not explain other aspects of the reading process. In terms of the characterisation of the reading process Alderson (2000:18) states that neither the bottom-up nor the top-down approach is adequate, and that the interactive model is more adequate. He expresses his preference for a construct that entails a complex interaction of bottom-up and top-down information, "in which every component in the reading process can interact with any other component, be it 'higher up' or 'lower down'" (Alderson 2000:18).

2.3.1.4 Comprehensive interactive view of reading

Besides the three metaphorically labelled reading theories discussed above, a more complex interactive view of reading and a more comprehensive theory of the reading process is presented by Grabe and Stoller (2002). Echoing researchers like Alderson (2000:14) and Maria (1990:14), Grabe and Stoller (2002:17) acknowledge that the fluent reading process is rapid, purposeful, motivated and interactive. It is also strategic, evaluating, comprehending and linguistic. Both bottom-up lower-level decoding skills and the top-down higher level comprehension and extralinguistic elements interact to produce successful comprehension of texts. This interaction is extensively described by Grabe and Stoller (2002:18), as illustrated and explained in Table 2.1 below.

Table 2.1: Reading processes that are activated when we read (Grabe & Stoller 2002:18)

Lower level processes	Higher level processes
Lexical access [and word recognition]	Text model of comprehension
Syntactic parsing	Situation model of reader interpretation
Semantic proposition formation	Background knowledge use and inferencing
Working memory activation	Executive control processes

The lower level processes are more automatic and involve linguistic skills, such as vocabulary for lexical access, grammar for syntactic parsing, and the combination of meaning and structural information for semantic proposition formation. In a sense, they require the application of bottom-up processes. These processes are supposed to take place rapidly and automatically in order for the reader to free up working memory time (i.e. the system that holds information and makes it available for further processing) for higher level processes. The most fundamental requirement for fluent reading comprehension involve rapid and automatic word recognition, and lexical access, which are the unconscious recall of the meaning of a word as it is recognised and the way it is accessed (Grabe & Stoller 2002:20). So important is this ability to recognise words in reading that it has been said to be the single most important predictor of reading comprehension (Alderson 2000:35). For good readers word recognition and lexical access are automatic and fast. The importance of this ability, and the difficulties in acquiring it, is explained by Grabe and Stoller (2002:21):

Reading comprehension cannot be carried on for an extended period of time without word recognition skills. However, these skills are difficult to develop without exposure to print (through many hours of reading practice).

The importance of word recognition skills has influenced many reading teachers to lay great emphasis on bottom-up decoding skills. However, as explained earlier, bottom-up decoding skills alone (even though they aid comprehension) do not ensure comprehension at higher levels.

In addition to word recognition skills, the ability to extract grammatical information rapidly is important for comprehension. This ability, referred to as syntactic parsing, enables fluent readers to recognise phrasal groupings, word ordering information, and subordinate and superordinate relations among clauses, in order to clarify how words are supposed to be understood (e.g. *The chair gave no support. Its leg broke,* and, *The chair gave no support. The meeting ended in chaos*). Another process that takes place automatically at the lower level is the process of combining word meanings and structural information into basic clause structure level meaning. Referred to as semantic proposition (Grabe & Stoller 2002:21), this process requires that the recognised words, together with grammatical cues, are integrated in a meaningful way in relation to previous readings. The connection of meaning relations allows the information to be more active in memory and become central ideas if repeated. Semantic propositions formed in this way create a propositional network of text meaning. The three lower level processes (lexical access, syntactic parsing and semantic proposition) occur automatically and are combined rapidly to ensure efficient working memory activation. Poor reading occurs partly due to readers being slowed down as a result of difficulties at word recognition level or partly due to inefficient coordination of processes. The faster the process the more working memory time is freed up for other processes. However, if the processing is slow, the information fades from memory and has to be reactivated making the reading process laborious and painstaking. Grabe and Stoller (2002:25) assert that "the efficient coordination of information from rapid and automatic processes is a necessary component of fluent reading comprehension abilities". To develop rapid, automatic and efficient coordination of processes, many hours of reading practice and frequent exposure to text is required (Alderson 2000:15; Grabe & Stoller 2002:21).

Higher level processes involve the coordination of ideas from a text to form a meaning representation of the text (i.e. the text model of comprehension), on the one hand. On the other hand, background knowledge, inferencing, reader goals, reader attitudes, reader motivation and strategies for text and task difficulty are used for the interpretation of the text (the situation model of reader interpretation) (Grabe & Stoller 2002).

These higher level processes interact in more complex ways and require higher cognitive abilities. The text model of comprehension is essentially a linguistic one, whereas the situation model involves extralinguistic elements. During the reading process, meaningful linkages to other information are formed and remain in active memory to emerge as main ideas of the text. These main ideas emerge to form an internal summary of the text. Inferencing and background knowledge are required at this level in order to anticipate discourse organisation of text to aid comprehension. Research has shown that successful anticipation of discourse organisation of text improves comprehension and consequently academic reading ability (Alastair 2003; Alderson 2000:35; Anderson 1999:12; Brunfaut 2008; Trabasso & Bouchard 2002).

Whereas the text model reflects the extraction of main ideas for general comprehension, the situation model allows the reader to interpret the text. The situation model shows that the reader makes projections for the reading based on a high degree of background knowledge, inferences, reader goals, reader motivations, task and text level difficulty, and reader attitudes towards text, task, and author (Grabe & Stoller 2002:27). In other words, the reader builds a situation model around the text model by combining other knowledge sources, such as knowledge of the world, knowledge of text structure, affective influences and additional inferences. Thus, whereas the text model is essentially linguistic and requires minimum inferencing, the situation model is derived from various knowledge sources and requires heavy inferencing and a high degree of background knowledge application (Grabe & Stoller 2002: 28; Perfetti, Van Dyke & Hart 2001:133-4). Grabe and Stoller (2002:26, 27) provide the following succinct summary of the two models:

> The text model amounts to an internal summary of main ideas […]
> The situation model integrates text information with a well developed
> network of ideas from the reader's background knowledge, and it
> interprets new information in the light of reader background, attitudes,
> motivations, goals and task purposes.

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The numerous abilities required, and the high knowledge and affective levels expected for processing texts in this way, require skilful and fluent reading. Fluent readers are able to integrate text and background information appropriately and efficiently in an effortless manner. They are able to both understand the author's ideas (text model) and to interpret the information for their own purposes (situation model). This duality in performance, according to Grabe and Stoller (2002:28), explains how a reader is able to provide a summary of a text (text model) and also offer a critique on the text's position (situation model).

Tertiary level students are expected to integrate and combine aspects of the text model and the situation model when engaging in academic reading. Incorrect or incomplete background knowledge or faulty inferences related to the situation model could affect interpretation of text. At the situation model of reader interpretation low motivation could also lead to shallow processing. It is therefore essential for all the skills and knowledge required for interpretation to be at appropriate levels and to be assembled and coordinated in an appropriate manner. Many researchers (Alderson 2000; Anderson 1999; Grabe & Stoller 2002; Stanovich & Cunningham 1993) identify frequent exposure to texts as the measure that would provide these adequate levels of skills, knowledge and abilities that are required for academic reading.

Besides the linguistic text model, and the extralinguistic situational model at higher level processes, executive control processes (e.g metacognition strategies) are used to oversee or monitor comprehension, use of strategies, reassessment and reestablishment of goals and repair of comprehension problems. In effect, executive control processes represent how we assess our understanding of a text and evaluate our level of comprehension, which is equivalent to metacognition, an important component in (academic) reading that will be discussed later in this section. Alderson (2000:13) elaborates on metacognition in the following way:

> Self regulation strategies like planning ahead, testing one's own comprehension, and being aware of and revising the strategies being used are also said to be typical reading strategies of fluent readers.

He concurs with Grabe (1991:382) that metacognitive strategies are used by fluent readers and play a significant role in reading comprehension. Anderson (1999:12) agrees with

McNeil (1987) when he states that whereas efficient readers approach tasks in a more active, strategic, and flexible fashion, poor readers' passivity is reflected in their lack of predicting and monitoring activities. It seems therefore that inability to use metacognition or executive control processes in reading will lead to poor reading comprehension.

Two issues are pertinent. First, that reading comprehension processes occur simultaneously and that some processes (lower level) need to be relatively automatic, for reading processes to work efficiently; second, that fast and efficient processing ensures comprehension of texts. While speed allows more time in working memory to process higher level meaning, automaticity in word recognition enables the reader to identify words rapidly. Unskilled readers are not able to do so due to poor processing at lower level that leaves little or no room for higher level processing. Speed, automaticity and efficiency may not occur effortlessly for these readers when difficult texts are encountered. Students who generally have not had much practice in reading at primary and high school levels will find the automatic processes explained above to be more conscious and effortful. This may be due to inadequate background knowledge, limited linguistic resources (e.g. vocabulary) and low efficiencies, resulting from inadequate exposure to texts. These comprehension difficulties increase if the information encountered is new to the reader (Grabe & Stoller 2002).

A number of students, especially L2 students who encounter these difficulties for various reasons (discussed in Chapter 1), resort to coping strategies that in the long term are ineffective. For instance, some would use a slow, mechanical translation process that often leads to poor operation of working memory efficiencies. Others will force the text to fit certain preconceived notions from past experiences in an effort to form a situation model of comprehension. In this instance, inappropriate background information is activated, leading to poor comprehension (Grabe & Stoller 2002:30). In both cases, Grabe and Stoller point out that successful reading is not likely to occur. In most cases readers will constantly resort to coping strategies, such as translation and guessing, in an attempt to form a coherent account. Such experiences, if repeated continually, will lower motivation in reading. The main solution to the problem, as suggested by researchers in the field, is frequent exposure to texts:

> [T]his problem also suggests a likely long-range solution.
> Students need to engage in reading for many hours at text- and

task-levels appropriate to their abilities. It is only through extended exposure to meaningful print that texts can be processed efficiently and that students will develop as fluent readers (Grabe & Stoller2002:30).

Such suggested solutions have led many instructors to immerse students in extensive reading. Others have resorted to teaching different aspects of reading in order to achieve quick and fast results. For instance, many instructors have focused on reading strategies, while others have dealt with vocabulary development to promote automaticity in word recognition; or attempted to make students aware of discourse organisation and text structure due to their role in comprehension; or emphasised word recognition, speed and fluency. These solutions, based on the cognitive theories discussed above, are valid, but do not indicate the social nature of reading nor the affective influence on reading, which are crucial issues in reading development.

2.3.2 Social view of reading

The cognitive view of the reading process, as discussed above, is not entirely adequate, as reading is both a cognitive process and a social, affective activity (Alderson 2000:45; Bernhardt 1991a:9; Grabe & Stoller 2002:59; Greaney 1996:5; Guthrie & Wigfield 2000:404; Verhoeven & Snow 2001:2). Reading in the cognitive sense is regarded as a solitary individual activity in which the reader processes and interacts with the text in isolation. However, research has shown that the cognitive processes are greatly influenced by social and affective factors (Alvermann, Phelps & Ridgeway 2007; Elley 1996; Grabe & Stoller 2002; Guthrie & Wigfield 2000; Verhoeven & Snow 2001). For instance, in the comprehensive interactive view of reading, the reader brings his/her social experiences and knowledge of the world in order to construct meaning from text. Schema theory also suggests that reading involves more than utilising linguistic and decoding skills; and that interest, motivation, attitude, context and background knowledge will determine, to an extent, the success that a reader will have with a given text. In sum, reading is a dynamic process in which the text elements interact with other factors outside the text.

The social view of reading is based on social constructivist views of learning, which emphasise the importance of culture and identity as expressed in social norms, rules and understanding. Social constructivists have argued that the social environment greatly influences the cognitive process in learning (Alvermann et al. 2007:26). For example,

Vygotsky (1978) emphasises the critical importance of culture and social context for cognitive development. His concept of Social Cognitive Development states that the child's cognitive development starts within the social environment, before becoming individualised (Vygotsky 1978:57). Vygotsky further argues that cognitive development and cognitive processes are embedded in social interaction. The main ethos of his framework is that social interaction plays a fundamental role in the development of cognition. Whatever the state of the social environment, it influences the cognitive development of the individual. He argues through his concept of ZPD (Zone of Proximal Development) that appropriate cognitive development is attained through engaging in social behaviour. Street (2003), and other socio-cultural reading researchers such as Gee (1991), base their views on Vygotsky's social learning theory and argue that literacy is a social practice. Street (2003:77) argues that his ideological model is based on the premise that "literacy is a social practice, not simply a technical and neutral skill; that it is always embedded in socially constructed epistemological principles". The social view of reading therefore plays a significant role in explaining the reading challenges that students encounter.

With regard to this view, Nunan (1991:72) points out that students are socialized into reading. In other words, the literacy behaviour of people with whom students interact influences the students' literacy practices. Wallace (2003) takes up the social context of the L2 reader and explores the different situations in which such readers acquire and maintain literacy. In her view, for many L2 readers motivation for reading is based on gaining access into a community of readers (Wallace 2003:9).

The influence of outside factors in reading is also shown by Bus's (2001:51) Attachment Theory, which posits that young learners with good and close relationships with their parents develop into better readers than those who do not have this close relationship. This confirms the important role played by significant adults in relation to reading development. In contrast to the cognitive view of reading, which perceives the reading process as an intrapersonal problem-solving task that takes place within the brain's knowledge structures and processes, the social view of the reading process is rooted in the belief that texts are manifestations of structures. These manifestations, Bernhardt (1991:10) explains, imply socially acquired frames of reference, value systems, idiosyncratic knowledges and beliefs. In other words, texts are read within cultural contexts. This stands in contrast to the

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cognitive view which perceives that readers take in information in a particular way and process it. That is, depending on the context and the reader, each text is read differently. The reader brings his/her set of values and beliefs into the reading process. Bernhardt (1991) argues that a social view of reading implies that there are no generalised readers or generic reading behaviours. Instead, each reading activity is a unique process depending on the reader's frame of reference – his/her values, beliefs, and so on (Ibid). Secondly, texts are not generic, since each text consists of a number of implied value systems. Each reader approaches a text differently depending upon his/her frame of reference, values and beliefs. Research has shown that "the context or social background from which the learner emerges influences his/her acquisition of literacy skills" (Bernhardt 1991:11). The learner's social background could conflict with the school culture, causing difficulties for the learner. Bernhardt (1991:12), citing Wells' study, states that:

> [W]hen a learner's home environment does not mesh with the school environment […] the learner's attainment of literacy skills from the majority culture's point of view is retarded. The critical point here is that this retardation is not the result of a cognitive deficit, but rather the result of the conflict between home and school cultures; in other words, the result of a social mismatch.

This mismatch between home and school cultures is projected by Niven (2005) in her study of students' and lecturers' frames. The students in her study, who are deemed among the best of their peers by their admission into university, struggle with their reading and writing due to the mismatch between their frames and those of their lecturers. Clearly, reading is not entirely cognitive, but also highly social. The social issues in turn manifest in the cognitive abilities of the students, leading to poor literacy levels. In addition to the influence of the social environment or background of the reader, the interpretation of the text itself also suggests a social perspective to the reading process, in that the interpretive process ensues from different perspectives depending on the reader's social view. In other words, a reader interprets a text based on his/her social and historical point of view.

The social constructivist view of reading, posits that cognitive processes of reading are influenced and propelled by the reader's social behaviour. Alexander and Fox (2008:20) state that "social and contextual forces matter greatly in reading and reading instruction". Readers may encounter problems at a social level, which may influence their cognitive processing. For example, learners from print poor homes and environments may experience difficulties in reading due to their low encounter with texts.

In addition, the social environment may influence the reader's motivation to read. Wallace (2003:9), in discussing the social context of the L2 reader, argues that learners are socialised into reading and that they read not only for enjoyment and information, but to gain access into a 'community' of readers. In other words, if reading is an accepted behaviour of those with whom learners come into contact, then they are much more likely to want to read. Wallace's (2003:9) discussion indicates that reading performs a socialising function and the reader's ability to read is usually linked to his social group. She states that "readers […] enact their roles as members of communities". It is therefore essential that in developing students' reading ability their socialisation into reading should be investigated. Also, as (academic) texts are to be read from the perspectives of the values of the (academic) community (Bernhardt 1991:14), it is important to have knowledge of the perspectives from which students approach academic reading. As discussed earlier, a number of students have difficulty in operating from the perspective of the academic community. These students struggle with interpretation of texts, and therefore seek comprehension solely from linguistic elements or from their background knowledge, which usually lead to wrong interpretations and faulty inferencing (Alexander & Fox 2008:18).

The proponents of the social view of reading argue that in order for the reader, especially in L2 contexts, to overcome this difficulty they have to "gain access to implicit information possessed by members of the social group for which the text is intended" (Bernhardt 1991:14). Bernhardt (1991:16) argues that understanding of the linguistic elements of a text is cognitively oriented, whereas the interpretative aspects are very socially and culturally dependent, and a reader needs to perceive both in order to interpret a text successfully. The difficulty experienced by readers at interpretation and inference level could be attributed to social background differences as well as L1 and L2 reading differences (August 2006:258; Bernhardt 1991:15; Niven 2005:785). The argument is that L2 readers and the texts they read usually represent separate and distinct social entities. Whereas L2 readers approach the text with an L1 framework of the language, the text may call for a different framework from which the intended audience will interpret it. Bernhardt (1991:16) puts it succinctly thus:

> Hence before second language readers even reach a text, an inherent conflict exists. This conflict exists from micro level features of text (e.g. orthography) through grammatical structures […] to the social nature of access to literacy.

The argument according to a number of reading researchers (Alderson 2000:25; Bernhardt 1991:16; Grabe & Stoller 2002:68; Verhoeven & Snow 2001:2) is that literacy is both social and cognitive in nature, therefore models that represent literacy, specifically L2 literacy, should be both social and cognitive in nature.

2.3.3 Affective/ response theories

In addition to the social and cognitive theories of literacy, as expounded above, researchers have also advocated affective theories of literacy. Response theories explain how readers' affect (i.e. goals, interests, attitudes, motivations and involvement in the learning experience) influence and control their reading abilities. The Reader Response Theory, as advocated by Rosenblatt (1978), describes reading as a complex transaction between reader and text and explains that the way a reader responds to a text and the meaning a reader constructs from a text are influenced by the stance or purpose that the reader chooses. Although she proposes both [3]efferent and aesthetic purposes she puts greater emphasis on the aesthetic.

Alvermann et al. (2007:369) advocates that feelings, attitudes, motivations, interests, and other affective responses of the reader are used in interacting with the text. These affective responses are crucial for reading development, as together with other factors they determine the amount of reading a reader does. For instance, readers' affect influences their willingness to read and their ability to use appropriate strategies for comprehension. Alvermann et al. (2007:29) cite Wigfield et al.'s (1996) study to show that motivational dimensions of enjoyment, curiosity and self-efficacy were the best predictors of the frequency with which students' read. Using the Motivations for Reading questionnaire on 600 middle grade students from various backgrounds, Wigfield et al. (1996) found that enjoyment, curiosity and self-efficacy best predicted students' reading frequency.

Fluent reading involves the use of well orchestrated strategies, and for a reader to be strategic he/she has to be motivated. In other words the reader has to have a positive attitude, high interest and the willingness to read, which will result in the application of strategies and the enhancement of comprehension abilities. When students are motivated

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[3] "The predominantly efferent reader focuses attention on public meaning, abstracting what is to be retained after reading – to be recalled, paraphrased, acted on, analyzed. In aesthetic reading, the reader's selective attention is focused primarily on what is being personally lived through, cognitively and affectively, during the reading event (Rosenblatt 1985:101-102).

"they view themselves as competent readers who are in control of their comprehension processes; they are said to be strategic in their approach to reading" (Alvermann et al. 2007:29), and consequently, successful readers. Various means of motivating students have been advocated, with learner autonomy and student choices being the most significant. The Humanistic approach (an approach that focuses on the needs of the individual) calls for instructors to create an appropriate environment where motivation can be enhanced in order for learners to take responsibility for their own learning.

In line with humanistic theories (Cook 2001; Brown 2000), and the emphasis on lowering of anxiety and inhibitions to promote learning, reading research has put the reader's affect at the centre stage of reading development. Krashen's Monitor Model for learning advocates for a lowering of the affective filter in order to promote learning (Brown 2000:279). The reader's affect needs to be at positive levels to attain a high reading frequency that would yield reading proficiency equivalent to academic reading levels. Providing a positive teaching and learning environment, for example an unrestrictive environment that promotes participation and increases motivation, is therefore an important issue in reading classrooms.

Researchers such as Anderson (1999), Grabe and Stoller (2002), and Guthrie and Wigfield (2000) have pointed out that readers' affect is important in raising reading levels. In particular, Guthrie and Wigfield found that 13-year-old students who were involved in reading had higher achievement than 17-year-old students who were less involved in reading. They concluded that students' involvement in reading provide them with self-generated opportunities that are equivalent to several years of education (Guthrie & Wigfield 2000:404). Grabe and Stoller (2002:56) argue that students' affect influence their willingness to engage in reading tasks. However, very few researchers have systematically pursued the issue of affect in reading.

2.3.4 Current directions in reading development

Besides the three dimensions of reading theories – cognitive, social and affective – that have been discussed in relation to reading development (cf. § 2.2.3), recent directions in reading development have been towards metacognition, New Literacies and engaged reading. Metacognition involves the monitoring strategies that readers employ in comprehension. The New Literacies refers to multiliteracies and is rooted in Social

Constructivism, while engaged reading emphasises the reader's affect in reading. Engaged reading and affective factors are discussed in Chapter 3. This section discusses metacognition and New Literacies.

2.3.4.1 Metacognition

Metacognition refers to the reader's ability to plan, self-monitor and self-evaluate comprehension during reading (Alderson 2000:13; Grabe & Stoller 2002:28; Takallou 2010:273). The metacognitive view explains reading in terms of the strategies that readers use to monitor comprehension. Sets of flexible and adaptable strategies are used to make sense of a text and to monitor ongoing understanding. These control strategies that readers execute in their effort to understand a text is what has been referred to as metacognition (Dole, Duffy, Roehler & Pearson 1991). The application of metacognitive strategies is thought to be fairly conscious and the assumption is that they can be explicitly taught. So important is Metacognitive Theory that many reading teachers focus on explicitly teaching students reading strategies to promote successful reading, especially in academic contexts, where such strategies are vital for comprehension.

The metacognitive view of reading adds a monitoring dimension to the reading process. According to this view the reader becomes aware of his/her own mental processes. This advanced technique in reading involves a great deal of independent learning. Metacognition relates to cognitive strategies that focus on the reader's ability to classify, sequence, establish whole-part relationships, compare and contrast, determine cause-effect, summarise, hypothesise and predict, select and extract relevant points from texts, infer, and conclude (Fontanini 2004; Urquhart & Weir 1998). These abilities are required in academic reading, and comprehension involves the ability of the reader to monitor these processes, hence the importance of metacognition in academic reading. Fontanini (2004:179) claims that for demanding texts, readers have to be highly skilful and strategic if they want to read effectively.

Current researchers (e.g. Alderson 2000; Alvermann et al. 2007; Grabe & Stoller 2002) who have attempted to explain the reading process have all acknowledged the importance of metacognition. Esperet (in Fontanini 2004:175) explains that the three aspects to take into consideration in reading are: the organisation of lower level language units, storage of information in working memory, and the way the reader controls the process of accessing a

piece of information. This resonates with Grabe and Stoller's (2002:20) comprehensive framework of the reading process, which includes an executive monitor – a kind of metacognition that oversees the appropriate coordination of these processes. Gernsbacher (1990), in attempting to describe how cognitive processes (specifically the application of background knowledge) work in the construction of comprehension, developed the Structure Building Framework. The framework posits that for comprehension to take place, readers need to apply strategies to restart the reading process if the incoming input does not fit or cohere with any stored structure. His explanation relates to metacognition, as it refers to the monitoring of input. Instruction has focussed on teaching strategies that students can apply to gain comprehension, as well as drawing their attention to the monitoring strategies that enhance comprehension. Besides the knowledge gained in this type of instruction, the students also become more confident when given explicit instruction, which may lead to increased self-efficacy – an affective factor that corresponds to reading achievement.

2.3.4.2 New Literacy Studies

Another recent direction of reading that is embedded in Social Constructivism, but with a critical and political postmodernist edge, is the New Literacy Studies (NLS). NLS is based on Street's (1995; 2003) and Gee's (1991; 2000) views on socio-cultural literacy emanating from Vygotsky's social constructivism (cf. §2.2.2). The NLS has viewed reading practices as multidimensional. Reading is no longer perceived as a psychological phenomenon in which individuals, who can decode and have the requisite background knowledge of drawing inferences, are able to arrive at the 'right' interpretation of a text. Instead, the NLS focuses on "what literacy events and practices mean to users in different cultural and social contexts" (Street 2003:10). Proponents of this approach believe that "reading and writing are shaped by (and in turn, help to shape) multiple socio-cultural practices associated with becoming literate" (Alvermann et al. 2007:15). In other words, reading and writing are influenced by the different social environments and cultural practices that relate to students' reading behaviour. The NLS, therefore, involves "ways of behaving, knowing, thinking and valuing" (Ibid) in relation to reading, and hence comprehension extends beyond the printed words. This socio-cultural view of reading has begun to influence reading instruction. It proposes that instruction should be geared

towards students' reflexive and expressive views. Although this view relates to the current multicultural and diverse social groups of students, and as Alvermann et al. (2007:16) point out, has much to be admired in its natural approach to literacy instruction, its application in classrooms has come under criticism lately. One of the criticisms is that instructors who teach in accordance with the NLS, and from a reader response perspective, put too much emphasis on personal experience and individual interpretation at the expense of critiquing texts.

However, as some researchers (Lewis 2000; Moje, Willes & Fassio 2001) argue, these shortcomings can be corrected and worked around "to enable the important gains realised through student centred instruction to move forward" (Alvermann 2007:16). The view is that the NLS and reader response approaches are useful in acknowledging student voices, providing student choices, and promoting motivation. Consequently, such approaches should not be discarded, but should be applied in a manner that minimises the limitations.

In relation to the NLS, which projects the social view of language learning and teaching (cf. § 2.2.2) further by arguing for identification and expression of students in relation to their diverse social and cultural backgrounds, August (2006) advances an English Second Language Readers (ESLR) theory. Based on the socio-cultural view, August (2006) argues for a theory that differentiates adult English Second Language Readers from children and first language readers. August argues that adult ESL students come to ESLR with diverse educational backgrounds, and consequently a descriptive model needs to build in variability to account for a wide range of L1 literacy skills that traditional and non-traditional adult ESLR readers bring to the educational process. She presents a model of L2 adult reading, arguing that due to a number of factors models that describe adult ESLR would differ from those created to cater for L1 reading or even child ESLR. These factors, include the possible transfer of a wide range of L1 reading skills; the various kinds of L1 and L2 educational experiences; and adult cognitive abilities. Her model therefore accounts for an additional component (level 3) of adult learners' academic reading, such as academic vocabulary, complex linguistic structures, various writing genres, and relevant background and cultural information. Level 1 represents child ESLR and level 2, traditional adult ESLR with strong L1 literacy skills. An illustration of her model is given in Figure 2.1 below.

Level 1 Level 2 Level 3

Child ESLR

L1………………………..L2……………....

Adult ESLR

Traditional student (strong L1 skills)

L2………………………...L1…………………………L2+……………….

Adult ESLR

Non traditional students (weak L1 skills)

L2…………………L1…………..L2+……………………………………
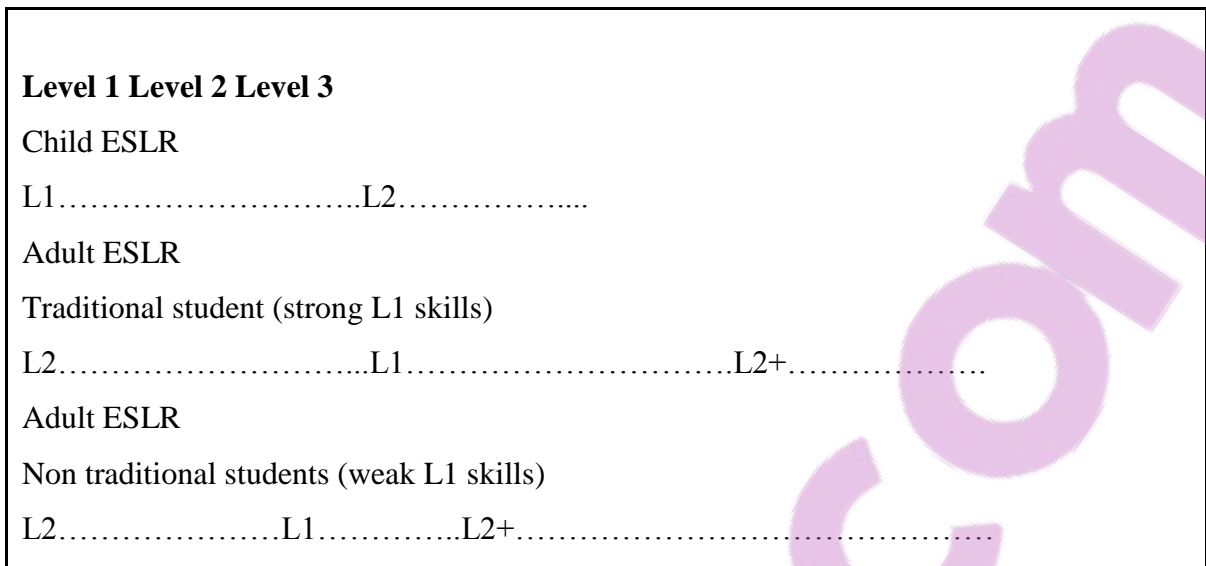
Fig 2.1: Three levels of ESLR (August 2006)

According to the model, child ESLR is less complex than adult ESLR. A child will transfer basic decoding skills from the L1 to L2 reading given the language threshold. A child does not need the academic reading skills of level 3. However, with the adult ESLR, where additional comprehension and academic reading skills are required, the situation is more complex. Those with strong L1 skills will transfer the skills and will therefore need less instruction in L2 academic reading skills required at level 3. Non-traditional students who have weak L1 reading skills will have very little skills to transfer and will therefore need more instruction in L2 reading to make up for lack of L1 cognitive reading skills. Students with weak L1 reading skills, unlike the traditional students, need more time to gain more exposure to the L2 in order to acquire academic reading skills of L2. These students, short-changed by many of the factors mentioned in Chapter 1, are weak in the cognitive aspect of L2 and also weak in L1 reading skills. The solution, according to August (2006:259), is to improve L2 language and reading skills. She explains that

> [t]raditional ESLR readers can build reading proficiency by using previously developed L1 reading knowledge to support the newly developing L2 language skills, and so need a smaller component of advanced academic skills (level 3). The non-traditional ESLR readers have less sophisticated L1 reading knowledge and require a model that will account for the development of advanced skills in the L2 (level 3). In other words, the non-traditional ESLR would need to acquire the most academic skills not from transfer but from L2 instruction.

Pretorius's (2007) study relates to this situation, as she found Grade 7 students to perform better in L2 reading skills than in L1 reading skills. Another basis for providing L2 reading instruction is that adult learners, specifically tertiary level students, do not have the time to acquire L1 literacy skills before transferring them onto the L2. The ideal would be to acquire L1 literacy skills in childhood, transfer the skills onto the L2 and enhance them with more exposure to the L2. This, unfortunately, is not the case with non-traditional students who lack L1 literacy skills, and have poor L2 reading skills. August (2006:260) advocates for a curriculum that considers these ESLR factors for such students. She states:

> Although transfer occurs for all ESLR readers, the academic goals of an individual with a weak L1 background are more dependent upon the newly acquired L2 skills and require a curriculum which provides a highly intensive focus on L2 language, grammar, and reading skills.

August's model, though a good explanation of ESLR, emphasises cognitive development to make up for reading deficiencies. She admits that ESLR needs more than transfer to achieve academic goals, and specifies grammar instruction and teaching of reading skills in addition. While her model is a logical representation of ESLR reading, and her solution a justified one, instructions need to be supported with a willingness to learn and the motivation to do so.

From her explanation, August assumes that all ESLR students have had some reading experience in the L1. However, this is not always the case. In a number of South African tertiary institutions, as in the UP context, many mother-tongue speakers of indigenous African languages have not read literary texts or expositions in their L1. A reading model in the South African context would have to cater for these ESLR students who fall into two categories, that is those with strong L2 skills and those with weak L2 skills. Though both groups have virtually had no reading in the L1 (probably due to a number of factors, including lack of expository books in the African languages, etc; (cf. § 1.1.2.1), one group can be termed traditional as they have had extended exposure to the L2 as a result of higher SES and print rich home and school environments. For this group of students, although they have poor or no L1 literacy skills to transfer, the prolonged exposure to L2 through instruction and pleasure reading has been adequate to develop efficiencies in reading. They will therefore need a shorter time to develop advanced academic reading skills, and may operate at the same level as those traditional students who have strong L1 reading skills. The second group (non-traditional students), though similar to the first

group (i.e. weak L1 literacy skills), differs in the sense that they do not have adequate L2 reading skills. This disadvantage may be attributed to low SES, a poor reading culture at home, inappropriate instruction and poor resources common in poor rural and urban schools (Pretorius 2007; Pretorius & Mampuru 2002; Scheepers 2008), as discussed in Chapter 1. With these disadvantages the students are highly at risk of failure, given the advanced academic reading skills expected of them at tertiary level. Students in this second group, like August's group of non-traditional students with weak L1, need more time to develop comprehension skills and the complex academic reading skills required at tertiary level.

August's model is significant in distinguishing the different types of ESLR readers. Although she cites the need for a model to distinguish the different groups due to variability in educational backgrounds, her focus is solely on cognitive development. The cognitive approach assumes that the affective is already in place or is insignificant, but students from disadvantaged reading backgrounds with poor reading habits – weak L1 and/or poor L2 literacy skills – usually have low reading motivation and show a lack of interest in reading (Boakye 2007). A model of cognitive intervention should include the development of the affect, which would form the basis for cognitive development to be achieved (Bus 2001; Guthrie & Wigfield 2000; Verhoeven & Snow 2001).

The following issues need to be considered in developing the reading skills of this group of non-traditional students (those with weak L1 literacy or virtually no L1 literacy and poor L2 reading skills).

- **Exposure to L2 through reading.** Increased reading and exposure to texts is advantageous for vocabulary development. If students read often, they become familiar with a number of academic words. Vocabulary acquisition is gained more extensively through exposure (pleasure reading) than it is gained through instruction (Anderson 1996). In addition, through frequent reading, more complex syntactic constructions (e.g. passives, nominalisation, subordination, etc.) become easier to understand; genre conventions, structure and discourse patterns, become more familiar and reading fluency and speed are increased.

- **Instruction to complement the process of reading development.** As students at tertiary level do not have time to allow reading ability/proficiency to develop naturally, instruction should therefore accompany the reading of texts. Reading strategies should be taught to students to develop the use of cognitive strategies and to increase awareness (metacognition). Fluent and skilled readers are known to use appropriate, well-orchestrated strategies (Anderson 1991; Anderson 1999; Barnett 1988:150; Nunan 1991:77), and explicit vocabulary instruction has been found to be beneficial for poor readers (Scheepers 2008).

- **Engaging in many hours of reading to develop efficiencies, speed and appropriate use of strategies.** The more students read, the better they become at reading. However, texts used to improve reading should adhere to Krashen's principle of Comprehensible Input (Brown 2000; Cook 2001; Nunan 1991). In other words, texts should neither be too difficult nor too easy for students. Texts should be at a level slightly above students' level of comprehension. Students' reading rate and their knowledge of high frequency words (up to the 3,000 word level) and academic words in English would give an indication of whether or not they read Grade 12 texts at frustration level. Texts can then be scaffolded or gradually increased in level of difficulty until the required academic reading level expected of tertiary students is reached or attained. The gradual increase in text difficulty will help improve students' motivation as well as self-efficacy. Grabe and Stoller (2002:30) caution against the reading of difficult texts by students with low reading proficiency. Pretorius (2007) refers to it as reading at frustration levels. Frustration level reading leads to a sense of inadequacy, boredom, low motivation and lack of interest (Grabe & Stoller 2002:30).

- **Development of the affect to evoke interest, motivation and love for reading.** The issue of affect is central to all aspects of reading. The three principles stated above should be pursued in a manner that enhances student motivation and interest. This will provide students with the necessary will and desire to read and will mitigate any apathetic feelings and negative attitudes that they may have developed towards reading as a result of difficulties experienced in reading. Whereas some students may have developed reading efficiencies either through L1 reading that transfers to L2 reading, or through long exposure to L2 reading, and could therefore be given reading instruction through cognitive approaches, others need

more than just a cognitive approach. Non-traditional students who are weak in L1 and/or L2 reading, and who consequently have low motivation to read do not only need intensive development of reading skills but an affective approach to boost motivation, change negative attitudes and allow the cognitive development to successfully occur.

- **Creation of an environment in which students have choices and autonomy, and perceive that their voices are acknowledged.** According to the Reader-Response Theory and the New Literacy Studies, literacy is shaped by the multiple socio-cultural practices that students engage in. In promoting reading proficiency at academic level, students should be given choices in tasks and texts; autonomy and freedom in learning; and be allowed to express their voices in various ways, while at the same time developing academic literacy competence that conforms to academic conventions.

While this section has discussed cognitive and social theories of reading, and briefly mentioned the influence of affect in reading, the following section briefly explains some social and psychological theories/views of learning, which further strengthen the need for a social and affective perspective to (academic) reading development.

2.4 Social and psychological theories that relate to learning

As explained in Chapter 1 and in the previous section of this chapter, the difficulties that students face in academic reading can be attributed, inter alia, to the influence of social and affective factors. Hence, if an effective solution focussing on socio-affective factors is to be found in the tertiary teaching-learning context, as this study seeks to do, it is necessary to discuss social and psychological models that account for human behaviour in general, and human learning behaviour in particular.

According to social theorists certain factors are salient in influencing human behaviour and shaping lives, and these need to be examined closely. A systems model of human behaviour presented by the psychologist Huitt (2003) illustrates the components of the individual and posits that the individual's cognition, affect and volition culminate in overt behaviour. This behaviour and other aspects of the individual develop as a result of cognitve transactions, which are influenced by biological maturation and the environment.

Huitt's model is discussed in conjunction with the views of the social psychologist Bandura (1986; 2001). First, a brief account of salient theories of human behaviour and of learning is given.

Human behaviour has been explained in various ways in terms of psychological models. The behaviourists' theories of the 1950s emphasised observable processes and explained human behaviour in terms of environmental stimuli and behavioural responses. They believed that if and when provided with a stimulus an individual would behave accordingly. These theories on human behaviour and of learning have greatly influenced teaching methodology. Rote learning and memorisation were predominant, and reading pedagogy was conducted through drills of isolated skills, such as phonics-based instruction (Alexander & Fox 2008:14). A decade later (1960s to early 1980s) cognitive explanations of human behaviour, posited by cognitive psychologists, refuted the behaviourist emphasis on observable processes triggered by the environment, to focus on mental processes such as memory and problem solving. Cognitive theory was used to explain reading as a cognitive process in which the reader engages in a problem solving activity. Reading instruction was mainly on appropriate use of strategies and prior knowledge, as the readers prior or background knowledge "was shown to affect the comprehension, interpretation and recall of written text" during reading (Alexander & Fox 2008:15, 16).

Later, humanistic theories were advanced by Rogers (1983) as explained in Brown (2000:89, 90). He emphasised subjectivity of meaning and a concern for positive growth. The theory rejects Determinism (the theory that all events including human decisions are predetermined by previous events), and posits that given the right environment the individual has the ability for growth and development. Humanistic theories relate to social psychologists and sociologists' view that the individual is shaped by the society within which he/she interacts. Bandura's (1986; 2001) Social Cognitive Theory provides a framework for understanding, predicting and changing human behaviour. The theory describes human behaviour as interactions occurring between personal factors, behaviour and the environment. Bandura (1986; 2001) explains that the interaction between a person and his/her behaviour involves influences by a person's thought and actions. Secondly, the interactions between the person and his/her environment involve the person's beliefs and cognitive competences, which are developed and modified by social influences and structures within the environment. The third interaction is between the environment and

behaviour. In this interaction, a person's behaviour determines aspects of his/her environment, and this behaviour is in turn modified by that environment. Figure 2.4 below illustrates the three interactions involved in human behaviour as described by Bandura (2001).
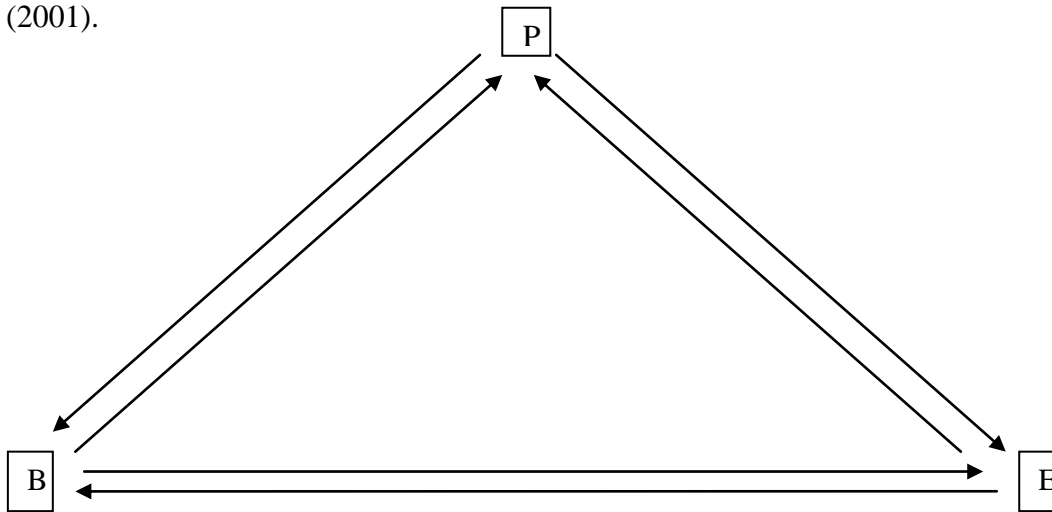
Fig 2.2: Social cognitive theory: B represents behaviour, E represents the external environment, and P represents personal factors in the form of cognitive, affective, and biological events

Bandura's description of the second (i.e. interactions between a person and his/her environment) and third (i.e. interactions between the environment and behaviour) interactions is shared by many social psychologists and sociologists. The view, as shared by social theorists, is that the environment influences the individual, and the individual in turn has an effect on the environment. Bandura's model opposes the cognitive view that learning and also reading can be analysed mainly from a cognitive perspective. It illustrates how various factors – cognitive, social, affective – influence human behaviour, including learning. He posits that the environment or context plays a dual role as it influences the individual and also responds to the individual's output and overt behaviour. Another aspect of his model posits that the environment which surrounds the individual, and with which he/she is in constant interaction, plays a major role in his/her development. This context, he argues, needs to be examined in the pursuit of changing people's behaviour. In support of Bandura's model, Huitt (2003) identifies the family and the community (i.e. schools, religious institutions, peer groups, and the culture with which the family identifies) as the most immediate and earliest influences on the individual. In addition to the influence of these micro systems, he states that influences from society,

such as societal and global changes in the economy, can filter down and influence an individual's behaviour.

Huitt (2003) argues that to fully understand human behaviour, we should not only examine it from a cognitive perspective but also take other sources into account, for example the environment (i.e. social and cultural contexts). He argues that external environmental factors play a significant role in human behaviour, and cognitive issues, which are internal, are informed by external environmental factors. Hence an integration of all factors (i.e. cognitive, social, affective, etc.) is necessary in devising a solution to cognitive and behavioural problems.

However, these external factors, as argued by several scholars, are not deterministic. For instance, Giddens (2001:668) believes that ways of acting, thinking or feeling "might constrain what we do, [but] they do not determine what we do". Human behaviour in the form of students' reading behaviour and resultant cognitive difficulties could have been influenced by negative social factors, but these influences are neither final nor deterministic. Individuals, if influenced positively by social factors (e.g. school environment, appropriate instruction, home environment, etc.) will be able to change their behaviour in a positive direction. In other words, if a student's social, educational and cultural background has deprived him/her of reading frequently and gaining exposure to texts, a positive environment if created, even at tertiary level, could influence the student to read more. Guthrie and Wigfield (2000: 404) argue that students who are poor readers due to their low SES background could become proficient readers given the right environment and appropriate instruction. The intervention designed as part of the present study therefore attempted to create an appropriate environment to influence students' reading behaviour and academic reading ability.

Most current social theorists who propose that external environmental factors which influence human behaviour should be identified and examined in order to institute change, also argue that the influence of social factors is bidirectional and that the object of influence could, in turn, influence the external factors. Applied to reading, the external environmental factors of family and community (e.g. schools) could influence the students in their reading behaviours – positively or negatively – resulting in corresponding academic performance. This will in turn influence the family and community in either a

negative or positive way. Whereas it is difficult, or almost impossible, for tertiary institutions to directly change the external factors that influence students' reading behaviour, change could be brought about in students in a manner that will counteract negative external influences of the immediate family and community. The educational environment, using appropriate methods of instruction and creating an appropriate teaching environment and ethos, could inculcate positive reading behaviour in students. Such an approach, as adopted by the current study, focussed on students' affect in order to bring about the desired change. The assumption was that the change in students' reading behaviours would enable them to become successful readers and consequently achieve academic success. The manner in which students' affect in reading can be influenced by the educational environment, as well as the social and affective factors (e.g. motivation, self-efficacy, attitude and interest), which are targeted in changing students' reading behaviour, are discussed in Chapter 3.

The next section provides a synopsis and justification for the consideration of social and affective issues in reading development.

2.5 A synopsis and justification for social and affective issues in reading development

Earlier models of reading were linguistically or cognitively oriented and focussed on the linguistic and cognitive aspects of reading. Solutions to reading difficulty, that were and are still based on these theories, adopt mainly a cognitive approach. Current theories have recognised and been orientated towards social and affective influences. In an attempt to provide a comprehensive account of reading, Grabe and Stoller (2002) distinguish L1 reading from L2 reading and identify social, cultural and affective factors as important in L2 reading development. This is an important departure from the strictly cognitive explanation of earlier models. However, exposure to texts, which Grabe and Stoller (2002) perceive as a solution to addressing students' reading difficulties, is not adequate for the South African context. It is indeed correct, as research has shown that exposure to texts improves reading comprehension and other cognitive abilities related to reading. However, to benefit from text exposure, or rather for exposure to be worth while, other factors also need to be considered. This is especially important for non-traditional students who, due to social, educational and cultural factors have had limited exposure to print, are poor

readers, may have different attitudes to books and reading and have low affective levels. Also, due to their SES and/or cultural background they may approach reading with frames vastly different from that expected by their lecturers (Niven 2005). For such students, exposure to print should be underpinned by raising their affective levels. In other words, not only should students be exposed to texts, but their motivation and interest should be raised, and their attitudes (social and cultural) should be encouraged to undergo positive change to derive expected levels of academic reading. Explicit reading instruction should also be undertaken simultaneously, as exposure alone does not provide significant improvement due to time constraints. Scheepers (2008:38) argues from her findings that "for poor readers, exposure to reading alone is not enough, and there must be explicit focus on […] teaching". Also, instruction will enhance the use of executive processes, increase metacognition and consequently self-efficacy, which have been shown to improve academic reading comprehension (Barnett 1988; Ghonsooly & Elahi 2010).

Besides instruction, there is a need to address reading difficulties from social and affective perspectives. Grabe and Stoller (2002:37) conclude a chapter on reading processes as follows:

> This emphasis on individual processes is not intended to deny the relevance of social factors on reading development (e.g. family literacy experiences, primary schooling, peer and sibling interaction around literacy events, etc.) or the relevance of social contexts on purpose and processes themselves [...]

Although August's (2006:259) descriptive model distinguishes different types of ESL readers as a result of their different educational backgrounds (which is an important distinction), it provides mainly cognitive redress. Like the earlier models it focuses on a cognitive approach to reading development. Niven (2005) however, in providing a socio-cultural explanation to students' reading problems and difficulties, recommends "that a more 'socio-cultural' understanding of literacy should be considered". She contends that this would facilitate a rapprochement of frames between lecturers and students. In relation to socio-cultural theory, Niven (2005) explores attitudes and assumptions that students bring from their homes and schools to the tertiary learning context. She found that students' reading frames were primarily cognitive, focussing on skills, as a result of their socio-cultural and educational backgrounds, whereas lecturers' expected expressive frames for reading that focussed on meaning – what is behind rather than before the eyes. In an

attempt to operate in the expected expressive frame of their lecturers, students applied inappropriate background knowledge and engaged "with ideas that were related to reading but not as often, in a disciplined and systematic way with the text itself" (Niven 2005:785). She further comments on the dilemma of the students:

> The students' lack of experience of a range of different kinds of reading conflicted with expectations that they would be able to recognise and process the wide variety of textual genres. Their lack of experience of general reading meant that they were often unable to use appropriate extratextual or intertextual frames to make inferences about textual meanings.

Niven (Ibid) argues that without adopting a socio-cultural framework to first understand socio-cultural factors contributing to students' underpreparedness for academic reading tasks and then devising appropriate means to address the problem, the conflict of frames will continue to exist and successful teaching and learning will not occur. She asserts that it is dangerous and alienating to assume that 'osmosis pedagogy' would work equally well with all the diverse socio-cultural groups that typify the South African academic environment (Niven 2005:786). It is clear that a socio-cultural stance is needed to understand students' reading problems and to help devise an appropriate instructional framework.

2.6. Conclusion

Different theories of reading, including bottom-up, top-down, and Interactive, as well as Grabe and Stoller's (2002) comprehensive lower- and higher-level processes, have been discussed to give insight into the reading process and to highlight areas of difficulty for tertiary students regarding academic reading abilities. For instance, some students lack automaticity and have limited academic vocabulary for lower-level processes to occur effortlessly. Others apply coping strategies and provide incorrect interpretation at the situation level of text interpretation, due to a lack of background knowledge and a milieu of affective factors. In addition, social and affective theories of reading, as well as recent directions in reading, such as metacognition and NLS, were discussed to show recent emphases in reading development. In relation to the fact that reading processes take place within the individual as well as in interaction with external factors, and in light of the focus on students' reading behaviour and reading ability in the present study, social and psychological theories that influence human behaviour have been briefly discussed. The

next chapter discusses in greater depth the social and affective factors that influence reading ability.

Chapter 3: Socio-affective factors in reading and the Engagement Model

3.1 Introduction

Having discussed the various reading theories and how they explain or fail to adequately explain (L2) reading development, and having shed light on new directions in reading development (i.e metacognition, NLS, etc.) in the previous chapter, this chapter discusses socio-affective factors influencing reading development, and presents Guthrie and Wigfield's (2000) Engagement Model. Thereafter, issues pertaining to tertiary level reading; L2 reading and L2 motivation, are discussed, culminating in an extended engagement model for developing L2 reading at tertiary level.

3.2 Socio-affective factors

Four affective factors were selected for this study: *motivation, attitude, self-efficacy* and *interest*. They were selected due to their frequent occurrence in the literature and their significant influence on reading. These factors are discussed in relation to their constructs and their influence on reading. In addition, the social factors (home environment, classroom environment, community, SES) are also delimited and their influence on reading development is discussed. However, they do not form an integral part of the study, as they cannot be changed by intervention. Instead, classroom activities that enhance social interaction and promote literacy practices were introduced.

As already indicated, despite the importance of socio-affective factors in reading, they have not received much attention in reading research. However, socio-affective factors, such as motivation, self-efficacy, attitude, interest, educational and home background, and socio-economic status, have recently been acknowledged by many researchers as playing an important role in reading development (Alderson 2000; Grabe & Stoller 2002; Guthrie & Wigfield 2000; Taylor & Yu 2009; Wigfield & Lutz 2005). Anderson (1999) includes the building of motivation as one of the eight strategies he proposes for teaching L2 reading. In an earlier study, he concluded from his findings that students' reading of textbook-related materials can be attributed to factors such as level of interest, motivation, learning style and background (Anderson 1991). Grabe and Stoller (2002:56) make this

clear when they elaborate extensively on how socio-affective factors could influence reading comprehension. They point out that L2 readers usually bring different attitudes and varying motivations to reading classes, and these attitudes and motivations, if negative and low, largely influence students' willingness to involve themselves in reading related activities.

Grabe and Stoller (2002) link the affective factors of attitude and motivation to previous experiences, exposure to people who read, and perceptions about the usefulness of reading, among others. These factors are related to several other causes, such as varying academic goals, prior educational instructions, socialization practices from home and community, or even a broad cultural framework for literacy (Alderson 2000:25; Grabe & Stoller 2002:56). These experiences, Grabe and Stoller (2002:56) contend, shape students' perceptions of how well they can perform tasks, and lead to their self-perceptions of how successful they are as students and readers, which in turn affect their self-esteem, emotional responses to reading, interest in reading and willingness to persist. The fact that the influence of socio-affective factors on reading comprehension development is acknowledged by several researchers and educators, but has often been ignored in reading research, is clearly explained by Grabe and Stoller (2002:57) below.

> No one disputes the fact that students' self perceptions, emotional attitudes towards reading, interest in specific topics and willingness to read texts and learn from them are important issues for the classroom learning environment. Unfortunately, these issues are often ignored in discussions of reading comprehension instruction, but in L1 reading research they are now seen as important predictors of academic success.

Grabe and Stoller (2002:57) cite the study by Guthrie, Wigfield and Von Secker (2000) in support of L1 reading research. In addition, Guthrie and many of his colleagues have conducted several studies that have shown correlations between socio-affective factors, especially motivation, and reading comprehension abilities on the one hand, and academic success on the other (Guthrie, Anderson, Alao & Rinehart 1999; Guthrie, Wigfield, Metsala & Cox 1999; Guthrie & Wigfield 2000; Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scafiddi & Tonks 2004).

As mentioned above, the reader's affect is just as important as the linguistic and cognitive aspects (Elley 1996; Greany 1996; Guthrie & Wigfield 2000; Schiefele 1992:159,160; Verhoeven & Snow 2001) and could be redirected to achieve positive gains in reading. A

student will read only if he/she is motivated to do so. Arguing along the lines of humanistic theories, Verhoeven and Snow (2001:2) advocate for a redefining of literacy to acknowledge the degree to which it is a social activity and an affective commitment in addition to being a cognitive accomplishment. Schiefele (1992:159) presents a model in which topic interest is influenced by cognitive and affective processes to yield text comprehension. Furthermore, Guthrie and Wigfield (2000:403) point out that readers are decision makers whose affect as well as their language and cognition play a role in their reading practices. They argue that people read, not only because they have the ability, but that they are motivated to do so. These views point to the fact that without considering the affective component to reading comprehension, one cannot be certain of achievement or optimal gains in reading and other academic activities. Besides, the affect relates directly to the individual, and presents an effective means of instituting change in reading behaviour.

Although the socio-affective dimension of reading is crucially important, this area has been under-researched across the world, but even more so in developing countries (Grabe & Stoller 2002; Greaney 1996; Guthrie, Anderson, Alao & Rinehart 1999). As a result, our understanding of the influence of socio-affective factors and reading development is blurred. To incorporate these factors, a better understanding of the constructs that underlie socio-affective barriers to reading is needed. The link between socio-affective factors and reading achievement, referred to as **Engagement** (Guthrie & Wigfield 2000) is also explored. Although motivation has different facets (Deci & Ryan 2000; Dörnyei 2001b; Guthrie & Wigfield 2000), the notions of intrinsic and extrinsic motivation, interest, self-efficacy, and attitude are considered for the study. These aspects of motivation are selected because they are important contributors to the cognitive and conceptual processes that are vital to reading comprehension (Guthrie & Knowles 2001:159). Also, the concepts are often associated with motivation in reading research literature, and a number of empirical studies and experimental studies have been conducted in reading, using these variables of motivation (Deci & Ryan 1992; Elley 1996; Verhoeven & Snow 2001:5). In addition, these motivational variables, although known to influence reading ability and academic performance, have not all been investigated together in one study. Consequently, to understand better the overarching concept of motivation, the constructs of *intrinsic* and *extrinsic motivation, interest, self-efficacy* and *attitude* are discussed in relation to reading comprehension abilities.

3.2.1 Motivation

Motivation is usually associated with goals, values and beliefs (Deci & Ryan 2000; Eccles, Wigfield & Schiefele 1998). Based on this, Guthrie and Wigfield (2000:405) define reading motivation as the "the individual's personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading". Motivation is usually perceived as multifaceted, with components such as intrinsic, extrinsic, and social. Social motivation refers to the motivation or need to belong or be with others, as well as the execution of motivated social behaviour (Forgus, Williams & Laham 2005). Self-efficacy is also identified as an aspect of motivation. However, self-efficacy is discussed separately due to its singular effect on reading. Interest and attitude are also usually subsumed under motivation (Brunfaut 2008; Mori 2002), however, for the sake of clarity, they are separated in this study. In addition, Dörnyei (1994:274) explains that attitude and motivation tend not to be used together in the psychological literature, as they are considered key terms in different branches of psychology. Attitude is used in social psychology and sociology where action is seen as the function of the social context, whereas motivation is referred to in psychology in relation to its influence on human behaviour in the individual, and focuses on concepts such as drive, arousal, need, anxiety, and self-esteem (Ibid). Motivation is divided into two main categories: intrinsic and extrinsic motivation.

Intrinsic motivation is referred to as the desire to engage in a task or activity for its own sake, and involves mastery and learning goals, curiosity, involvement (enjoyment, absorption) and preference for challenge (Deci & Ryan 2000:56; Dörnyei 2001b:47; Guthrie & Knowles 2001:160 Guthrie & Wigfield 2000:407). Extrinsic motivation, on the other hand, refers to external rewards and recognition as the goals for reading. It leads to performance goals, competition, and general instrumental goals for reading (Deci & Ryan 2000:60; Dörnyei 2001b:47; Guthrie & Knowles 2001:160; Guthrie & Wigfield 2000:407). Whereas both intrinsic and extrinsic motivation predict reading amount and frequency of reading, leading to reading achievement, the former is said to be more beneficial in learning and in reading, and highly predicts text comprehension (Lau 2009; Wang & Guthrie 2004). Guthrie and Knowles (2001:160, reporting on Pintrich and De Groot's 1990 study), explain that students who had higher levels of intrinsic motivation were more likely to use cognitive strategies and to be more self-regulating. More

specifically, students who believed that their school work was interesting, enjoyable and important were cognitively engaged in learning and comprehending of material. Empirical research has shown that high levels of intrinsic motivation can facilitate positive emotional experiences, self-esteem and mastery goals needed for high academic achievement (Deci & Ryan 2000). Positive emotional experiences have been identified by humanistic theorists as important for learning (Arnold & Brown 1999; Rogers 1983, cited in Brown 2000:287; Vygotsky 1978). Self-esteem has also been singled out by Deci, Vellerand, Pelletier and Ryan (1991) as promoting high quality learning and conceptual understanding. Guthrie and Wigfield (2000:407, citing Ames 1992 and Ames and Archer 1988), point out that individuals with learning and mastery goal-orientation seek to improve their skills and accept new challenges in activities such as reading, and utilise deep strategies for reading, which leads to more permanent conceptual learning. Guthrie and Knowles (2001:160-161) cite Ames and Archer (1988), who showed that

> [W]hen students perceive an emphasis on mastery goals, in an educational setting, they used more strategies, preferred tasks that offered challenge, and had a more positive attitude towards their class.

They further note the belief of motivation researchers that mastery and learning goal orientation is more likely to foster long-term engagement and learning than performance goal orientation (Ibid). A common means of measuring intrinsic motivation has been the use of self-reports of interest and enjoyment (Deci & Ryan 2000:57). There has been a call for the study of domain-specific motivation, for example motivation for reading or for school in general.

Extrinsic motivation, however, pertains to being externally propelled into action and involves, for example, the desire to complete a task and outperform others (Deci & Ryan 2000:55). It is perceived to be associated with the use of surface strategies for reading, which are temporary (Guthrie & Wigfield 2000:407). However, extrinsic motivation can produce high achievement and can develop into intrinsic motivation for long-lasting and deep conceptual learning. (Deci & Ryan 2000:63; Dörnyei 2001b:47). For example, the use of external rewards, such as the allocation of stars to learners at primary level, has proven to be a great motivational tool for learning and achievement. Dörnyei (1994:276) argues that although intrinsic and extrinsic motivation were previously seen as opposing types of motivation, with extrinsic motivation as detrimental, recent research has shown that extrinsic motivation can be combined with or lead to intrinsic motivation. Deci &

Ryan (2000) also explain that extrinsic and intrinsic motivations comprise a continuum instead of a dichotomy, and that certain external motivators are mainly instrumental while others can foster internalisation and integration based on the level of autonomy. Internalisation is the process of taking in a value and integration is the process by which individuals more fully transform the regulation into their own so that it forms part of their sense of self (Deci and Ryan 2000:60). A more detailed explanation of their views on intrinsic and extrinsic motivation is given when discussing Self-determination Theory (cf. § 3.4.1)

In relation to reading, a number of studies have shown a relationship between positive emotional experiences and reading achievement. Quirk, Schwanenflugel and Webb's (2009) short-term longitudinal study of the relationship between motivation to read and reading fluency showed that students' reading self-concept was significantly related to reading fluency at each time point in the one-year study. Privé (2004), using the Florida Comprehensive Assessment Test (FCAT) and Motivation to Read Profile for 585 mixed population of elementary, middle and high school students, found that motivation to read was a significant positive predictor of FCAT reading achievement. Molnár and Székely (2010:121) using different components of motivation (self-concept and attitude) to analyse the relationship between motivation and reading competency of Hungarian-speaking children in relation to the 2001 and 2006 PIRLS (Progress in International Reading Literacy Study) results, conclude that reading-related self-concept was more closely associated with reading achievement than attitude, and that students' perceptions of their own reading competence is a more reliable predictor of students reading achievement than is liking or not liking reading.

Motivation has also consistently been said to relate to students' use of strategies. Highly motivated readers are said to be strategic and employ deep conceptual strategies to comprehend (Wigfield, Guthrie, Perencevich, Taboada, Lutz, McRae & Barbosa 2008:432).

From the positive results of the various research studies on motivation and reading achievement, the issue then is how to motivate L2 students in the area of reading. Dörnyei (1994), in his construct for L2 motivation, presents a framework that consists of three levels: language level, learner level, and learning situation level, which corresponds with

the L2 learning process (the L2, L2 learner and the L2 learning environment). For each of these levels he proposes a number of teaching strategies that could be employed to increase L2 students' motivation (cf. §3.4.4.7)

Deci and Ryan (2000) argue through Self-determination Theory (SDT) that since intrinsic motivation weakens with each advancing grade, it is important for teachers to devise means to assist students to internalise and self-regulate extrinsically motivated activities so that they can be done for the sake of the activities themselves. To this end they propose SDT which is discussed under section 3.4.

3.3.2 Self-efficacy

Guthrie and Wigfield (2000:408) present Bandura's definition of self-efficacy as "people's judgements of their capabilities to organise and execute courses of action required to obtaining designated types of performances". Pajares (2006:341) refers to it as the way students judge their competence. Applied to reading, it implies that readers are seen to believe in their ability to read successfully. Schunk and Rice (1993) found that providing students with clear goals for reading tasks and giving feedback on students' progress in reading increased self-efficacy. Ghonsooly and Elahi (2010) examined the reading self-efficacy of Japanese EFL university students and found a positive relationship between the participants' self-efficacy in reading and their reading achievement. They also found that "high self-efficacious learners performed better than low self-efficacious learners in reading achievement" (Ghonsooly & Elahi 2010:58). This led them to conclude that self-efficacy is an "important factor in the achievement of higher scores in English language skills such as […] reading comprehension" (Ibid). They attributed this conclusion to low anxiety and frequent strategy use among learners with high self-efficacy. However, it is not the mere use of strategies but the appropriate use of reading strategies for comprehension that distinguishes good readers from poor readers. Consequently, strategy instruction has been proposed as a means of increasing self-efficacy (Dörnyei 1994:282).

Also, the degree of a student's metacognition (e.g. monitoring of comprehension) has been shown to influence his/her self-efficacy. Van Kraayenoord and Schneider (1999) studied the reading achievement, metacognition, self-efficacy (which they refer to as self-concept) and interest among German primary school students and found that higher reading achievement corresponded with higher metacognition and self-efficacy. Their findings

show that metacognition directly influences reading achievement, whereas motivation (operationalised as self-concept and interest) influences reading achievement indirectly via decoding and metacognition. They also found that metacognition and motivation had reciprocal effects on each other. Research showed that students with high self-efficacy perceive difficult reading tasks as challenging and work diligently to overcome them, using cognitive strategies productively (Guthrie & Wigfield 2000:408; van Kraayenoord and Schneider 1999:319). However, studies using self-reports could experience a [4]Dunning-Kruger effect that may not show a relationship between self-efficacy and achievement. Students may report favourably on their competencies and capabilities, yet display low levels of reading achievement scores. Pretorius (2000) found such an effect with the poor readers in her study. The Dunning-Kruger effect is said to be more predominant among low achievers. Despite this effect various studies have shown a consistent relationship between students' self-efficacy and their reading achievement scores (Ghonsooly & Elahi 2010; Pajares 2006; Schneider & Pressley 1997; van Kraayenoord and Schneider 1999).

3.3.3 Interest

Interest is closely related to motivation in that interest will invariably lead to intrinsic motivation. Van Kraayenoord and Schneider (1999) discuss interest and self-concept as motivational variables. However, other researchers have discussed interest as an individual concept and have differentiated between situational and personal interest (Hidi & Anderson 1992; Renninger, Hidi & Krapp 1992; Schiefele 1992). Personal interest in reading, like intrinsic motivation, is internal, and is the enduring attraction to a topic even before a particular text is read (Hidi & Anderson 1992:216; Schiefele 1992:152). Situational interest, on the other hand, is external, triggered by environmental factors, and is defined by Hidi and Anderson (1992:216) as a "short-lived emotional state educed within a particular context". Although personal interest and situational interest combined increase reading comprehension, research has shown a positive relationship between personal interest in particular, and reading comprehension (Hidi & Baird 1988; Schiefele 1992:152). It follows then that in as much as both forms of interest are necessary, reading classrooms should vigorously pursue students' personal interest in reading due to its

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[4] Dunning-Kruger effect refers to a cognitive bias in which unskilled individuals overrate their ability and performance in social and cognitive domains. Kruger and Dunning (1999:1121) attribute this bias to low or lack of competence and metacognitive skills, which lead to the inability of the unskilled to recognise their lack of competence.

singular positive effect. As this is not an easy feat, Hidi and Anderson (1992:218) have suggested the promotion of situational interest through text-based interest. Text-based interest is the interest in reading texts, and is elicited by creating reading materials, through the selection of ideas, topics, and themes. They state that interest that is created in this way is a particular form of situational interest. Like certain types of situational interest, this type of situational interest could later become long lasting and transfer into personal or individual interest (Hidi & Anderson 1992:229; Schiefele 1992:159).

3.3.4 Attitude

Guthrie refers to attitude as the "liking for a task" (Guthrie & Knowles 2001:161; Guthrie & Wigfield 2000:405). A reading-specific definition is provided as "a system of feelings related to reading, which causes the learner to approach or avoid a reading situation" (Guthrie & Knowles 2001:161; McKenna 2001:136).

Guthrie and Knowles (2001:161) add that reading attitudes are "affective responses that accompany behaviour of reading initiated by a motivational state". It is sometimes subsumed under motivations, yet other researchers see it as a distinct form of the affect (Guthrie & Knowles 2001; Mathewson 2004:1431; McKenna 2001:149). Most reading researchers believe that a positive attitude is vital in fostering engaged readers (Guthrie & Wigfield 2000; McKenna 2001:135).

McKenna's (2001:140) model on attitude extends a previous distinction of the two principal beliefs that affect attitude: the object itself (e.g. reading) and a normative nature (e.g. how one's friends view reading). Mckenna's (2001:140) model extends this distinction to include three principal factors in the acquisition of attitudes towards reading: the direct impact of episodes of reading; beliefs about the outcomes of reading; and beliefs about cultural norms concerning reading (conditioned by one's desire to conform to those norms). The model predicts that attitudes are shaped over an extended period through the influence of these three factors. He argues that if one were to succeed in changing students' negative attitudes towards reading, then one should target the factors that affect those attitudes (McKenna 2001:139). The direct impact of reading refers to the effect that any reading episode or encounter has on attitude. Beliefs about the outcome of reading refer to the reader's expectations of reading - be it of success or failure, pleasure or boredom. Beliefs about cultural norms include how an individual views or reflects the

values that significant others (family members, peers, community members, and teachers) attach to reading. He argues that where reading is negatively valued by people from whom a student seeks approval, the student is unlikely to develop positive reading attitudes. McKenna's model calls for a consideration of the cultural and social aspects in relation to students' reading attitudes. This view is also shared by Matthewson (2004:1436), with his later inclusion of external motivators that takes into account mediating social influences on reading behaviour.

Mckenna (2001:145), citing studies by Swanson (1982), Wallberg and Tsai (1985), and Richards and Bear (1986), argues that there is an impressive body of research that relates reading attitude to reading ability. He states that the older the students are, the wider the difference in reading attitudes between good and poor readers. He identifies effective instructional intervention as a way of bridging this gap. Kirmizi (2011) using the Reading Attitude Scale, found that attitude is a significant predictor of the level of reading comprehension strategies used by students. Interestingly, Lukhele (2010) did not find a relationship between reading attitudes and reading levels nor in reading activity among students in Swaziland. Many of her students expressed positive attitudes to reading but in fact performed very poorly on reading tests. It seems that McKenna's model may relate to the product of reading and not necessarily the process. In other words, the relationship between students' reading proficiency and their attitude could be informed by the model but not by the relationship between their attitude and reading behaviour or activity.

In justifying why reading attitude may not always relate to reading behaviour or predict reading behaviour, Matthewson (1994; 2004) provides a tricomponent view of attitude. He argues that certain variables affect the attitude and reading behaviour relationship, and proposes intention to read as the central component mediating the attitude-reading relationship (Matthewson 2004:1433). His tricomponent view presents attitude as consisting of evaluation (i.e. cognitive), feeling (i.e. affective) and action (i.e. conative). He argues for this all-inclusive view of attitude to be used in reading research. As his model deals with three components, it can be seen to tap into various aspects of attitude and may represent a more comprehensive view of attitude. Yamashita (2004) separated the different components and found no relationship between the evaluation component and students' reading. He concludes that "merely thinking that reading is good for oneself does not constitute a sufficiently strong motivation" to read (Yamashita 2004:13). He, however,

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found a positive relationship between the affective component and students' reading amount and reading behaviour. The seemingly inconsistent results of attitude research could emanate from the fact that attitude, specifically reading attitude, is a complex theoretical construct (Matthewson 1994; 2004; Yamashita 2004).

In relation to his model, McKenna (2001) provides guidelines for improving students' attitude towards reading, which includes: creating an environment that promotes reading while ensuring success and striving to show students the relevance of reading, providing positive adult models and recommending books on the basis of student opinion, using materials that students find relevant and enjoyable. Mathewson (1994, 2004) presents similar guidelines as instructional implications. He includes the fostering of cornerstone guidelines (i.e. values, goals, self-concept) underlying attitude towards reading; persuading students that various genres are worth reading; establishing classroom settings and norms that support favourable reading intentions and values; encouraging students to read large amounts of texts that stimulate satisfying feelings and ideas, and teaching students abilities that underlie successful reading.

In relation to actual classroom techniques, incentive programmes, among others, have been suggested (Mathewson1994; 2004; McKenna 2001) though caution is given on the number of incentives. McKenna (2001) and Mathewson (1994; 2004) both argue that incentives increase the amount of reading if they are minimal, and according to McKenna these (2001:150) consist of books at an acceptable level of comprehension. Besides incentive programmes, McKenna suggests peer interactions as a means to develop positive attitudes. Research has shown that peer interaction in the form of discussion groups involving risk-free interchanges about mutually read books can lead to improved attitudes towards reading. Discussion among readers is a desirable activity, first because it leads to literate activities; second, because it broadens students' critical perspectives on what reading is; third, in relation to attitude theory, it challenges the beliefs of some students that reading comprehension is a unitary end based on a single text meaning; and fourth, it exposes students to their peers' positive attitudes which may affect the perception of negative social norms (McKenna 2001:151). McKenna's proposal and underlying assumptions are echoed by Guthrie and Wigfield (2000) in their argument for the necessity of creating a community of readers as one of the components for cultivating engaged readers and improving students' reading abilities. Mathewson (2004:1437) concurs with this view as

he states that "attitude is viewed as affecting reading only if readers believe that their social and physical surroundings are compatible with reading activity".

The affective variables discussed separately above are often discussed under the overarching concept of motivation. For example, Lau's (2009) study on grade differences in reading motivation operationalises motivation as self-efficacy, intrinsic motivation, extrinsic motivation and social motivation; Monár and Székely (2010) in using the 2001 and 2006 PIRLS data to analyse the relationship between motivational components and reading competency of Hungarian-speaking children in three countries, subsume attitude and self-concept under motivation; Mori (2002) operationalises motivation as: intrinsic value of reading in English, value of reading in English, extrinsic utility of reading in English, and expectancy for success in reading in English (the latter two referring essentially to attitude and self-efficacy, respectively). Likewise, van Kraayenoord and Schneider (1999) use interest and attitude interchangeably together with self-concept, which is frequently referred to as motivation. Self-efficacy is usually perceived as an aspect of motivation, and so is interest. Besides, personal and individual interest is usually used synonymously with intrinsic motivation (positive feeling, enjoyment and involvement), but situational interest is more aligned to attitude (liking). Guthrie and Knowles (2001:161) acknowledge that if attitude is translated into behaviour, it leads to motivation.

Although these affective factors invariably lead to motivation, they may individually influence reading ability in different ways. Singling them out, as some researchers (Guthrie and Wigfield 2000; Hidi 1992; Mathewson 1994, 2004; McKenna 2001) have done, as the present study does, allows for clarity and enables us to see the individual effect they have on reading ability.

Although studies on socio-affective factors, though scanty, are beginning to surface as exemplified above (cf. § 3.4), most of these studies are based at primary and secondary levels of education and research at tertiary level is seriously lacking – even more so in the South African context, where the current study was conducted.

3.3.5 Social and cultural factors

As discussed earlier (cf. §3.2), not only are affective factors influential in reading comprehension but so are social and cultural factors. Social factors, such as home environment, socio-economic status (SES), interaction with people who read, school environment, literacy practices in school, and cultural influences on reading are discussed (cf. §1.2.1). Whereas the negative influence of social factors cannot be undone, appropriate classroom practices (techniques, tasks and approaches) could be used to counteract these negative influences. For impeding cultural practices, awareness and instruction may be possible antidotes for changing beliefs and values, as proposed in language learning research by Boakye (2007), Horwitz (1987) and Lepota and Weideman (2002). These three studies used the Beliefs About Language Learning Instrument (BALLI), first developed by Horwitz and modified in later studies, and found that some aspects of students' beliefs about language learning may contradict the teachers' beliefs, and consequently may impede language learning. In relation to the studies the authors suggest changing students' erroneous beliefs, which are often based on social and cultural factors, through instruction and by making them aware of these mismatches.

The social factors that will be discussed are home environment, SES, school environment and cultural influences. These social factors are selected as they are frequently discussed in reading literature and are known to have extensive influence on students' reading ability (Alderson 2000; Bus 2001; Elley 1996; Grabe & Stoller 2002; Greaney 1996; Taylor & Yu 2009).

3.3.5.1 Home environment

The reading behaviour of parents, siblings, friends; the reading materials in the home; and the emphasis/importance given to reading in the home are factors considered in this section. Research has shown that the home environment is an important contributor to students' reading abilities (Adams 1990; Currin & Pretorius 2010; Greaney 1996; O'Carroll 2011; Pretorius and Lephalala 2011; Taylor & Yu 2009). In as much as the home environment contributes to vocabulary development, it also fosters positive reading habits and attitudes. Greaney (1996:13) cites a number of studies to conclude that the development of early reading habits depends, to a large extent, on home attitudes and circumstances. According to Greaney (1996:13) the IEA study which investigated reading achievement with other variables, identified home environment as 'the single most critical

factor in the development of literacy'. He reports that Elley, in the same study, found that the amount of voluntary reading and the amount of reading materials in the home were positively correlated with reading achievement. Analysing Indonesian data of the same study, Greaney (1996:13) showed that characteristics of students' homes proved to be important predictors of reading behaviour and achievement at both primary and secondary levels. Home factors that have been identified to militate against the development of literacy, especially in developing countries, include: illiterate parents and adults in the home, reticence about encouraging reading in the home, lack of appropriate reading materials, and the inability of parents to purchase any form of reading material (Currin & Pretorius 2010:25; Greaney 1996:13). These home factors also relate to the SES of students' parents and family, which is identified as an important influence on reading ability. Students from low SES background are usually poor readers, due to the adverse home environment and poor education (Currin & Pretorius 2010; Pretorius 2008; Taylor & Yu 2009).

3.3.5.2 School environment

A number of students, especially those from low SES families, rely on the school environment and have to depend on teachers for basic reading instruction, as they do not have home literacy support. When the school environment does not promote students' reading development, and teachers do not handle reading classes appropriately, these students are greatly disadvantaged (Taylor & Yu 2009). The 2006 PIRLS report showed South African children's poor performance. Of the 40 participating countries, South Africa had the lowest scores. The National Systemic Evaluations also revealed dysfunction within the South African education system. Only 36% of Grade 6 learners passed the literacy test in the language of learning and teaching (LoLT), and overall, 63% were in the 'Not Achieved' band, with only 28% functioning at or above grade level (Department of Education 2005). School conditions have been cited as a contributing factor in these poor results. Currin and Pretorius (2010) cite under-resourced schools and few qualified teachers as contributing factors to students' low literacy levels. Van Staden and Howie (2010), in discussing South African teacher profiles in relation to the 2006 PILRS results, identify teacher characteristics, use of resources and instructional practices as contributing factors to students' poor performance. They explain that there are fewer qualified teachers in the schools. The teachers themselves have had limited exposure to texts and rely heavily on textbooks, which are usually outdated. Moreover, reading strategies are poorly taught

and independent silent reading is minimal or rare; very little time is spent on reading instruction and the large class sizes in many South African schools compound the problems (Van Staden & Howie 2010). As Greaney (1996:21) explains:

> Teaching in many impoverished countries [and low income communities] tends to be of the 'chalk and talk' variety with a high priority being placed on the acquisition of basic skills. Much use is made of the chalkboard […] Discussions with the teacher, interactions among small groups of students, encouragement of risk-taking, and questioning of the material being presented – important factors in the development of language and reading skills – tend not to be encouraged .

In effect, teachers in low income communities use ineffective traditional modes of teaching instead of current approaches, which are believed to be more beneficial in achieving results and cultivating critical thinkers. As a result, students do not achieve the necessary reading skills from school. Greaney (1996) compares such students to those from high socio-economic status families, mostly in developed countries, but also in developing countries. He explains that children in developed countries acquire essential pre-reading skills, and in some instances basic reading skills, by being read to and through interactions in the home, even before they start to attend school. These students, who come to the school environment with some reading skills due to the supportive home environment, are also the ones who usually end up in schools with good reading support (Pretorius 2007:111). The two groups of learners (i.e. from high and low SES backgrounds) will therefore exhibit varying levels of reading abilities and academic performance (Pretorius 2007:116,117). When these two groups of students finally end up at tertiary institutions and attend the same classes, it is obvious that there will be great disparity in the reading abilities, and consequently academic performances of these students.

3.3.5.3 Cultural influence

Cultural influences sometimes have adverse effects on students' reading abilities. Some cultures (e.g. traditional African cultures) perceive the written word as authority not to be disputed, depriving students of the ability to be critical, evaluative readers. Others may view reading in terms of functional or utilitarian purposes (Alderson 2000:25; Carstens 2004:19; Grabe & Stoller 2002:59; Greany 1996:22). This view may have been influenced by community attitudes towards reading or, as Greaney (1996:22) points out, emanated from teachers' emphasis on skills as opposed to reading for pleasure. Many teachers in

developing countries emphasise reading skills, with little emphasis on reading for pleasure (Elley 1996:50). Yet reading for pleasure is a consistent positive predictor of reading achievement (Beglar, Hunt & Kite 2011; Day 2010; Greaney 1996:22; Macalister 2008).

3.3.6 Engaged reading

Positive levels of the affective culminate in reading engagement. *Engagement* is defined by Guthrie & Wigfield (2000:404) as "the motivated use of strategies to gain conceptual knowledge during reading", consciously or unconsciously. The reader achieves this through a state of total absorption (Csikszentmihalyi 1991). Guthrie and Wigfield (2000:404) argue that engagement leads to improved reading comprehension ability, which can compensate for several years of education and inadequacies in reading abilities due to poor socio-economic background.

These social factors have been known to influence reading positively or negatively (Alderson 2000:25; 26; Bus 1996:51; Grabe & Stoller 2002:59; Greany 1996:5; 13; Guthrie & Wigfield 2000:404; Neeta 2005:3; 5; 10). However, the negative influence can be overcome through engaged reading (Guthrie & Wigfield 2000: 404; 417). Guthrie (2008:3) reports that reading engagement is more important than students' family background consisting of parents' education and income, and is connected to achievement more strongly than home environment. In effect, Guthrie, Schafer and Huang (2001:145) in their study found that "reading engagement trumped socio-economic status as a correlate of reading achievement".

The relationship between students' level of engagement in reading and their reading proficiency has been well established. Guthrie (2008:3) notes that in the Programme for International Student Assessment (PISA) comparison, students' reading engagement predicted achievement on a test of reading comprehension in every nation tested.

Engaged readers deeply engage with texts, and exchange ideas and interpretation of texts with peers. Their devotion to reading spans across time, transfers to a variety of genres, and culminates in valued learning outcomes. Disengaged readers, on the other hand, tend to avoid reading, and minimise the effort to read, rarely enjoy reading during free time and hardly become absorbed in literature (Guthrie & Wigfield 2000:403). Many of Guthrie's studies and intervention programmes undertaken with his colleagues, focus on motivation

and engagement. These scholars contend that integrated instruction leads to high motivation and motivation leads to engagement, which in turn leads to achievement in reading and success in academic activities. This chain of events is encapsulated in Figure 3.1 below.
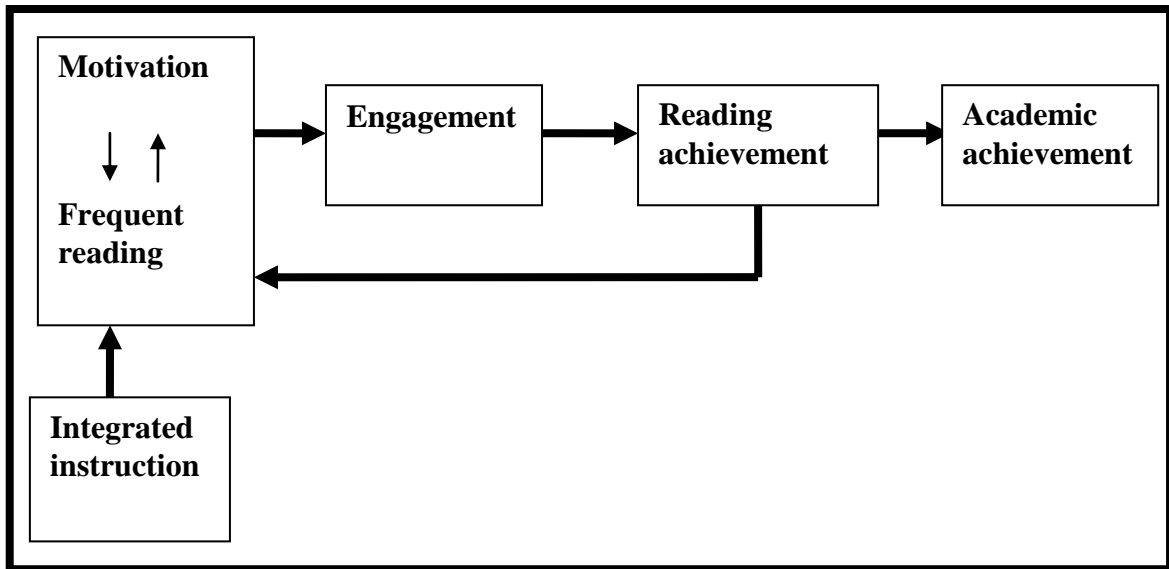
Figure 3.1: Relationship between motivation, engagement and achievement

The above figure thus introduces an important element of causal chains. Engaged reading will ensure successful reading which will, in turn, reflect in students' academic performance. This chain of events is bidirectional since reading achievement also leads to higher levels of motivation. The current study focuses on developing engaged readers by improving their affective levels.

3.3.7 A synopsis

The review undertaken so far on socio-affective factors and reading comprehension indicates that a number of variables tend to influence reading comprehension abilities. A relational model could therefore be used to provide appropriate insight into the understanding of socio-cultural and affective factors relating to students' reading abilities. This is in line with the ideas expressed by social theorists such as Giddens (2001) and Neuman and Krueger (2003), that social processes by nature tend to exhibit large amounts of feedback loop relations to the extent that at times it becomes difficult to separate causes from effects. It will therefore be interesting to consider whether in this study some causal

and feedback links exist between the social factors on one hand, and the affective factors on the other.

A snapshot model that could be used to illustrate the causal links between the determinants of reading abilities is illustrated in Figure 3.2 below.
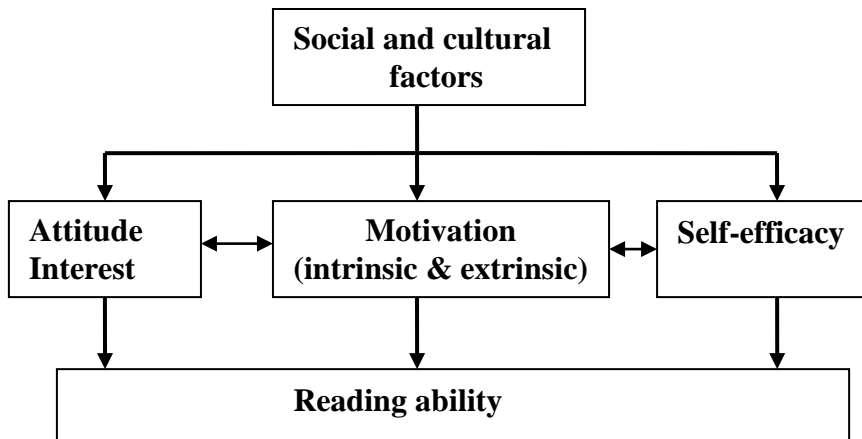
Fig 3.2: A model showing the influence of social and cultural factors on affective factors or levels, and their influence on reading ability

3.4 Engagement framework for reading instruction

The next section discusses Self-determination Theory, on which Guthrie and Wigfield's (2000) Engagement Model is based. Thereafter the framework for engaged reading is discussed, and the adapted model presented.

3.4.1. Self-determination Theory

This theory is based on motivational theory, and explains how people can be motivated to perform an action for its own sake. Deci and Ryan (2000) distinguish between intrinsic and extrinsic motivation and present four types of extrinsic motivation (external, introjected, identified and integrated) on a continuum, depending on the degree of external control or autonomy. External regulation is entirely manipulated from external sources such as praise and rewards; introjected regulation involves externally imposed rules such as studying for a test; identified regulation involves engagement in an activity because a person highly values the activity, sees its usefulness and identifies with the behaviour; integrated motivation, involves choiceful behaviour that is fully assimilated with the individual's other values, needs and identity. The most autonomous or fully internalised form of

extrinsic motivation is integrated motivation where the external motivator has been internalised and assimilated into the self to become self-determined, similar to intrinsic motivation. With internalised extrinsic motivation, the enjoyment of the activity is within the self but differs from intrinsic motivation in the sense that it is propelled by instrumental values or external influences. An entirely external form of motivation, for example external regulation through rewards and praise, could become internalised and develop into an integrated regulation allowing the individual to experience the activity's interesting properties (Deci & Ryan 2000).

The well-known Self-determination Theory (SDT), when applied in education, specifically the classroom, may lead to intrinsic motivation, internalisation of values and regulatory processes, which result in high quality learning and conceptual understanding. Deci and Ryan (2000) identify three key aspects of intrinsic motivation as competence, relatedness and autonomy. Competence increases autonomy by equipping students to take responsibility for learning, and also speeds up the internalisation of external motivators. Highly autonomous extrinsic motivation is associated with greater engagement, better performance, less dropping out and higher quality learning, than less autonomous extrinsic motivation. Deci and Ryan (2000:65) rightly assert that self-determination can be evoked in students by creating the right social conditions or contexts through autonomy support, competence support and involvement or relatedness support. When learners are instructed to gain knowledge (competence/cognitive) and perceive a sense of involvement with significant adults, as well as collaboration with peers (relatedness/social) and are allowed to make choices and to take personal responsibility (autonomy/affective), there will be an increase in intrinsic motivation and autonomous internalisation of extrinsic motivation (Deci & Ryan 2000). Deci, Vellerand, Pelletier and Ryan (1991:342) emphasise their point by stating that they believe that

> [P]romoting self-determined motivation in students should be given high priority in educational endeavours […] When significant adults – most notably, teachers and parents – are involved with students in an autonomy supportive way, the students will be more likely to retain their natural curiosity (their intrinsic motivation for learning) and to develop autonomous forms of self-regulation through the process of internalisation and integration.

Whereas the idea of autonomy is not new to many educators, and its application may be widespread in many classrooms, the issue of support may be considerably absent in many

teaching endeavours. Although, as the authors admit, the understanding of the two seemingly opposing concepts of interaction (relatedness) and independence (autonomy) still need empirical work, one without the other will not promote the self-determination components needed for optimal conceptual learning (Deci & Ryan 2000; Deci et al. 1991:340). Bernhardt (1991a:187) and Guthrie and Knowles (2001:173) present a similar argument. Although it may seem contradictory, they argue that the teacher's involvement and support should be given in combination with students' autonomy and choice. One without the other will not produce optimum benefits.

Given that SDT refers to social and environmental factors that facilitate or undermine motivation, Deci and Ryan provide a number of ways to develop self-determination among students. They point out that there should be an experience of both competence and autonomy support. Although positive performance feedback enhances intrinsic motivation (Dörnyei & Ushioda 2011:115), it has been shown that self-efficacy mediates the effect of positive performance feedback on intrinsic motivation. Consequently, Deci and Ryan suggest that increase in self-efficacy should be undertaken with autonomy support in order to increase intrinsic motivation. Whereas autonomy supportive teachers develop greater intrinsic motivation, creativity and desire for challenge in their students, teachers who are overly controlling cause their students to lose initiative and learn less well. Specific support for promoting self-determination in students includes offering choice, minimising controls, acknowledging feelings, and making available information that is needed for decision making and for performing the target task (Deci & Ryan 2000; Deci et al. 1991:342).

As not all classrooms and learning activities may be intrinsically motivating, and intrinsic motivation weakens with the advancement of each grade, Deci and Ryan (2000) further suggest ways of assisting and enabling learners to internalise extrinsic motivating activities through relatedness, competence and autonomy support. First, they contend that people will be prepared to undertake activities if those activities are valued by significant others, and should therefore be provided with a sense of belonging and connectedness to peer group, family, or society. For instance, teachers' care for students is important for their willingness to accept classroom values. Second, they argue that perceived competence (self-efficacy) can be used as a means of increasing autonomy, and the other way round. Deci and Ryan (2000:64) state that "[a]dopting as one's own an extrinsic goal requires that

one feels efficacious with respect to it." In this regard, effective relevant feedback can be used to promote competence and facilitate internalisation. Third, they believe that autonomy support should be given to students. They claim that support for competence and relatedness may yield regulation, but only autonomy supportive contexts will yield integrated self-regulation. In sum, extrinsic motivation becomes internalised and integrated in environments that support needs for competence, relatedness and autonomy. Moreover, studies showed that providing meaningful rationale for activities, (i.e. promoting learning goal, cf. §3.4.2.1) along with support for autonomy and relatedness, promoted internalisation and integration.

In so far as Deci and his colleagues' SDT may be applied to all aspects of learning, its application to reading development is particularly crucial. This is because successful reading is based first and foremost on exposure. In other words, proficient reading is achieved through frequent reading (Elley1996: 52; Grabe & Stoller 2002; Verhoeven & Snow 2001:3). Although it is necessary to make students aware of strategy use, the goal is to get them to read independently. To get students to read, they have to be motivated and self-determined. To motivate them to read, activities that increase competence, relatedness and autonomy are vital to achieve success. Besides, strategy instruction is more successful if students are motivated. Instructional means that could enable students to internalise reading as part of the self is crucial. As students become more self-determined and motivated, their interests increase, attitudes become positive, self-efficacy and self-esteem are likely to be raised and desired outcomes achievable. These results can also in turn influence motivation. In other words these affective gains have a bidirectional effect on each other to produce achievement.

As already indicated, the importance of the affect, as well as the social context in reading improvement, has been argued for by many researchers. The individual's affect (e.g. motivation, attitude, interest, self efficacy, etc.) and social background (e.g. home environment, socio-economic status and school and classroom environment) play a vital role in his/her reading development (Greaney 1996:2; Guthrie et al. 1999; 2000; 2004; Schiefele 1992:159; 160; Verhoeven & Snow 2001). Hence socio-affective factors have been said to be a strong driving force in students' success in reading and academic achievement (Anderson 1996; Bus 2001; Stanovich & Cunningham 1993; Elley 1996; Greany 1996; Guthrie & Wigfield 2000; Verhoeven & Snow 2001). Based on the

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importance of motivation and other affective factors in learning and, specifically, in reading, Guthrie and Wigfield (2000) devised a framework for reading development. The next section discusses Guthrie and Wigfield's (2000) Engagement Model of reading development, which is grounded in Deci and Ryan's (1985; 2000) SDT.

3.4.2 Guthrie and Wigfield's (2000) framework

Guthrie and Wigfield's (2000) Engagement Model of reading development seems to be the only model to date that fully incorporates affective issues into reading instruction and has numerous intervention reports to support its effectiveness (Guthrie, McRae & Klauda 2007; Guthrie, Wigfield, Barbosa et al. 2004; Guthrie, Wigfield, Metsala & Cox 1999; Guthrie, Wigfield & Von Secker 2000; Wigfield, Guthrie, Perencevich et al. 2008). The integrative and affective focus of the model in developing reading abilities is highlighted, and the practical instruction in the form of Concept-Oriented Reading Instruction (CORI) is briefly discussed. Thereafter, the model is adapted to the multilingual or multicultural tertiary context at the University of Pretoria, taking into consideration L2 factors as well as the tertiary academic context. The proposed adapted framework bears the features of Guthrie and Wigfield's framework in that it is integrative and focuses on cognitive and affective support to derive engaged reading. However, it builds on this framework to include issues specific to tertiary level and L2 reading in the specific South African context.

The framework is foregrounded in the reading processes discussed in Chapter 2, and aligns with the social constructivist view in its development of students' reading. The theoretical rationale is based on Deci and Ryan's (1985; 2000) SDT, which refers to interest and intrinsic motivation as major determinants of self-determination (cf. §2.5.1).

Based on SDT, an environment that is autonomy supportive is therefore required for promoting intrinsic motivation and consequently self-determination in students. In relation to this, Guthrie and Wigfield (2000) identify nine classroom principles to be applied in creating the appropriate environment for fostering motivation and creating engaged readers:

- Learning and Knowledge goals
- Real world involvement
- Autonomy support
- Interesting texts
- Strategy instruction
- Collaboration
- Rewards and Praise
- Teacher involvement
- Evaluation

These classroom principles or strategies for motivating students are based on the Self-Determination Theory of Motivational Development (Deci & Ryan 1985; 2000; Deci et al. 1991), which is a sub-theory of SDT. This theory describes the development of intrinsic motivation in terms of support for the individual's need for autonomy (making own choices), relatedness (collaborating with others), and competence (understanding of the attainment of outcomes). Autonomy is provided through self-directed learning, relatedness is addressed in collaborative classroom activities, such as group discussions and projects, and competence is achieved through instruction, frequent and positive feedback, as well as rewards that acknowledge efforts put into learning. When students' needs for autonomy, relatedness and self-perceived competence are met intrinsic motivation is created, which leads to gains in cognitive achievement in reading, deep conceptual thinking and appropriate use of strategies. Consistent with this framework, the teacher provides choices for autonomy support, creates opportunities for social interaction to cater for relatedness support, and strategy instruction is provided for competence support, in order to develop motivation (Guthrie & Wigfield 2000:416, 417). The classroom characteristics are discussed empirically and theoretically, with a strong reliance on Guthrie and Wigfield (2000).

3.4.2.1 Learning and knowledge goals

This instructional technique refers to the purpose for learning and is linked to performance and learning goal theory. Whereas performance goals are based on outperforming others, learning goals are based on dedication to understanding and learning. Focus on learning goals produces long-term engagement and learning (Linnenbrink 2005; Pintrich 2000). Research showed that teachers who emphasised learning goals instead of performance goals contributed to students' self-efficacy (Guthrie & Wigfield 2000:409). The

assumption is that students put in more effort and apply strategies more effectively when they are made to believe that understanding the work is more important than getting right answers (Guthrie & Wigfield 2000:410). However, as Douglass and Guthrie (2008:24) put it, grades are here to stay, and students who combined both performance and learning goals achieve the greatest success. A sole emphasis on performance goals, however, is detrimental.

3.4.2.2 Real-world interactions

These can be referred to as authentic interactions. They refer to connections between academic curriculum and the personal experiences of students. Reading instruction embedded within intrinsically motivating activities that relate to students' personal experiences, such as collecting information, observing and reporting, led to increase in reading motivation and strategy use (Anderson 1999; Brophy 2004; Csikszentmihalyi 1991; Guthrie, Anderson, Alao, & Rinehart 1999; Guthrie, van Meter et al. 1998; 2000). Guthrie, Wigfield, Humenick, Perencevich, Taboada and Barbosa (2006) found that reading comprehension improved when students could practically connect with the text through real-world activities and experiences. Gibb and Guthrie (2008:88) note that an hour of real-world interaction can sustain many hours of engaged reading.

3.4.2.3 Autonomy support

Students' independence and responsibility is the focus of this technique. Though a popular and general teaching technique, its application to reading involves teachers' guidance in leading students to make responsible choices in reading. Based on the convention that choice is motivating, the technique develops independence and affords students scaffolded control over topics, themes and reading materials, with teacher support. Guthrie and Wigfield (2000:411) assert that individuals (e.g. students) prefer to be in command of their environment rather than to be manipulated by powerful individuals (e.g. teachers). A number of researchers have reiterated and shown the benefits of autonomy support on intrinsic motivation and reading comprehension (Deci & Ryan 2000; Lepola 2004; Reeve & Jang 2006; Reeve, Jang, Carrell, Jeon & Barch 2004). Autonomy support is linked to strategy instruction. In order for students to be autonomous they need to be competent.

3.4.2.4 Interesting texts

The use of interesting texts (texts that are significant and readily understandable) is based on the assumption that texts that are personally significant and that meet cognitive competence of students would be motivating, and consequently develop comprehension abilities. Grabe and Stoller (2002:30) argue that difficult texts that are beyond students' level of comprehension cause them to adopt coping strategies, which eventually lower their motivation for reading. Guthrie (2008:5) adds that difficult texts lower students' self-efficacy, and that texts should be at their level, as well as adequately challenging to raise their interest. Scaffolding, using different levels of texts, would enable students to approach challenging texts gradually without losing motivation. In addition, interesting texts assist in focussing reading instruction on word recognition and word fluency development (Stanovich & Cunningham 1993). Assor, Kaplan and Roth (2002) as well as Assor, Kaplan and Kanat-Maymon (2005) found that relevant texts generated students' engagement in the classroom activities. Relevant texts connect to a person's sense of self and therefore relevance is enabling (Gibb & Guthrie 2008:95).

3.4.2.5 Strategy Instruction (competence support)

This technique involves direct instruction of reading and comprehension strategies, such as summarizing, paraphrasing and synthesizing, and provides support for reading competence. A number of investigations have shown that strategy instruction promotes appropriate strategy use, increases intrinsic motivation and self-efficacy (Anderson 1991; Dreyer & Nel 2003; Guthrie, Van Meter et al. 1998; Guthrie, Wigfield & VonSecker 2000; Worden 2003). Strategy instruction is necessary for developing autonomous learners. It is only when students are well equipped with the necessary strategies that they can self-direct and self-monitor their own learning (Kumaravedivelu 2003:135).

3.4.2.6 Collaboration (relatedness support)

Social collaboration in the classroom, a type of relatedness support, was found to promote intrinsic motivation for reading and learning, and maintaining active learning over an extended period of time. Guthrie (2008:5) states that restricting reading to a solely individual activity disadvantages many students who are disposed to social interaction and who need discussion to learn. This technique promotes relatedness. When students realise that their ideas are recognised by other students, they feel a high sense of acceptance (Antonio & Guthrie 2008:52; Wentzel 2005). Wilkenson (2006) found that student-led

discussions had higher impact on students' engagement than teacher-led discussions. Collaboration supports autonomy in the sense that student-led discussions afford students a sense of autonomy and increases their understanding of texts. Furrer and Skinner (2003) showed that when students have a high sense of control in class interactions, which occurs in collaborative activities, they are highly engaged. Antonio and Guthrie (2008:55, reporting Furrer and Skinner 2003) state that students who felt related to their teacher and their peers demonstrated better academic performance, including reading grades, than students who felt unrelated. According to Guthrie and Wigfield (2000:408) the argument that engaged readers share ideas and discuss literature with others, is the basis for this teaching technique.

3.4.2.7 Rewards and Praise

At tertiary level praise and rewards could be in the form of grades, encouraging comments, positive feedback, book awards, and as Dörnyei (2001) points out, applause and celebration. Positive feedback that is based on effort encourages learning-goal orientation and promotes continued effort (Douglass & Guthrie 2008:30; Schunk 2003). Although this concept is known to be beneficial (i.e. increasing self-efficacy and motivation) (Brophy 1981; 2004), it could also have detrimental effects. Students can become extrinsically motivated and depend on performance goals, which involve the use of temporal and surface strategies, such as memorization and guessing. Their focus would be shifted to high grades, correct answers and completion of tasks instead of comprehension and enjoyment. For praise and rewards to be beneficial they should be given within Wlodkowski's 3S-3P; that is, "praise should be *sincere*, *specific* and *sufficient* and should be *properly* given for *praiseworthy* success in the manner *preferred* by the learner" (Guthrie & Wigfield 2000:414). Although this principle is included in the instructional framework designed for this study, Guthrie and his colleagues do not seem to focus on it extensively in any of their experimental studies.

3.4.2.8 Teacher involvement

The teacher's knowledge of individual students, care about their progress and pedagogical understanding of how to foster their active participation (Guthrie & Wigfield 2000:416) are important avenues for increasing students' motivation and fostering engagement. It also provides relatedness support. When students feel that significant adults, such as parents and teachers, are involved in their learning, and that they are valued and

acknowledged by these adults, they become motivated (Dörnyei & Ushioda 2010; Wentzel 2009). Dörnyei and Ushioda (2010:109) explain that the teacher significantly affects the motivational quality of the learning process in positive or negative ways, and that the teacher should be empathetic, congruent and caring. Bus (2001) showed that children who interacted positively with their parents and received parental attention had positive attitudes towards learning, and subsequently achieved success in learning. Skinner, Wellborn and Connell (1990) showed through empirical evidence that the teacher's involvement promoted reading engagement, which led to achievement in reading and content subjects. The teacher's involvement is also important for autonomy support.

3.4.2.9 Evaluation

Evaluation in the form of tests, assignments and projects should reflect students' ownership and provide motivation for reading. Evaluations that are purely teacher-centred are controlling, thus have a negative influence on learner autonomy, and may cause anxiety and diminish intrinsic motivation, which may curtail conceptual learning. Personalised evaluations (e.g. projects and portfolios) may be difficult to administer, but contribute to motivations for reading. An integration of standardized and personalized evaluations in order to produce optimal results has been suggested. Evaluating effort and progress (performance feedback) rather than absolute skills encourages success and enjoyment, and increases self- efficacy (Au & Asam 2005; Deci & Ryan 2000; Schunk & Zimmerman1997).

3.4.3 Guthrie and Wigfield's (2000) Engagement Model

In addition to the instructional principles discussed above, Guthrie and Wigfield's (2000) Reading Engagement Model includes constructs such as motivation, conceptual knowledge, strategy use, and social interaction. The instructional techniques discussed in the framework are wrapped around the constructs, as shown in Figure 3.3 below.
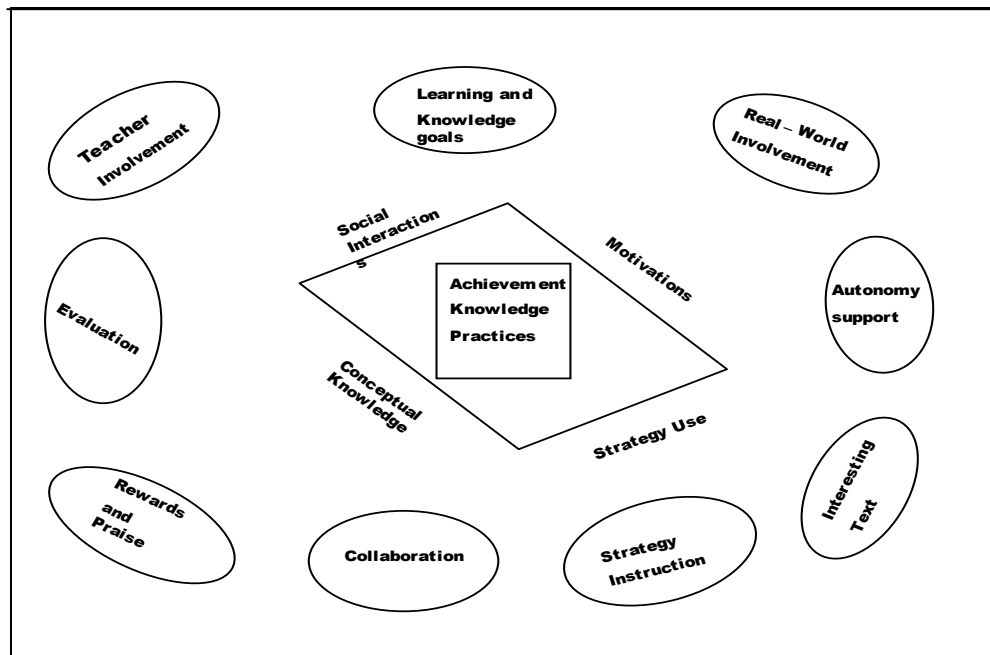
Fig 3.3: Guthrie and Wigfield's (2000) Engagement model for reading development

Underlying all the instructional techniques is motivation, which includes goals, intrinsic and extrinsic motivation, self-efficacy and social motivation. The assumption is that the motivational aspects of the reader propel him/her to choose to read, and to do so, using cognitive strategies to comprehend. The strategy use aspect in the construct refers to the cognitive processes of comprehending, self-monitoring, and constructing understanding. The conceptual knowledge facet refers to reading as knowledge-driven and knowledge-applied (i.e. background knowledge and content knowledge). The social interaction facet of the diamond in the diagram points to reading as a social endeavour that refers to collaborative practices among students, inside and outside the classroom.

Achievement, knowledge, and reading practices are at the centre of the model, to show that the result of instructional practices with social and affective emphasis is achievement. Achievement is in the form of comprehension test results, and other literacy practices; knowledge is shown through standardized evaluations; and reading practices are reflected in the amount and frequency of independent reading. Guthrie and Wigfield believe that if the principles are applied with a goal towards motivation, engaged reading will occur and students will reap the benefits related to engaged reading, such as conceptual use of strategies, and obtain success in reading knowledge and reading practices.

Guthrie and Wigfield's (2000) model, as shown in Figure 3.3 above, is innovative, integrative and outcome-oriented. The model stands in contrast to a number of reading research and intervention programmes that have focused on cognitive processes alone. Such research studies have included intervention programmes that focused on the effects of strategy instruction (Dreyer & Nel 2004; Worden 2005) and vocabulary instruction (Scheepers 2008) on students' reading comprehension. However, given the recent emphasis on the immense role of the affective in reading development, and the fact that many students have impoverished reading backgrounds and little or no love for reading, recent research (predominantly by Guthrie and his co-researchers) have focused on the affective in experiments and intervention programmes. Guthrie and his colleagues have reported great gains in intervention programmes on reading development based on their instructional framework of classroom principles (Guthrie & Wigfield 2000), and its practical application in Concept-Oriented Reading Instruction.

Concept-Oriented Reading Instruction (CORI) combines motivation support and strategy instruction. It is used to develop elementary and middle school children's reading comprehension, motivation, and engagement in reading. CORI is a reading comprehension instructional programme that integrates science (or social science) and reading through activities and the use of science books in reading instruction (Wigfield, Guthrie, Perencevich, et al. 2008). For example, students are taught reading comprehension strategies, such as questioning and summarising, using conceptual themes (e.g. ecology, solar system, etc.) within Guthrie and Wigfield's (2000) motivation framework discussed in §3.4.2. In CORI motivational practices are integrated with cognitive strategies for reading comprehension. Students learn a variety of reading strategies (e.g. summarising), which are effective in increasing reading comprehension through engagement. CORI's design is based on Guthrie and Wigfield's (2000) Engagement Model of reading development, which posits that when readers are fully engaged in reading, they comprehend better, use reading strategies effectively, and are motivated to read (Wigfield, Guthrie, Perencevich et al. 2008:433).

The success of the engagement framework (discussed above), and its practical instruction as CORI in improving students' engagement and reading comprehension, have been reported in Guthrie (2008), Guthrie and Humenick (2004), Guthrie, Wigfield, Barbosa, et

al. (2004), Guthrie, Wigfield, Perencevich et al. (2004) and many others. Grabe (2008:190) states that

> CORI, the curricular approach developed by Guthrie, Wigfield and his colleagues, is easily the most researched curricular approach to L1 reading instruction to date. It has demonstrated remarkable success in many studies with L1 elementary grade students in building student motivation for reading, promoting reading engagement, producing greater amounts of activity, and significantly improving reading comprehension abilities.

However, in applying the model to a multicultural and multilingual, tertiary context such as UP, there needs to be some modifications. First of all, most of Guthrie's subjects were primary and middle school students whose reading demands are different from the demands at tertiary level. CORI dealt mainly with fluency, comprehension and strategy use. The present study therefore adds on to the model and the research by conducting an affective intervention in a tertiary context. In addition, the present study focuses on (high level) academic reading, an area that has been scantily researched in comparison to general reading comprehension (Brunfaut 2008). Academic reading at tertiary level, as explained in Chapter 1, demands a higher level of reading. As Boughey (2009:1) rightfully explains "Universities require students to make inferences and draw conclusions from what they read, and to use reading of other texts and their knowledge of the world to question what they are reading." Although these demands are required in academic reading at middle and high school levels, at universities, they are required at a higher cognitive level.

Secondly, Guthrie and Wigfield's model mostly relate to L1 readers. The present study extends Guthrie and Wigfield's model by including L2 reading issues (cf. §3.4.4.3), as L2 reading has its own complexities (August 2006; Bernhardt 1991:2, 2005; Grabe & Stoller 2002:41). Also aspects that pertain to L2 motivation and L2 learning are included in the adapted model.

3.4.4 The adapted model

Due to the multilingual, multicultural and dual-level educational system of the South African context, an exploration of students' needs is crucial and is explicitly included in the model. Although Guthrie (2008:10), like many other researchers (e.g. Bernhardt 2005; Butler 2007; Dörnyei 2001b; Dörnyei & Ushioda 2011; Grabe 2008), point out the relevance of assessing students' needs and how important this is in an intervention

programme, it is not explicitly included in the Engagement Model. As emphasised by Guthrie (2008) and other researchers, assessing students' needs is necessary in order to tailor the intervention to meet students' specific needs. It enables the teacher to become aware of students' needs, and consequently select teaching materials and activities that are significant, of interest to students and at their level of competence. Also due to the fact that L2 teaching and learning is quite complex, this issue will be discussed and included in the modified model. Bernhardt (1991:5) adds that there are various groups of second language readers (she identifies three groups of adults and two groups of children) who are very different from one another, and recognising the differences between and among these groups, provides an initial step towards developing non-generic, more principled reading instruction. In extending Guthrie and Wigfield's (2000) model to suit the L2 tertiary context, factors such as students' needs, L2 reading issues, tertiary academic demands and L2 motivation are included.

3.4.4.1 Students' needs

When attempting the design or redesign of a course syllabus, input from the population at whom the course is aimed, is indispensable. However, students' perception about what they need may not be reliable, as they do not necessarily have the metacognitive skills to translate shortcomings into teaching strategies. Therefore a course designer may have to use a tool, such as a survey on their habits and activities, to infer possible needs. Establishing students' needs is especially important in L2 contexts. This is echoed by L2 reading researchers such as Bernhardt (2005) and Grabe (2008), as well as other literacy researchers within the UP tertiary context (Butler 2007; Carstens 2008). Although Guthrie (2008) recommends a needs analysis, one may add that this is even more crucial in L2 reading, as L2 students come from different socio-cultural and educational backgrounds, and as Grabe (2008:188) intimated, students from different cultures experience different levels of home and institutional support for reading development. These differences lead to vast variations in students' affective and proficiency levels in reading.

Secondly, an exploration of students' reading profiles, which is assumed to reflect their tuition needs, is relevant because one cannot emphasise all aspects of reading and also focus on all socio-cultural aspects equally in a reading intervention programme. There is simply not enough instructional time (Grabe 2008:19; Passe 1996:68). A reading profile of the target population will indicate the areas that need emphasis, and "determine which

[affective factors] reading skills and academic abilities require the highest priority" (Grabe 2008:19).

Specifically in the UP context, Butler (2007) and Carstens (2009) point out that in selecting teaching materials, tasks and activities for tertiary level literacy development learner needs should be considered. In the present study a needs analysis is conducted in the format of a survey strategy that explores students' reading background, attitudes and habits; and this survey forms part of an adapted model for L2 reading instruction in the UP context.

3.4.4.2 Institutional demands and constraints

Most discussions that centre around students' reading and literacy challenges also include the institutional demands on the students (Boughey 2009; Brunfaut 2008; Butler 2007; Carstens 2009; Niven 2005; Pretorius 2000). Grabe and Stoller (2002) explain that academic reading at tertiary level requires the rapid integration of both lower and higher level processes appropriately and efficiently in a topical domain (e.g. history, psychology, economics, etc). Both lower- and higher-order processes involve a stream of abilities and skills, which, as explained in Chapter 2, develop with constant exposure to texts. Unfortunately, many students do not possess these required abilities. Brunfaut (2008:33), in discussing reading at tertiary level, states that

> [T]exts read within tertiary education settings, however, are often of a different nature than those read in other environments […] the academic setting within which these texts are read is characterised by a particular academic culture and a particular disciplinary culture, and those involved are expected to be(come) academically literate.

In other words, students are supposed to read and write successfully within the academic culture and in their academic disciplines by applying the rules in these settings. However, citing Johns (1997), Brunfaut (2008:33) argues that this ability requires students to understand that these "skills" are influenced by each other, and also involve "ways of knowing particular content, languages, and practices", and includes "strategies for understanding, discussing, organising and producing texts". She further argues critically that, in many cases, an osmotic stance is taken by universities and institutions of higher learning, that by functioning in an academic setting, students are expected to become increasingly literate (Brunfaut 2008:34). However, as Boughey (2009:2) explains, if this

stance is taken, the students "who will learn to read and write in powerful ways are those who pick up those ways of reading and writing outside the formal learning environment", students "who are already privileged because of the educational and social background of their parents and what that exposes them to […]"

The implication is that reading and writing demands at tertiary level require higher order skills and students cannot be left to the mercy of osmosis pedagogy given the poor reading background of a number of students (cf.§5.4.2.1). Boughey (2009) further explicates that:

> Universities require students to make inferences and draw conclusions from what they read, and to use reading of other texts and their knowledge of the world to question what they are reading. […] it involves the reader taking up a different position in relation to what she reads – a position which is ultimately derived from values and attitudes related to what can count as knowledge and how that knowledge can be known.

Niven (2005) explains from her findings that whereas students use a more bottom-up cognitive frame for learning, university lecturers expect a different approach to learning from students – an approach that most students entering universities straight from high school are not familiar with. Pretorius (2000:42) presents Chall et al.'s (1990) taxonomy of stages of reading development, and identifies stage five as the stage where tertiary level reading is expected. At stage five-level, readers are required to integrate and synthesise information and acquire new knowledge from reading high density texts. As stated by Pretorius (2000:42; 43), students are expected to possess a vocabulary of about 18,000 to 24,000 words, containing many general academic words and technical words related to specialised subjects. For students who have had limited exposure to texts and have not engaged in frequent reading due to a number of socio-economic, socio-educational and affective factors, these expectations pose serious challenges.

Focussing on the UP context, Butler's (2007) empirical study of UP lecturers' expectations of their students in terms of academic writing shows that students do not meet the expected levels. Carstens (2009) also singled out argumentation as an important rhetorical mode required of students in the Humanities. Argumentation, a pivotal rhetorical mode at tertiary level, poses great challenges to students. Yet this mode of writing can be mastered through the frequent reading and writing of such texts. For students to be successful writers they have to be proficient readers.

Anderson and Krathwohl (2001:67-68) designed a revised version of Bloom's taxonomy of cognitive domains, which has been provided as a guideline for teaching and learning by the Education Innovation Department of the University of Pretoria. In applying the taxonomy, students are required to operate in both lower-order and higher-order cognitive domains. The taxonomy lists remembering, understanding, applying, analysing, evaluating and creating as important cognitive domains in learning. In other words, students should be able to retrieve information (understanding); construct meaning from texts by interpreting, exemplifying, classifying, summarising, inferring, comparing and explaining (understanding); carry-out procedures through executing and implementing information (applying); break-down texts into constituent parts by determining how the parts relate to one another and to an overall structure (analysing); make judgements on texts based on criteria by critiquing (i.e. evaluating; put elements together to form a coherent or functional whole, and reorganise elements into a new pattern or structure through generating, planning or producing (creating).

Although the skills and abilities required for tertiary level reading (e.g. high-level inferencing, critical analysis, and metacognitive abilities) have been unpacked in Chapter 1, it is important to make reference to them in this chapter, as they are important institutional requirements for academic success.

In as much as teachers may apply innovative approaches in the L2 classroom, this is subject to the constraints and demands of the academic context. Butler (2007) in his unpublished PhD thesis on academic writing in the UP context, states that the issue of 'institutional demands and constraints' is a key element for academic writing in tertiary education. These are real issues that exist in the academic learning context and greatly influence teaching and learning in tertiary institutions.

The influence of institutional demands is also noted by Carstens (2008:94) in her teaching-learning model for tertiary-level disciplinary writing. She states, and rightly so, that "the course designer and the classroom teacher should anchor themselves in the social, political economic epistemological and educational particularities of the surrounding context" (Carstens 2008:95). In other words, in designing and implementing courses (e.g Academic Reading) for students at this level, epistemological access needs to be considered.

Another major constraint of tertiary level reading development is time. As Passe (1996:68) points out, teachers are under enormous pressure to complete the curriculum, and students' time table schedules may not allow for the frequent practice and extra reading involved in the development of L2 reading. Yet students, especially non-traditional readers, need frequent practice with tasks and require extensive reading for the development of their reading ability.

3.4.4.3 L2 reading and learning issues

Bernhardt (2005:142) asserts that L2 reading instruction should be integrative and accommodate L1 literacy variables (i.e. L1 literacy skills), language variables (i.e. L2 language knowledge) and affective variables. In her Compensatory Model of Second Language Reading, Bernhardt (2005) identifies L1 literacy, L2 knowledge and affective variables as the three main areas that account for L2 reading.

First, she presents L1 literacy as accounting for 20% of the variance and argues that L2 reading instruction should consider this factor in reading development. Such arguments have led to the prominence of background knowledge in L2 reading development. According to Bernhardt and other L2 reading researchers, adult learners do possess some L1 literacy that can be transferred to L2 literacy. She further states that adult readers come into L2 reading with well developed beliefs and understanding of the world and these greatly influence their reading in an L2. Similarly, in explaining L2 learning, Kumaravadivelu (2003:285) points out that, adult learners bring a wealth of knowledge that teachers could tap into in an L2 classroom. In relation to this, Bernhardt (2005) suggests that teachers should assist learners to apply their background knowledge in understanding texts. The influence of background knowledge in L2 reading is an important factor that is emphasised by most reading researchers (Alderson 2000; Anderson 1999; Carrell 1991; Grabe & Stoller 2002). Bernhardt (2005:138) contends that it is not whether L1 literacy skills transfer but how much is transferred, how it is transferred and in what context. This implies that L1 literacy should be considered in L2 reading instruction and a favourable context should be created to allow L1 literacy skills to transfer.

The second dimension in Bernhardt's (2005) model is L2 language proficiency, which in her view generally accounts for 30% of the variance in L2 reading, and includes

knowledge of grammatical forms, vocabulary knowledge, cognates and L1/L2 linguistic distance. She explains that other researchers have broken this 30% down into 27% vocabulary and 3% syntax or grammatical forms (Bernhardt 2005:137). This makes vocabulary knowledge a crucial part of L2 reading. The importance of L2 knowledge is explained in the language threshold, and in the significance of a large vocabulary base for L2 reading fluency. First, as explained by Grabe and Stoller (2002), the L2 learner needs to acquire thousands of words to be able to read fluently, and for those at tertiary level, academic vocabulary is crucial. Although Grabe (2008) presents a Content-Based Reading Instruction (CBRI) framework comprising instructional principles for L2 reading instruction, he cautions that it is not an alternative to language practice, and suggests other language-learning tasks to support reading development. Grabe and Stoller (2002) suggest instruction and exposure to texts through extensive reading in order to expand L2 learners' vocabulary and language knowledge.

The third dimension of Bernhardt's (2005) model comprises the other 50% of the variance. According to Bernhardt (2005:140) this dimension is still under investigation and unexplained. She states that this area may constitute the affective domain and comprises of comprehension strategies, engagement, content and domain knowledge, interest, motivation, etc. In other words the affective domain of L2 reading may comprise 50% of L2 reading and constitute an under-researched area.

In view of the above discussion, issues pertaining to L1 literacy and L2 language proficiency are included in the extended model. Next in this section, further discussions of L2 language issues are undertaken under the subheadings of the language, the L2 learner and the L2 learning situation or environment (Dörnyei 1994; Dörnyei & Ushioda 2011; Kumaravadivelu 2006).

3.4.4.3.1 The second language
Reading instruction that seeks to improve the reading ability of L2 learners should simultaneously seek to improve students' language proficiency. When one considers the language threshold, it becomes necessary for students who have read in the L1 to be assisted to develop their L2 in order for the L1 literacy skills to transfer. A specific example will be Afrikaans L1 speakers at UP. Many of them have done most of their reading (reading for pleasure and academic reading in Afrikaans) and therefore proficiency

levels in English (LoLT) for tertiary academic purposes may be low. There are also students from French and Portuguese speaking countries who enrol at UP and would need to improve their English language proficiency in order to transfer L1 literacy skills.

Unlike L1 readers, L2 readers usually have limited vocabulary. L2 readers need to accumulate thousands of words for fluency in reading. For those with limited exposure to texts (due to socio-cultural and educational disadvantages), and who therefore possess limited vocabulary, this impedes their reading development, and more so at tertiary level where the need for an extended academic vocabulary is vital for comprehension and evaluation. In the UP context, a number of indigenous South African languages (ISAL) speakers have had limited reading experience in L1 and/or L2 and need intensive language and vocabulary development. For those with L1 literacy skills, academic vocabulary in the L2 is important for transfer of L1 literacy skills. In order for literacy skills to transfer, students need to attain the language threshold (i.e. the level of L2 knowledge that L2 learners need to attain in order to comprehend L2 texts, and for literacy skills to transfer) and vocabulary is an important part of this. There are also those with very little L1 literacy who need intensive language and vocabulary development. In addition, critical reading may be implicitly included in strategy instruction, but at tertiary level this needs to be addressed more vigorously. In developing L2 reading, a number of practical guidelines have been suggested (Anderson1999; Grabe 2008). Grabe (2008), however, adds a critical reading component that is highly important in tertiary level reading. For L2 readers at tertiary level, vocabulary and critical reading are essential aspects in developing reading ability. Extensive reading is also essential for L2 reading development.

3.4.4.3.2 The L2 learner/reader

The different groups of L2 readers make L2 reading instruction a very complex exercise. First, there are the traditional students (students who are proficient in the L2, and therefore L1 literacy can transfer) who would only need L2 academic reading instruction for the purpose of tertiary studies (cf. § 2.3.4.3; August 2006). Bernhardt (1991a:185) argues that a number of L2 readers are literate in the L1 and may carry this knowledge (i.e. literacy ideas) over to the L2. Then there are the non-traditional students who fall into two categories in the South African context: low or no L1 reading but high L2 reading proficiency; and low or no L1 reading and low L2 reading proficiency. Usually the second category of non-traditional students come from poor SES and educational backgrounds and

need both extensive and intensive language and literacy instruction, as well as both extensive and intensive affective reading development.

For a number of non-traditional readers, tertiary instruction may be intimidating, and therefore reading instruction should relate to the learner's background as much as possible. Kumaravadivelu (2003) suggests that teachers should treat L2 learners as cultural informants so that they are encouraged to engage in the process of classroom participation that recognises and elevates their power and knowledge. This can be done by identifying the cultural knowledge they bring to the classroom and by allowing them to share their own individual perspectives with the teacher and other learners. When learners are treated as cultural informants they are encouraged to engage in a process of participation that projects and highlights their own power and knowledge (Kumaravadivelu 2003:40). This involves going beyond the textbook's frame of reference and attempting to bring the learner's home community into the classroom experience. In other words, using learners' home culture to inform classroom activities enables students to become motivated and empowered.

Studying in a second or additional language is stressful, especially if the learner has a poor educational background as in the case of a number of the first-year students at UP. As a result, all attempts should be made to alleviate debilitating stress for L2 learners and enable them to enjoy reading classes.

3.4.4.3.3 The L2 learning environment

The learning environment is an important aspect of L2 learning. Various L2 researchers have emphasised the importance of the L2 learning environment. The call is for teachers to create a conducive environment for learning. As L2 researchers intimate, teachers should create environments where learners are free to explore and express their views (Brown 2000; Cook 2001; Kumaravaduvelu 2003; 2006). The assumption is that, by creating conditions necessary for learning, learners will be able to learn (Rogers 1983 in Brown 2000:89; Cook 2001). Explaining Rogers's humanistic view, Brown (2000:89, 90) states that "[g]iven a nonthreatening environment, a person […] will grow and learn", and that "if the context for learning is properly created, human beings will, in fact, learn everything they need to". Burton (2011) explains the importance of creating a non-threatening environment for learning by applying the principles of Universal Design for Learning

(UDL). She explains that a learning environment which creates positive emotions in learners enhances cognitive development.

3.4.4.3.4 The socio-cultural context

Closely linked to the educational context are other factors, such as cultural and social issues that impinge on L2 reading (Alderson 2000; Grabe & Stoller 2002). Wallace (2003:16) emphasises that for L2 learners, social institutions, such as the society and cultural identity, as well as background play a significant role in interpretation of texts. Kumaravadivelu (2003:239, quoting Zeichner and Liston 1990) states:

> It is simply impossible to isolate classroom life from the school's institutional dynamics, the ever-present tensions within the community, and the larger social forces […] In order to act effectively we have to recognise the influence of the social context.

With the introduction of socio-cultural theories by Street (2003) and Gee (2000) the social and cultural context of learning has gained greater impetus and has become important in the L2 learning/teaching context.

The factors that shape society (e.g. race, class, ethnicity, religion) also play a role in shaping classroom discourse. For instance, the experiences that teachers and learners bring to the classroom are shaped not only by the learning and teaching episodes they have encountered in the past, but also by a broader social, economic and political environment in which they grew up. These experiences have the potential to affect classroom practices. In other words learners' previous educational background as well as the community and the larger society exert great influence on classroom participants and management, and teachers cannot ignore them in L2 classrooms. Kumaravadivelu (2003:239) argues that teaching materials, for example textbooks, should be relevant, in that they should be sensitive to the aims and objectives, needs and wants of learners from a particular pedagogic setting, and that L2 teachers cannot afford to separate the linguistic needs of learners from their social needs. In sum, teachers have to consider several social, political, historical and economic conditions that shape the lives of their learners. This is echoed and projected by other reading researchers (Grabe & Stoller 2002; Guthrie & Wigfield 2000; Wigfield & Lutz 2005). They argue that the reading proficiency of students is greatly influenced by their social, economic and educational background and teachers cannot ignore these factors in developing students' (academic) reading ability.

3.4.4.4 L2 motivational issues

In the presentation of a three-level framework of L2 motivation (i.e. language level, learner level, and learning situation level), Dörnyei and Ushioda (2011) indicate that each of these levels, independently, has a vital effect on overall motivation. In other words, each of the three levels of motivation exerts its influence independently of the other, and has sufficient power to nullify the effects of the other two levels (Dörnyei & Ushioda 2011:53). All three levels therefore need to be considered in L2 motivation. The language level consists of integrative and instrumental systems, whereas the learner level has to do with the learner's need for achievement and self-confidence. The learning situation level consists of the following: course specific (i.e. syllabus, teaching materials, teaching methods and learning tasks), teacher-specific (i.e. the teacher's behaviour, teaching style and practice) and group-specific (i.e. group dynamics) components. In relation to these levels Dörnyei (1994), in an earlier publication, presents a number of guidelines or strategies on how to motivate L2 learners in the classroom. Some of the strategies include developing students' self-confidence by regularly providing praise and encouragement and ensuring that students regularly experience success and a sense of achievement. Other strategies include developing students' self-efficacy by teaching strategies, and decreasing students' anxiety by creating a supportive and accepting learning environment in the L2 classroom; and promoting motivation-enhancing attributions, such as attributing past failures to use of inappropriate strategies rather than lack of ability. The strategy of providing praise and encouragement resonate with Guthrie and Wigfields's teaching technique of giving 'rewards and praise' (cf §3.4.2.7).

On the learning situation level, Dörnyei (1994) provides strategies for each motivational component. For the course-specific component he suggests making the syllabus relevant by basing it on students' needs. He also includes the use of authentic materials that are at the students' level, in order to increase the attractiveness of the course content, and by arousing and sustaining students' curiosity and attention by changing the interaction pattern from time to time; for example, making peer interaction (e.g pair work, group work) an important teaching component. He also suggests that difficulty of tasks should match students' abilities so that they can expect to succeed if they put in reasonable effort, and also that students' satisfaction should be facilitated by celebrating success (Dörnyei 1994:282). He further advises (along the lines of Guthrie & Wigfield's learning goal

technique) that students' expectancy of task fulfilment should be increased by "familiarising students with the task type, sufficiently preparing them for coping with the task content, giving them detailed guidance about the procedures and strategies that the task requires, making the criteria for success (or grading) clear and 'transparent' and offering students ongoing assistance" (Dörnyei 1994:282).

On the teacher-specific component, Dörnyei (1994) suggests that the teacher should exhibit the three basic teacher characteristics that enhance learning which is empathetic, congruent and accepting. He explains empathy as being sensitive to students' needs, feelings and perspectives, and refers to congruence as the ability to be real and authentic without hiding behind facades or roles, while acceptance refers to a non-judgemental, positive regard, acknowledging each student as a complex human being. In addition, he suggests that the teacher should assume the role of a facilitator rather than an authority figure, and develop rapport with the students. The teacher should also promote learner autonomy by affording students choices, and include project work where students are in charge, which refers to Guthrie and Wigfield's technique of autonomy support. Tasks should stimulate intrinsic motivation and help internalise extrinsic motivation by being presented as learning opportunities, and being connected to students' interests. Finally, Dörnyei suggests that teachers should give motivating feedback, in the format of positive competence feedback. For the group-specific component, Dörnyei suggests that teachers should promote the development of group cohesion by creating a classroom situation in which students can get to know each other and share genuine personal information (e.g. feelings, fears, desires, etc.). Teachers should also use cooperative learning techniques by frequently including group work in which the group's achievement rather than the individual's is evaluated.

In recent publications, Dörnyei (2001b), and Dörnyei and Ushioda (2011) present these strategies in a process-oriented framework of motivational teaching practice in the L2 classroom. This process-oriented framework, Dörnyei and Ushioda (2011:107) explain, follows through the motivation process from the initial arousal of the motivation to the completion and evaluation of the motivated action. The framework consists of four sections: creating the basic motivational conditions; generating initial motivation; maintaining and protecting motivation; and encouraging positive retrospective self-

evaluation. These components are discussed briefly, citing some specific strategies that can be used to motivate L2 learners in particular.

3.4.4.4.1 Creating basic motivational conditions

For the first phase, the guidelines include: appropriate teacher behaviours; a pleasant and supportive atmosphere in the classroom; and a cohesive learner group with appropriate group norms. These conditions collectively mould the psychological environment in which learning takes place, and establishing all three is important (Dörnyei & Ushioda 2011:109).

In terms of the teacher's behaviour, Dörnyei and Ushioda (2011) suggest that the teacher can influence students' motivation through rapport, by establishing relationships of mutual trust and respect with the learners in showing that he/she cares about their progress; recognising their individual efforts; indicating his/her availability for all things academic; and having sufficiently high expectations for student achievement (Dörnyei 2001b:33, 36; Dörnyei & Ushioda 2011:110). Secondly, teachers need to create a pleasant and supportive atmosphere in the L2 classroom. Students become highly involved in learning in a psychologically safe classroom climate in which they are free to express themselves. Dörnyei (2007a:719) states that sustained learning of an L2 "cannot take place unless the educational context provides, in addition to cognitively adequate instructional practices, sufficient inspiration and enjoyment to build up continuing motivation in learners". In terms of group cohesiveness Dörnyei (2001b) suggests among other things that the teacher should create opportunities for interaction and maintain an active presence, and promote successful collaborative activities by allocating project-work and problem-solving activities. These suggestions resonate with Guthrie and Wigfield's (2000) principles of teacher support and collaboration within the engagement framework.

3.4.4.4.2 Generating initial motivation

For the second phase, Dörnyei and Ushioda (2011) advocate that teaching should enhance the learners' language-related values and attitudes; increase learners' expectancy of success; and make the teaching materials relevant for the learners.

First, they suggest that the learners' language-related values and attitudes should be promoted using peer role models, reminding students of the values of achieving success,

and establishing incentive systems that offer extrinsic rewards for successful completion of tasks. Second, to increase the learners' expectancy of success Dörnyei and Ushioda (2011:115) suggest offering students sufficient preparation and assistance; making sure that they know exactly what success in the tasks entails; and removing any serious obstacles to success. In addition, as Brophy (2004:60) states, "[t]he simplest way to ensure that students expect success is to make sure that they achieve it consistently". Thirdly, in emphasising the importance of making teaching materials relevant for the learners, Dörnyei and Ushioda (2011:117) state that "one of the most demotivating factors for learners is when they have to learn something that they cannot see the point of because it has no seeming relevance whatsoever to their lives". Chambers (1999:37) shares their views and states that "[i]f pupils fail to see the relationship between the activity and the world in which they live, then the point of the activity is likely to be lost on them". A needs analysis is suggested to enable the teacher to ascertain what students' interests, goals and needs are, and for these to be built into the curriculum (i.e. teaching materials and activities) as much as possible (Dörnyei 2001b:65, 66). Dörnyei (2001b) proposes that instruction should relate to the everyday experiences and backgrounds of the students. This suggestion is also advocated by Kamaravadivelu (2003) in what he refers to as "creating social relevance in L2 teaching". Finally, realistic learner beliefs are to be created through class discussions and mismatches between the teacher's beliefs and the learners' should be addressed. Dörnyei's (2001b) strategies for the second phase relate to the principles of learning goal, as well as to the technique of using relevant and interesting texts in Guthrie and Wigfield's framework (cf. § 3.4.2.1; § 3.4.2.4).

3.4.4.4.3 Maintaining and protecting motivation

For the third phase, Dörnyei (2001b) and Dörnyei and Ushioda (2011) list the following guidelines: make learning stimulating and enjoyable, present tasks in a motivating way; increase learners' self-confidence; promote cooperation among the learners; create learner autonomy; and promote self-motivating learner strategies, among others.

One way of making learning stimulating and enjoyable is to break the monotony of learning by varying the learning tasks, learning materials, teaching approach and activities as much as possible. Another way is to make the tasks interesting, which according to Dörnyei and Ushioda (2011:119) is by far the most motivating approach in classroom teaching. In order to present tasks in a motivating way, Dörnyei (2001b:78) suggests that

teachers should explain the purpose and the utility of tasks, and provide appropriate strategies for doing tasks. To promote favourable self-conceptions, Dörnyei and Ushioda (2011:120) suggest that L2 learners should be provided with regular experiences of success, made to feel that they have an important part to play, and that their contributions are useful to the class. In line with Guthrie and Wigfield's (2000) framework, Dörnyei and Ushioda (2011) suggest that praise and encouragement should be given where they are due. In addition, classroom anxiety should be reduced by making the learning context less stressful. They also advocate for the teaching of strategies, as in Guthrie and Wigfield's framework, so that students' confidence can increase.

Regarding learner cooperation, Dörnyei and Ushioda (2011:122) cite studies showing that students in cooperative environments have more positive attitudes, and develop higher self-esteem and self-confidence than other classroom structures. Dörnyei (2001b:101) lists a number of reasons for the positive impact of cooperative learning. For example, it fosters group cohesiveness, increases the expectancy of success, responds to students' needs for belonging and relatedness, generates less anxiety and stress, promotes autonomy (which is a powerful contributor to motivation) and increases effort because knowing that one's contribution is required for the success of the group is motivating. He suggests activities that require learners to work together towards a common goal. Furthermore Dörnyei and Ushioda posit that a key aspect of maintaining L2 learners' motivation and increasing learning is promoting learner autonomy, as intimated by Barfield and Brown (2007), Benson (2007), Guthrie and Wigfield (2000) and Kumaravadivelu (2003). This principle is rooted in humanistic psychology, which explains that learning that affects behaviour significantly is self-discovered and self-appropriated (Brown 2000). Dörnyei and Ushioda (2011:123) suggest allowing students choices, introducing peer teaching, project work, and self- and peer-assessment, as some of the ways to provide autonomy. However, autonomy should be given with support. Ushioda (2003:99-100) maintains that although learners should be given the freedom to act independently, they should be brought to an understanding of "what is good to want and why" in a supportive rather than controlling manner. This refers to the seemingly contradictory combination of autonomy and teacher support (Bernhardt 1991a; Deci & Ryan 2000; Guthrie & Wigfield 2000). Finally, to keep motivation on-going, learners should be encouraged to motivate themselves by taking personal control of the affective conditions and experiences involved in learning.

3.4.4.4.4 Encouraging positive retrospective self-evaluation

The guidelines for the final phase are presented in three components. One is that failure should be attributed to effort rather than ability, as students' failure attributed to ability has a negative effect on the approach to subsequent tasks. The other is that feedback should be motivational. Informational feedback (comments on progress and competence) should be more dominant rather than controlling (which judges performance). Finally, Dörnyei (2001b:126) notes that celebration and satisfaction are crucial motivational building blocks because they validate effort, affirm the entire learning process, and reinforce the value of the experience. Some of the strategies suggested for increasing learner satisfaction are the teacher's monitoring and recognition of the learners' accomplishments, taking time to celebrate (i.e. give praise, applause and standing ovation, if this does not embarrass recipients) (Ibid). Although Dörnyei (2001b), and Dörnyei and Ushioda (2011), state that rewards are good incentives, they point out the controversy surrounding rewards (the seemingly negative aspects of extrinsic motivation), but conclude that the simplistic view of extrinsic motivation being bad and intrinsic motivation being good has been modified. Sufficiently internalised extrinsic motives are now seen as complementary to intrinsic motivation (Deci & Ryan 2000; Dörnyei & Ushioda 2011:129).

These L2 motivational strategies, a number of them echoed by Deci and Ryan (2000) and used as justification for Guthrie and Wigfield's (2000) L1 motivational teaching techniques, will be used as overarching strategies in the implementation of Guthrie and Wigfield's framework. However, Guthrie and Wigfield's framework relates specifically to reading, has been practically used with successful outcomes, and will therefore be the main framework upon which I draw for the socio-affective reading intervention.

For the present study, instead of CORI, the adapted reading instruction for L2 tertiary level will be referred to as Critical Reading Instruction Through Engagement (CRITE). CORI is aimed solely at improving fluency, comprehension and strategy use by improving motivation and engagement and strategy instruction at elementary and middle school levels (Guthrie, Wigfield, Perencevich et al. 2008); whereas CRITE is based on the engagement model, but aims at improving tertiary-level students' critical reading and comprehension (including comprehension, strategy use, academic vocabulary, and critical analysis) by improving motivation and engagement. Tertiary level reading requires high levels of comprehension, critical analysis and technical academic vocabulary, which a

number of first-year students find challenging. In addition, the profile of the population of L2 learners and the impoverished educational system from which they come demands a complex approach to the already complex process of reading development.

Based on the above exposition (cf. § 3.4.4.1 – 3.4.4.4), the important components to be added in Guthrie and Wigfield's model are: students' needs, (socio-affective and cognitive), institutional demands, L2 reading and learning issues and L2 motivational issues.

3.5 Adapted framework for academic reading development

The L2 issues discussed above are also confirmed by Grabe and Stoller (2002:42) in their distinction between L1 and L2 issues in reading development. L2 reading has its unique complexities, which should be highlighted in L2 reading development. Anderson's strategies for teaching L2 reading further illuminate this issue. However, although she includes *'instil motivation'* as one of her strategies, the rest of her strategies are solely cognitively oriented. Guthrie and Wigfield, on the other hand, do not explicitly highlight L2 issues in reading, but their focus on the affective renders their model applicable to this study. The model is therefore adapted for the study with important elements such as **exploration of students' needs, academic and tertiary demands** (e.g. institutional constraints and requirements), **L2 reading and learning**, and **L2 motivational strategies,** included for comprehensibility and specificity.

Student needs
Socio-affective profiles:
- Reading experience
- Social literacy
- Interest
- Attitude
- Self-efficacy
- Motivation (intrinsic)
- Motivation (extrinsic)
- Strategy use
- Reading habits

Reading ability:
- Academic literacy test
- Academic reading test

L2 characteristics
L2 reading and learning:
- L1 literacy
- L2 knowledge
- L2 learner
- L2 learning environment
- L2 socio-cultural context

L2 motivational strategies

Institutional demands:
- Academic reading
- Tertiary context

Engagement model: reading instruction and motivational support

Figure 3.4: Framework for developing academic reading ability of L2 tertiary students

The principles, elements, and techniques have been suitably integrated for the context of the present study. This integration was used to generate the above model. Although the core of the design is based on Guthrie and Wigfield's Engagement Model, it is situated in the context of academic reading at tertiary level, according to its institutional demands and disciplinary norms, as well as proficiency levels.

The model can be explained as follows: First, the demands and constraints of the institutional context are important in any teaching and learning situation. For example, as much as the lecturer is free to modify and adapt lessons, this freedom is curtailed by institutional demands and constraints. The institutional demands and requirements should therefore guide the teaching and learning. The institutional requirements can be determined empirically from a survey of lecturers' perceptions as in Butler (2007), or from experiential knowledge of the lecturer and other colleagues, which is the case in this study. Student needs are ascertained through questionnaire surveys and reading tests to determine students' social and affective levels in relation to reading, as well as reading proficiency levels. As learning depends on the individual (Guthrie & Wigfield 2000; Kumavaradivelu

2003), the importance of exploring students' social and affective levels to inform teaching cannot be overemphasised. The results of the exploratory survey, the L2 reading issues and L2 motivational strategies will together guide the classroom teaching techniques of Guthrie and Wigfield (2000) to provide engagement in reading that will produce desired outcomes of achievement, knowledge and practices in reading. Institutional demands, L2 characteristics and students' needs influence classroom management (such as teaching procedures, classroom activities and teaching materials) and are grounded in engagement practices of motivational and cognitive support. However, students' socio-affective and reading proficiency levels, in particular, have a bidirectional relationship with the motivational classroom practices (§ 3.4.4), as they can be influenced by the classroom practices as well as being used to design classroom teaching practices. The results of the exploratory survey will be used to guide the classroom activities and tasks, select appropriate and significant texts, and emphasise areas of need within the engagement techniques of L2 learning and reading.

3.6 Conclusion

This chapter has discussed Guthrie and Wigfield's (2000) model, and its relevance to the study, in that it focuses on affective and cognitive strategies to improve reading ability. A discussion of the affective constructs: *motivation, self-efficacy, attitude* and *interest* was undertaken. Given the fact that academic reading at tertiary level, L2 reading strategies, and L2 motivational strategies are important in the UP context, these issues were discussed. This culminated in a framework for developing L2 tertiary students' reading ability. Although the framework was constructed for the UP context, and is used for the present study, it can be adapted or used at other South African institutions, or similar contexts. This framework serves as a navigational map for the empirical research conducted in four phases:

1. the contextual exploration (students' needs);

2. pre-intervention survey and the intervention programme;

3. post intervention survey (quantitative analysis);

4. probing students' evaluation of the teaching strategies of the intervention based on Guthrie and Wigfield's (2000) framework (qualitative analysis) and mapped on to the affective factors listed above and discussed under § 3.2.

The next Chapter presents the methodology of the research, explaining the research design and methodological norms, as well as elaborating on the phases of the research.

Chapter 4: Methodology

4.1 Introduction

This chapter presents the methodology of the study. It describes the research design and methodological norms such as participants, instruments, and research procedure, comprising methods of data collection and analysis that address the research questions of the study. First, the mixed methods design used for the study is explained. Second, the methodological aspects such as participants and instruments are presented, and finally, the ethical considerations for the study are discussed.

4.2 Research design

A mixed methods design that comprises both quantitative and qualitative research methods was used for this study. Although quantitative and qualitative approaches were traditionally viewed as dichotomies, Northcutt and McCoy (2004) call for reconciliation in order to utilise the strengths of both for the benefit of a study. According to Ivankova and Creswell (2009) a mixed methods approach allows for a more complete understanding of the research problem, and gives the researcher an opportunity to obtain an overall picture and greater insights into the issue under investigation. The approach was primarily quantitative, based on questionnaire surveys, while the qualitative component was based on semi-structured interviews to add depth and scope to the study (Dörnyei 2007b; Dörnyei & Ushioda 2011:240; 241; Sandelowski 2003; Teddlie & Tashakkori 2003). This type of mixed methods design can therefore be characterised as a QUANqual design (Ivankova & Creswell 2009:138). First, an exploratory quantitative analysis was done to inform the intervention programme, after which a quantitative analysis was conducted to determine the efficacy of the intervention in raising affective levels in reading. Thereafter, qualitative analyses using interview responses on the teaching techniques were done. The results of the two types of analysis were drawn together to derive a nuanced understanding of the effectiveness of an affectively enriched reading intervention. The results of the interviews were to provide a useful supplement to the quantitative data and give a better understanding of the factors that influence students' learning within a socio-affective teaching approach in reading development.

The first set of quantitative data from the questionnaires was used to answer research Questions 1 and 2:

RQ1: What is the relationship between socio-affective factors and students' reading ability?

RQ2: Which socio-affective factor(s) best predict students reading ability?

The findings of research questions 1 and 2 together with the theoretical discussion were used to draw up the intervention programme in answer to research question 3:

RQ3: How can knowledge of socio-affective factors be used to design a more effective reading intervention?

The second set of quantitative data, produced by pre- and post-intervention questionnaires, assisted in answering research Question 4:

RQ4: How effective is a reading intervention programme that incorporates socio-affective factors?

Although students wrote pre- and post-intervention tests in academic reading, the results were not used for comparison, as the tests were not standardised and were compiled with the purpose of deriving a performance-based mark for the module. The results were merely used to select students for the interviews (cf. § 4.3.2). The details of the selection of students for the interviews are given in Chapter 8 where the qualitative data are discussed.

In addition to determining the validity of the construct underpinning the intervention and comparing data from the pre- and post intervention questionnaires to measure the effectiveness of the intervention, the researcher also sought to understand the students' experiences and perceptions of the efficacy of the intervention through semi-structured interviews. The next section presents the methodological norms (i.e. participants, measurement tools, data collection, data analysis) that comprise the present study.

4.3 Participants

Participants were first-year students at the University of Pretoria who had enrolled for the Academic Literacy and Academic Reading modules in 2009 and 2010. As the survey results were to guide the researcher in restructuring a programme to be implemented in 2010, it was decided that the 2009 students would be used for the survey on students' needs (phase 1). First, it would yield a large sample base, and second, it would provide

enough time for the researcher to analyse the results and restructure the reading programme for implementation in January 2010 (phase 3). The 2009 students who responded to the student profile questionnaire were registered for the same modules as the 2010 students who underwent the intervention, ensuring similarity in the student profile.

4.3.1 Phase 1 (2009 Exploratory survey)

Two groups of 2009 first-year students participated in this phase of the study. One group consisted of first-year students taking the compulsory Academic Literacy module. These students had been identified by the Test for Academic Literacy Levels (TALL) to be at risk or at high risk of failure, academically. Results of TALL are given in codes: students at level 1 are deemed to be at *High Risk*, and those at level 2 are *At Risk*. Students at level 3 are perceived to be at borderline level and are expected to rewrite the test in order to be placed at either level 2 or 4. Students at levels 1 and 2 are referred to as the *At Risk* group, and are required to take the compulsory Academic Literacy module to minimise the risk of failure. The total number of students who responded to the questionnaire from this group was 1168.

The other group also consisted of first-year students who were registered for an elective module, Academic Reading in 2009, to fulfil the language requirement for their faculties. A number of degree programmes from various faculties require students to register for a language-related module of 12 credits as part of their academic programme. This group of students, referred to as the *Low Risk* group, were identified by the TALL as having low or negligible risk of failure (level 4 – *Low Risk*; level 5 – *No Risk*), and were therefore given the option to choose any language module to meet the language requirement. The total number of students from this group who filled in the questionnaire was 1107. The combined total number of respondents was therefore 2258. This cohort of students (*At Risk* and *Low Risk*) participated in the exploratory study in phase 1.

4.3.2 Phase 3 (2010 quasi-experimental study)

The 2010 cohort of students that participated in the intervention in phase 3 was similar to the 2009 cohort and consisted of *At Risk* and *Low Risk* groups. For purposes of the quasi-experimental study each group, *At Risk* and *Low Risk,* comprised an intervention and a control class. In other words, four class groups participated in the study. As students selected their lecture times themselves, depending on the free timeslots on their timetables,

the students in each class were representative of all the first-year students registered for that module. The groups used for the study were not selected by any specific method, except that, as a matter of convenience, the researcher used the groups assigned to her for teaching. It was therefore a quasi-experimental study. In quasi-experiments, the investigator uses control and experimental groups, but does not randomly assign participants to groups. Instead, intact groups available to the researcher are used (Cresswell 2009:158-59). The intervention classes were chosen due to their relatively low numbers, in order to make marking less burdensome and for immediate feedback to be given. However, owing to the fact that students had the option to change classes in the first few weeks of lectures, the numbers in the intervention class of the *At Risk* group increased.

Although there were 323 students in the combined classes, only 195 questionnaires were used. The reason for the difference in the number of students in the classes and the number of questionnaires used for the study was that the responses had to be matched, and therefore those questionnaires that did not have corresponding pre-intervention and post-intervention versions were discarded. The 195 questionnaires consisted of 76 in the *At Risk* group (41 intervention, 35 control) and 119 in the *Low Risk* group (49 intervention, 70 control).

For the qualitative data, students in the intervention classes were selected on their performance in two tests on academic reading. They wrote a reading test at the beginning of the module, and another at the end of the module. The average for each test was calculated per group. From these two tests two high achieving students, two with average marks and two with low marks, were to be selected from the intervention groups (*At Risk* and *Low Risk*) for the interviews. Thus, there were supposed to be six students per group. However, due to the fluidity of the classes and the fact that the interviews could only take place at the end of the module this selection method was slightly altered. All the students who obtained the highest, lowest and average marks were identified in both pre- and post-tests and from both *At Risk* and *Low Risk* intervention groups. Forty-seven students were identified, but 40 students were interviewed. These students were contacted by e-mail and by phone, and a date and time that were suitable for them were arranged for the interviews. Students were interviewed individually, and the duration was approximately 45 minutes for each student.

4.4 Measurement tools

The measurement tools comprised questionnaires (Appendix 3) that consisted of a 5-point-Likert scale (positive to negative). The questionnaires comprised questions from Grabe and Stoller (2002:243) and Guthrie, Wigfield and VonSecker (2000:341), which were adapted to suit the context, and additional questions deemed necessary by the researcher were included. A pilot study conducted in 2008 (Boakye & Southey 2008) assisted in improving the questionnaires for validity and reliability. Items that were not compatible were deleted.

The questionnaires used for phase 1 comprised 65 questions (Appendix 3A), whereas the questionnaires for phase 3 comprised 54 questions (Appendix 3B). The questionnaires were divided into nine categories. For phase 1, these categories were used as independent variables in relation to students' literacy levels, which was the dependent variable. Students' reading proficiency or literacy levels were determined by the test for academic literacy levels (TALL). TALL is used to assess the literacy levels of students, in order to determine those who are at risk or high risk of failure, to be placed on academic literacy support programmes.

4.4.1 Phase 1 (2009 exploratory study on students' needs)

For the 2009 exploratory study on students' profiles, other variables (i.e. students' registered faculty, gender and home language) were included in the analysis. The nine categories consisted of eight socio-affective factors (*reading experience, social reading environment/social literacy, interest, attitude, self-efficacy, intrinsic motivation, extrinsic motivation, reading habits*); and a cognitive/metacognitive factor (*strategy use*) as laid out in the questionnaire, which is included in Appendix 3A. The constructs of the questionnaire items are discussed below.

4.4.1.1Reading experience

Questions in this category probed respondents' past experience with reading in the home, at school and on a personal level. It was expected that a positive past experience with reading would lead to a love for reading, which leads to frequent reading and engaged reading, and results in the development of reading proficiency, academic literacy and consequently academic achievement. A negative reading experience does not develop a

love for reading and therefore reading is burdensome and rarely undertaken, leading to low reading proficiency that spills over to low academic literacy and consequently poor academic performance. Six questions, comprising questions 1 to 6, contributed to this construct.

4.4.1.2 Reading in the social environment/social literacy

This category sought to elicit students' reading in the social context, with family members, friends and the wider community. It is expected that students who interact in social environments that have high positive literacy practices will be influenced to read, and thus become proficient readers. On the other hand, students who are raised in social environments with poor or inappropriate literacy practices will not develop a love for reading and will therefore not engage in frequent reading to become proficient readers. Thus, cultural and social practices could have negative or positive influence on students' reading habits and reading ability. Five questions, comprising questions 7 to 11, contributed to this construct.

4.4.1.3 Interest in reading

Students' reading for pleasure about topics that interest them, and the interest they have in reading as an activity, were elicited in this category. It was expected that students who have high interest in reading will read frequently and become engaged readers to reap the gains thereof. Five questions, comprising items 12 to 16, contributed to this construct.

4.4.1.4 Attitudes towards reading

The joy and pleasure that students derive from reading, the perceptions that they have of reading, and the ease with which they settle down to read, as well as the importance and usefulness of reading were elicited in this category to ascertain their attitude towards reading. A positive attitude is expected to translate into high self-efficacy that will increase students' motivation and provide the intention to read. Six questions, comprising items 17 to 22, contributed to this construct.

4.4.1.5 Self-efficacy

This construct refers to students' beliefs and perceptions of their successes in reading. Questions in this category were geared towards respondents' perception of their own reading capabilities, the challenges they encounter and the confidence they have in themselves as

readers. A positive perception augurs well for reading development. A negative perception relates to poor reading ability. Self-efficacy has been known to correspond with reading ability and academic performance. Ten questions, comprising items 23 to 32, contributed to this construct.

4.4.1.6 Intrinsic motivation

Students' curiosity in reading, their involvement and their preference for challenge in reading were elicited in this category. High intrinsic motivation is said to lead to frequent and engaged reading, which leads to many gains in reading ability. Low intrinsic motivation, on the other hand, leads to infrequent reading, poor reading ability and frustration level reading. Due to research findings on the relationship between motivation and reading ability, and the fact that Guthrie and Wigfield's (2000) model is based on motivation, the items in this category were almost double the average for other categories. Thirteen questions, comprising items 41 to 53, contributed to this construct.

4.4.1.7 Extrinsic motivation

This category dealt with motivation from external influence, such as recognition and competition. It was used to determine the level of external influences, such as praise and rewards, on students' motivation for reading. Although external influences are said to lead to temporal and superficial engagement, current studies have shown that extrinsic motivation can lead to positive achievement, especially if the external influence is internalised by the reader. Extrinsic motivation assists in increasing the amount and frequency of reading. Seven questions, comprising items 54 to 60, contributed to this construct.

4.4.1.8 Reading strategies

The types of strategies that students use for comprehension were elicited in this category. Proper orchestration of appropriate reading strategies leads to high reading comprehension and high self-efficacy. Reading strategies could involve processing (cognitive) or monitoring (metacognition) strategies. The majority of the questions in this section are centred on processing strategies. Appropriate use of strategies is crucial for successful academic reading at higher (tertiary) levels. Eight questions, comprising items 33 to 40, contributed to this construct.

4.4.1.9 Reading habits

Questions in this category tapped into the frequency with which students read, at the time of filling in the questionnaire, and the type of genres that they read; whereas questions on reading experience refer to past experience with reading from childhood, reading habits refer to current reading behaviour. Research has shown that positive reading habits develop reading ability. It is expected that students who have positive reading habits will be proficient readers, whereas those with negative reading habits will be poor readers. Five questions, comprising items 61 to 65, contributed to this construct.

4.4.2 Phase 3 (2010 quasi-experimental study)

Phase 3 consisted of questionnaires and interviews as measurement tools.

Questionnaires

The same questionnaire that was used for phase 1, the 2009 exploratory study, was used for Phase 3, the 2010 quasi-experimental study. The 2010 quasi-experimental study of phase 3 was used to answer the fourth research question, on the efficacy of the intervention. The aim was to elicit students' responses on their perceived affective levels, reading habits and strategy use before and after the intervention. However, the first two sections of the pre-intervention questionnaire (*past reading experience,* which included past school and childhood reading experiences, and *social literacy,* which included family and social reading experiences) were deleted from the post-intervention questionnaire, as the questions elicited fixed past experiences, and had no bearing on the intervention. The second (i.e. post-intervention) questionnaire therefore consisted of seven sections of 56 questions (Appendix 3B). The pre- and post-intervention questionnaires were thus compared on seven categories: *interest in reading, attitudes towards reading, self-efficacy* or *perceptions of reading capability, intrinsic motivation, extrinsic motivation, reading strategies* and *current reading habits.*

Interviews

In terms of the qualitative data, semi-structured interviews (cf. § 8.2.2) that allowed students the freedom to express open-ended views to questions were conducted. These questions centred mainly around the areas of motivational teaching techniques that were used for the intervention: *learning goal, relevant texts, teacher support, competence support/strategy instruction, autonomy, collaboration, praise and rewards, humanistic learning environment,* and *extensive reading.*

4.5 Data collection

The data collection was conducted in three phases. The exploratory phase 1 data were collected via a questionnaire survey from 2258 first-year students in 2009. The quasi-experimental phase 3 data were collected in 2010 – quantitatively through questionnaires, and qualitatively through interview sessions.

4.5.1 Phase 1 (2009 exploratory study on students' needs)

The questionnaires were distributed to the *At Risk/High Risk* students during one class period. Students who were not in class on the day did not participate. Due to incorrect or incomplete data not all 2258 responses were used. Some students left out certain sections of the questionnaire; therefore, the number (N) varied from section to section. The highest number was 1816 for the sections on *reading experience* and *self-efficacy,* and the lowest number 1812 for the section on *extrinsic motivation*. Permission was sought from Academic Literacy lecturers to distribute the questionnaires to their students towards the end of their class time. The students taking the Academic Reading module completed the questionnaire at the end of their 2009 semester examination.

4.5.2 Phase 3 (2010 quasi-experimental quantitative and qualitative studies)

Students completed the pre-intervention questionnaire during one class period in the first two weeks of the first quarter. The post-intervention questionnaire was completed after the intervention, at different times, by the two groups. The *Low Risk* group completed the post-intervention questionnaire during one class period in the last week of the first quarter (7 week module), whereas the *At Risk* group completed the post-intervention questionnaire during one class period in the last lecture week of the second quarter, which is the end of the first semester (14 week module). Due to incorrect or incomplete data, a number of questionnaires could not be used. Also, since the pre- and post-intervention questionnaires had to be matched, those that could not be matched were discarded. The unmatched questionnaires resulted from the fluidity of the classes. Although students in the intervention classes were advised not to change classes, if possible, one could not prohibit new students from joining the class. There was thus a large number of post-intervention questionnaires that could not be used because there were no matching pre-intervention

questionnaires. Class registers were kept, and the responses of students who had attended less than 50% of the classes were also discarded.

In relation to the qualitative data, the initial research protocol, as expounded in the research proposal for the study, interviews would be conducted in three phases – at the beginning, during and after the intervention - in the form of case studies. Selected students were to be interviewed on three different occasions to determine their perceptions after each phase of the intervention. However, due to the fluidity of the classes, this was not feasible, and therefore interviews were conducted once off, after the intervention at the conclusion of the modules. The advantage of scheduling the interviews at the conclusion of the modules was that students did not feel inhibited to express their views or try to please the researcher, since their work had already been graded, and therefore their responses would not have any positive or negative effect on their achievement in the modules.

4.6 Data analysis

The quantitative data were analysed statistically, whereas the qualitative data were analysed in a more narrative manner. This section discusses the exploratory, quantitative data as well as the quantitative and qualitative experimental data.

4.6.1 Quantitative data (Phase 1)

The phase 1 data comprising questionnaire responses were analysed quantitatively using analysis of variance tests (ANOVA) and Cumulative Logit analysis. As a statistical method, ANOVA is used for making simultaneous comparisons between means. It is used to determine differences between groups on some variable, and determines the impact independent variables have on the dependent variable. It is the initial step in identifying factors that are influencing a given data set. Whereas one-way ANOVA tests measure significant effects of one factor only, two-way ANOVA tests measure the effects of two or more factors simultaneously. Two-way ANOVA tests do not only assess two factors in the same test, but also indicate whether there is an interaction between the factors or parameters. Thus, the one-way ANOVA determines only the main effects, whereas the two-way ANOVA determines main effects and interactions. Since there were a number of independent variables (i.e socio-affective factors) in this study, and in answering research question 1 an investigation into the relationship between the dependent and independent

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variables was required, a two-way ANOVA test was appropriate. Since the F test of the ANOVA does not indicate the differences within the variables, a post hoc Scheffé's test was used to determine which groups differ significantly within a variable (e.g. Faculty, Literacy levels). The Scheffé test is used to adjust significance levels in a linear regression analysis to account for multiple comparisons of all possible contrasts among the factor level means and not just the pair wise differences. It is useful in analysis of variance.

In addition to the ANOVA test, a Cumulative Logit analysis was applied to the data in order to determine the strongest predictor of students reading ability. Logit models estimate the probability of the dependent variable in relation to the predictor independent variables (i.e. the probability that some event happens or situation occurs in relation to another) (Torres-Reyna 2009). The probability or odds ratio of the set of socio-affective factors (i.e. predictor variables) in relation to the response variable of students reading ability, was determined by the test.

4.6.2 Quantitative data (quasi-experimental study)

Levene's test for variance was applied to the pre-intervention questionnaires to determine the homogeneity of the groups. The quasi-experimental data, comprising the pre- and post-intervention questionnaires, were analysed using t-tests, with effect sizes calculated. Both paired and independent t-tests were used for the analyses. A t-test compares two groups so that inferences could be made on the effect of an intervention. It is used to control for experimental variability. By analysing only the difference, the test corrects the sources of scatter. In other words, it compares the improvement (if any) of intervention and control classes to see if there are differences within and between the groups. The paired t-test was used to determine significant differences within the groups for pre- and post-intervention questionnaires, and the independent t-test was used to determine significant differences between the groups at the end of the intervention. Both t-tests were therefore appropriate to be used in evaluating the efficacy of the intervention.

4.6.3 Qualitative data

The qualitative data from the interviews were analysed using content analysis, by identifying main themes and patterns. The results of the interviews were to provide a useful supplement to the quantitative data and give a better understanding of the factors that influence students' learning within a socio-affective teaching approach in reading

development. Interviews were conducted with selected students from the intervention classes, and the responses were analysed qualitatively. The selection of participants for interviews was determined by their performance in the pre- and post-test on academic reading (§ 4.3).

The interview sessions were recorded as handwritten field notes and also tape-recorded and transcribed. The electronic versions were transcribed and tallied with the manual data. Summaries of the significant and relevant ideas were compiled from the two sources (see Appendices 7A and 7B). A summary of the transcriptions and written notes was preferred, as sometimes certain information provided "may not add meaning or value to the data" (Taylor-Powel & Renner 2003:2). Because the interviews became quite interactive, students sometimes provided lengthy responses that relay very little relevant information. Sometimes the relevant information that is sifted may relate to another construct and not specifically in answer to the question asked. As a result, some constructs do not have responses from all the students, and therefore the number of responses varied for each construct.

The summaries were analysed using content analysis. Taylor-Powell and Renner's (2003:2) five steps for applying content analysis to qualitative data were followed. The first step is to indicate the limitations and level of analysis. The second is to focus the analysis by (a) question or topic; or by (b) case, individual or group; or by both (a) and (b). The third step is to categorise the information by coding into identified themes or patterns, and the fourth step is to identify the patterns and connections within and between categories. The fifth and final step is to bring all the information together for interpretation.

Step 1: Limitation

The limitation concerning the data (i.e. the interviews being interactive and sometimes not yielding adequate relevant information) has been explained above.

Step 2: Focus the analysis

Data were organised both by teaching technique and by individual responses. In other words, under each teaching technique, each student's response was given. Then a summary of the responses for all the students was recorded for each teaching technique.

Step 3: Categorise information

Preset themes as well as emergent themes were used for coding. The summary of each student's response for each teaching technique was analysed by idea or theme. Categorisation was done using themes which relate to each teaching technique. Emerging themes that were significant, such as forming of friendships, were also included.

Step 4: Identify patterns and connections within and between categories

After summarising the responses, the key ideas were identified and counted. The occurrence of each theme/idea was recorded. The number of times a theme or key idea was stated or the number of students who referred to the theme/idea was counted and recorded. In coding the responses, categories were preset according to teaching techniques, the various responses to questions on a teaching technique were considered in addition to what the literature deems relevant under each teaching technique. Relationships and connections between ideas and themes were also checked for. To derive percentages, the number of students who referred to a particular theme or idea in relation to a specific teaching technique was calculated as a percentage of the total number of students who responded to questions relating to that teaching technique. For example, if the issue of explanations being a motivating factor with regard to *learning goal* was stated 9 times or by 9 students, then 9 is divided by the number of students who responded to questions on that teaching technique (e.g. 16) and multiplied by 100 to derive a percentage (56%).

Step 5: Interpretation – use themes and connections to explain the findings

The themes and connections were summarised and analysed. Next, the data were discussed and interpreted to explain the findings. The summaries of the interview responses are presented under the teaching techniques that were used in the intervention: *learning goal*, use of *relevant and significant texts, praise and rewards, competence support* in the form of strategy instruction, *teacher support, autonomy support,* and *collaboration.*

4.8 Research outline

The study was organised in four phases:

Phase 1: Obtaining and analysing data pertaining to socio-affective aspects and reading abilities, using a questionnaire and the TALL results (Research questions 1 & 2);

Phase 2: Using the results from phase 1 to design an intervention programme (Research question 3);

Phase 3: Implementing the intervention programme using a mixed methods design, which entails quantitative analysis of questionnaire data and qualitative analysis of interview data (Reseach question 4)

Phase 4: Evaluating and drawing conclusions from the results of the quantitative and the qualitative research, both separately and in relation to each other.

4.8.1 Phase 1: pre-intervention phase of research (research questions 1 and 2)

In this exploratory phase of the study, a questionnaire comprising three sections was completed by over 1,000 first-year students. The first two were to identify salient social and affective aspects pertaining to students' reading proficiency. The third section was to solicit students' use of reading strategies.

To examine the relationship between socio-affective factors and reading proficiency, a two-way ANOVA test was used to analyse the results of the socio-affective reading questionnaire and students' performance in TALL; and to identify salient socio-affective factors that best and strongly predict students' reading ability a Cumulative Logit (regression) analysis was performed, using the socio-affective reading questionnaire results and students' performance in TALL.

4.8.2 Phase 2: Designing and administering the intervention (Research question 3)

A socio-affective reading intervention programme was designed, based on survey results from the questionnaire on socio-affective factors and the theories expounded in the literature review, and implemented.

4.8.3 Phase 3: Cross intervention analyses (Research question 4)

First Levene's test for homogeneity was performed on the pre-intervention questionnaire responses to determine the comparability of the results. Then to determine the effectiveness of the intervention programme, quantitative analysis of pre- and post-intervention questionnaire responses from both intervention and control classes were done using t-tests. Paired t-tests were used to compare for differences within groups. Specifically, students' responses before and after the intervention were compared to determine if results changed after the intervention, and whether the change was statistically

significant. Independent t-tests, with effect sizes were also applied to test for differences between groups.

4.8.4 Phase 4: Evaluation and integration of analyses

As the study used a mixed methods design, primarily, explanatory, the results of the intervention were analysed and evaluated first quantitatively and then qualitatively. As suggested by Dörnyei (2010:240) and Ivankova and Creswell (2009) the two data sets should be integrated at some stage of the research process. The quantitative data is reported on in Chapter 7 and the qualitative data is reported on in chapter 8, and both sets of data are integrated in Chapter 9. A diagrammatic presentation of the processes is given in Figure 4.1 below.
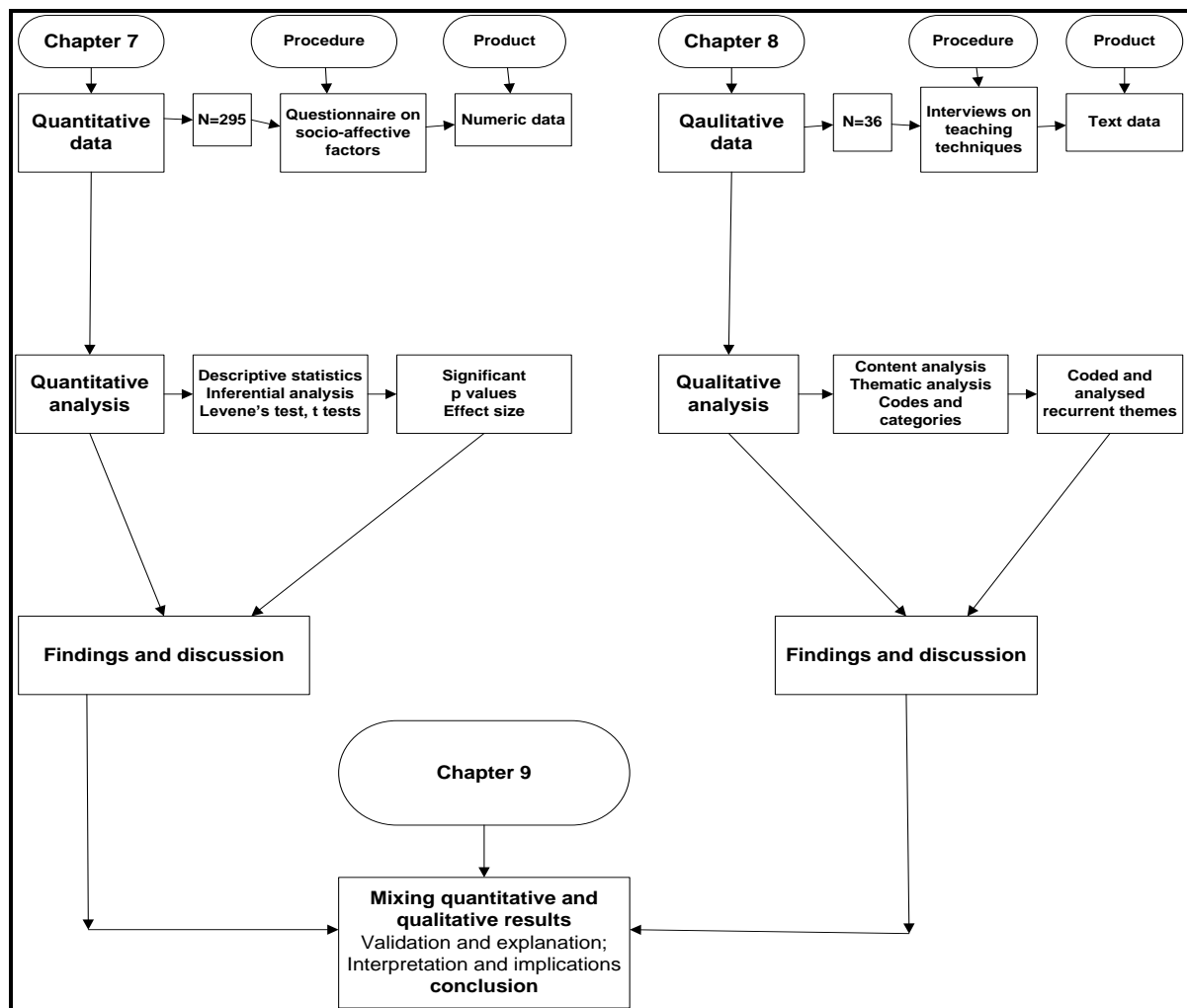
Figure 4.1: Schematic representation of the integration of quantitative and qualitative analyses

4.9 Ethical considerations

In line with Brown (2004:497) and Strydom (2002:68-73) measures were taken to ensure a fair research process in which participants were not disadvantaged. Since the research process involved tests and the use of test results, time in answering the questionnaires and the use of questionnaire answers, as well as interviews, appropriate measures were taken in each case. Informed consent forms were given to students, and further explanations were given before the onset of each activity. The informed consent forms sought students' consent for the anonymous use of their test results, questionnaire results and interview responses. Students were required to read and sign the informed consent section, which was included with the questionnaires (cf. Appendices 2A and 2B). The letter informed them about confidentiality, and assured them that they would not be disadvantaged in any way by their responses. On the other hand, students were requested to be sincere and truthful.

Students were told that the information was for research purposes only (to inform a recurriculation of the Academic Reading and Academic Literacy modules), and were also given the option to refuse participation. Consent was also sought from the lecturers who administered the questionnaires in their classes. In addition, ethical clearance was requested from the Research Proposal Committee of the Faculty of Humanities (cf. Appendix 1).

4.10 Conclusion

Having discussed the research design, and the methodological undertakings for the research, I conclude the chapter with a representation of the research outline, showing the relationships between the research questions and the data sources used to address these questions. The chapter in which each research question is discussed is mentioned, as shown in Figure 4.2 below.

Research questions		Data source	Analyses	Chapter
Research question 1		Questionnaire data	ANOVA test	Chapter 5
Research question 2		Questionnaire data	Cumulative logit	Chapter 5
Research question 3		Intervention	Programme	Chapter 6
Research question 4		Questionnaire data Pre-and post intervention	Paired and independent t-tests	Chapter 7
		Interview responses	Discourse analyses	Chapter 8
		Integration of data		Chapter 9

Figure 4.2: Alignment of research questions, data source, analyses and chapters in thesis

Chapter 5: Exploration of students' socio-affective profile

5.1 Introduction

The previous chapter presented the methodology for the research, whereas Chapter 3 discussed socio-affective factors and presented Guthrie and Wigfield's (2000) framework for developing engaged reading. Their engagement model was adapted to suit a multilingual tertiary context. For example, the demands of academic reading at tertiary level and an L2 reading component were included. In addition, the importance of students' needs was acknowledged as an important component of the adapted model (Figure 3.3).

This chapter focuses on the results of the needs analysis that was conducted in the form of a survey. The first objective of this chapter is to report on the survey questionnaire and to use the information to answer the first and second research questions (§ 1.8). The second objective is to use the analysis of the survey to assist in designing a reading programme that incorporates socio-affective factors. The survey constituted phase 1 of the research study (cf. § 4.8). The survey results were used to obtain a deeper understanding of the students' profile in relation to their socio-affective levels in academic reading. The results offered insights that were used to implement the instructional framework and classroom activities/practices, as well as to corroborate research findings from other researchers.

5.2 The exploratory survey: Phase 1

The main aim of this phase of the research was to identify and analyse the socio-affective factors influencing students' reading ability using a survey questionnaire. The survey was undertaken to determine the relationship between each of the nine socio-affective factors, as the independent variables (socio-affective factors and strategy use), and the reading profile of the target group, specifically academic reading ability, as the dependent variable. In other words, the survey sought to identify the variables that individually or interactively clarify possible differences in the reading strategies, and the social and affective reading levels of two categories of first-year students as determined by results of the Test for Academic Literacy Levels (TALL) (i.e. *High/At Risk* and *Low Risk*) at the University of Pretoria, in answer to the first two research questions:

RQ 1: Is there a significant relationship between socio-affective factors and students' academic reading ability?

RQ 2: Which socio-affective factors strongly predict tertiary students' academic reading ability?

Although the main focus of the study is on academic reading ability (operationalised by TALL results), other variables, such as gender, students' registered faculty and first/home language were included to gain a better understanding of the students' profile for the purposes of designing an appropriate reading instruction programme.

RQ 1

1a) Is there a significant relationship between each of Guthrie and Wigfield's nine socio-affective factors and students' literacy levels?

1b) Is there a significant relationship between each of the nine socio- affective factors and students' home/first language?

1c) Are there significant relationships between each of the nine socio-affective factors, and the variables of gender and students' faculty of study?

5.3 Methodology

This section describes the participants, and administering of the questionnaire.

5.3.1 Participants

As the exploratory survey results on students' needs were intended to guide the researcher in restructuring a programme that meets students' needs, it was decided that the 2009 cohort of first-year students be used for the needs survey. It would yield a large sample base, and also allow enough time for the researcher to analyse the results and restructure the reading programme for implementation in January 2010. The 2009 students who responded to the questionnaire were registered for the same modules as the 2010 students who underwent the intervention, ensuring similarity in student profile. Two groups of 2009 first-year students participated in this section of the study. One group consisted of first-year students required to take the compulsory Academic Literacy module. These students had been identified by the TALL to be at risk or at high risk of failure, as a result of

lacking crucial academic literacy abilities. Results of the TALL are expressed in the format of codes: students at level 1 are deemed to be at extremely *High Risk* scores ranging between 0 to 45, whereas the performance of those on level 2 are slightly better scores ranging between 46 to 55, but are still deemed to be *At Risk.* The total number of students who responded to the questionnaire from this group was 1168.

The other 2009 group also consisted of first year students, but who were registered for an elective module, Academic Reading, to fulfil the requirement of their respective faculties. A number of Faculties require students to register for a language-related module worth 12 credits if they were identified by TALL as having little or no risk of failure (level 4 – low risk; level 5 – negligible or no risk). The total number of students from this group who filled in the questionnaire was 1107. The combined total number of respondents was therefore 2258.

5.3.2 Procedure

Since the questionnaire was distributed to the *At Risk/High Risk* students during class, students who were not in class on the day could not participate. Furthermore, not all 2258 responses were used due to incorrect or incomplete data. Some students left out certain sections of the questionnaire; and therefore, the number (N) varied from section to section. The highest number was 1816 for the section on *reading experience* and *perceptions of reading capabilities (self-efficacy),* and the lowest number 1812 for the section on *extrinsic motivation*.

Permission was sought from Academic Literacy lecturers to distribute the questionnaires to their students towards the end of one class period. The students in the *Low Risk/No Risk* who were taking the Academic Reading module completed the questionnaires at the end of their 2009 June/semester examination. Students were informed about confidentiality, and assured that they would not be disadvantaged in any way by their responses and were asked to be sincere and truthful. They were told that the results would be used to inform a restructuring of the Academic Reading and Academic Literacy modules.

5.3.3 Measurement tool/instrument (questionnaire)

The questionnaire consisted of a 5-point-likert scale (positive to negative), comprising 65 questions divided into nine categories corresponding with the social and affective factors discussed under section 3.2 in Chapter 3 and again in 4.4.1. These categories were used as independent variables in relation to students' literacy levels, which was the dependent variable. Students' literacy levels were determined by TALL. Other variables were students' registered faculty, gender and home language. The nine categories consisted of eight socio-affective factors *(reading experience, social reading environment/social literacy, interest, attitude, perceptions of reading capabilities/self-efficacy, intrinsic motivation, extrinsic motivation, reading habits)*; and a cognitive/metacognitive factor (*strategy use*) as laid out in the questionnaire, which is included as Appendix 3A. The details pertaining to the categories in the questionnaire are discussed in detail with relevant literature in Chapter 4, under research instruments (cf. § 4.4).

5.3.3.1 Reading experience

Questions in this category probed respondents' past experience with reading in the home, at school and on a personal level. Six questions comprising questions 1 to 6 contributed to this construct.

5.3.3.2 Reading in the social environment/social literacy

This category sought to elicit students' reading in the social context, with family members, friends and the wider community. Five questions, comprising questions 7 to 11, contributed to this construct.

5.3.3.3 Interest in reading

Students' reading for pleasure about topics that interest them, and the interest they have in reading as an activity, were elicited in this category. Five questions, comprising items 12 to 16, contributed to this construct.

5.3.3.4 Attitudes towards reading

The joy and pleasure that students derive from reading and the ease with which they settle down to read, as well as the importance and usefulness of reading, were elicited in this category to ascertain students' attitude towards reading. Six questions, comprising items 17 to 22, contributed to this construct.

5.3.3.5 Self-efficacy

This construct refers to students' perceptions of their reading ability. Questions in this category were geared towards respondents' judgements of their reading capabilities, the challenges they encounter and the confidence they have in themselves as readers. Ten questions, comprising items 23 to 32, contributed to this construct.

5.3.3.6 Intrinsic motivation

Students' curiosity in reading, their involvement and their preference for challenge in reading were elicited in this category. Thirteen questions, comprising items 41 to 53, contributed to this construct.

5.3.3.7 Extrinsic motivation

This category dealt with motivation deriving from external influence, such as recognition and competition. Seven questions, comprising items 54 to 60, contributed to this construct.

5.3.3.8 Reading strategies

The types of strategies that students use for comprehension were elicited in this category. Reading strategies could involve processing (cognitive) or monitoring (metacognition) strategies. The majority of the questions in this section were centred on processing strategies. Eight questions, comprising items 33 to 40, contributed to this construct.

5.3.3.9 Reading habits

Questions in this category tapped into the frequency with which students at the time of filling in the questionnaire read, and the type of genres that they read. Five questions, comprising items 61 to 65, contributed to this construct.

5.4 Results

The results of the study, presented below, have been derived from responses to the questionnaire in relation to the above socio-affective variables. Statistically, the internal reliability of the nine groupings was obtained using a Cronbach's alpha measurement. Responses were consistent in each category (Cronbach's alpha not less than 0.7 for each category); therefore the aggregate responses for each socio-affective factor were used instead of responses to each individual question.

First, descriptive statistics are presented, followed by inferential statistics on the survey results in an attempt to answer the first and second research questions. The descriptive statistics give a general overview of the results, whereas the inferential statistics show the statistical relationships between the variables and provide answers to research questions 1 and 2.

5.4.1 Descriptive statistics

Table 5.1 presents the profile of the students with regard to the variables of gender, home language and registered faculty in relation to the dependent variable of literacy levels. As shown in the table below, there were almost twice as many females (N=1145) as there were males (N=671). This indicates that the females outnumbered the males registered for this module. The majority of the students were registered in the Faculty of Economics and Management Sciences (EMS) (N=896), with *Low Risk* students on literacy level 4 (N=806) comprising almost half of the total number of first year students who responded to the questionnaire. Students who spoke English (Eng) or Afrikaans (Afr) as a first language were almost equal in number (Eng N=486; Afr N=495). However, the indigenous South African languages (ISAL) speakers were in the majority (N= 650). Interestingly, but not surprising, the first language (L1) speakers of English or Afrikaans were mostly in the *Low Risk* group, at literacy level 4. In the *No Risk* group, literacy level 5, English first language speakers were the majority (N=125). Although ISAL students were on the whole in the majority, only 16 tested at level 5 (*No Risk*) and 136 at level 4 (*Low Risk*). The majority of the 650 ISAL students were in the *High Risk* and *At Risk* groups (levels 1 and 2). The distribution is shown in Table 5.1 below:

Table 5.1 Distribution of literacy groups

Literacy level	1 High Risk	2 At Risk	3 Borderline	4 Low Risk	5 No Risk	Total
Gender						
F	139	294	91	507	114	**1145**
M	81	145	57	299	89	**671**
Faculty						
EMS	69	163	57	490	117	**896**
EBIT	56	76	25	36	10	**203**
Humanities	52	116	43	141	30	**382**
Law	15	37	10	51	15	**128**
NAS	28	47	13	88	31	**207**
Home language						
English	18	36	9	298	125	**486**
Afrikaans	29	75	35	308	48	**495**
ISAL	140	272	85	137	16	**650**
Other	33	56	19	63	14	**185**
Total	**220**	**439**	**148**	**806**	**203**	**1816**

EMS: Economics and Management Sciences
EBIT: Engineering, the Built Environment and Information Technology
Humanities: Human Sciences
Law: Law
NAS: Natural and Agricultural Sciences

Tables 5.2 and 5.3 below provide summary statistics of literacy groups and language groups in relation to the nine socio-affective variables.

Table 5.2: Descriptive statistics (means and standard deviations) for literacy groups in relation to socio-affective variables

Literacy level	1 High Risk	2 At Risk	3 Borderline	4 Low Risk	5 No Risk
Factors	**Mean SD**	**Mean SD**	**Mean SD**	**Mean SD**	**Mean SD**
Experience	2.50 (0.87)	2.43 (0.75)	2.35 (0.87)	1.94 (0.67)	1.70 (0.55)
Social literacy	2.77 (0.81)	2.78 (0.73)	2.75 (0.72)	2.59 (0.73)	2.43 (0.81)
Self-efficacy	2.44 (0.77)	2.38 (0.72	2.19 (0.67)	2.09 (0.69)	1.75 (0.57)
Interest	2.09 (0.86)	2.14 (0.82)	2.17 (0.78)	2.08 (0.83)	1.75 (0.77)
Attitude	1.96 (0.75)	1.95 (0.72)	1.94 (0.69)	1.93 (0.67)	1.69 (0.61)
Int motivation	2.38 (0.68)	2.49 (0.66)	2.44 (0.62)	2.39 (0.69)	2.06 (0.64)
Ext motivation	2.61 (0.86)	2.58 (0.81)	2.62 (0.91)	2.85 (0.89)	2.77 (0.97)
Strategy use	2.25 (0.72)	2.37 (0.61)	2.35 (0.68)	2.53 (0.60)	2.47 (0.53)
Reading habits	2.65 (0.64)	2.62 (0.67)	2.62 (0.67)	2.64 (0.63)	2.48 (0.64)

Means with standard deviations (SD) in brackets are given for each socio-affective factor and literacy group. Means below 2 are considered low and rated positive, whereas means above 2 are considered high and rated negative.

With regard to the first row of Table 5.2, the means show an alignment with literacy groups. In other words, students with poor reading experience (high mean, indicative of negative responses) were in the *High/At Risk* group, whereas students who have had a

relatively better past reading experience (low mean, indicative of positive responses) were in the *Low/No Risk* group. This indicates that poor reading experience is related to low literacy levels, and rich reading experience corresponds with high literacy levels. The means for *social literacy, self-efficacy, current reading habits* and *attitude* were also aligned with the literacy groups. This shows that the poorer the social literacy, the lower the self-efficacy, and the more negative the reading habits or attitude of the students towards reading; the lower the literacy level. Similarly, the richer the social literacy, or the higher the self-efficacy, or the more positive the reading habits of students and their attitudes towards reading; the higher their literacy level and reading proficiency. The means for literacy levels 2, 3, 4 and 5 show that students' interests and intrinsic motivation were also aligned with their literacy levels. However, it is interesting to note that students at *High Risk*, level 1, had relatively higher interest (relatively lower mean, 2.09) than those *At Risk*, level 2, (M=2.14) and the borderline group on level 3 (M=2.17); and relatively higher intrinsic motivation (relatively lower mean 2.38) than those on level 2 (M=2.49), 3 (M=2.44), and 4 (M=2.39). Also worthy of note is the relatively better reported strategy use (shown by the relatively lower mean 2.25) of the *High Risk* students compared to the relatively poorer strategy use (shown by relatively higher means) indicated by the students in the other groups.

On the whole, besides the low mean figures (indicating positive responses for all the literacy levels) for the affective factor *attitude towards reading*, students' responses were negative, as shown in the high means that are above 2 for the other socio-affective factors. Students in the *No Risk* group, level 5, however, are distinct from students in the other literacy groups, as they indicated positive responses for four of the nine socio-affective factors: *experience, self-efficacy, interest,* and *attitude.*

Table 5.3 below presents the means and standard deviations for the socio-affective variables in relation to language groups.

Table 5.3: Descriptive statistics (means and standard deviations) for language groups in relation to socio-affective factors/variables

Language groups	English M (SD)	Afrikaans M (SD)	ISAL M (SD)	Other M (SD)
Factors				
Experience	1.81 (0.53)	1.88 (0.63)	2.54 (0.84)	2.25 (0.74)
Social literacy	2.57 (0.75)	2.53 (0.74)	2.82 (0.77)	2.67 (0.69)
Self-efficacy	1.99 (0.67)	2.18 (0.74)	2.28 (0.72)	2.25 (0.77)
Interest	2.06 (0.86	2.18 (0.89)	2.01 (0.75)	2.02 (0.83)
Attitude	1.92 (0.67)	2.01 (0.75)	1.85 (0.65)	1.87 (0.70)
Int motivation	2.32 (0.71)	2.47 (0.74)	2.38 (0.61)	2.33 (0.66)
Ext motivation	2.78 (0.93)	2.91 (0.93)	2.58 (0.81)	2.65 (0.85)
Strategy use	2.53 (0.57)	2.59 (0.64)	2.27 (0.62)	2.36 (0.59)
Reading habits	2.63 (0.63)	2.69 (0.68)	2.56 (0.63)	2.57 (0.60)

Means (M) with standard deviations (SD) in brackets are given for each socio-affective factor and language group

The means given in the table show that *attitude* is the only socio-affective factor that elicited positive responses in all language groups: the highest mean, least positive (2.01) for Afrikaans L1 students and the lowest mean, most positive (1.85) for the ISAL L1 group. Besides *attitude*, other socio-affective factors were distributed as follows: For the social factor *past reading experience,* English and Afrikaans students displayed positive responses (English mean: 1.88; Afrikaans mean: 1.88), whereas the ISAL and 'Other' groups displayed negative responses (ISAL mean: 2.54; 'Other' mean: 2.25). The standard deviation for English L1 speakers was .53 compared to the ISAL group that registered .84, indicating a more convergent response from the English L1 group, and a wider variation in the ISAL group. Responses to *social literacy* were negative across language groups. ISAL students were the most negative, displaying the highest mean of 2.82. English L1 students indicated the highest *self-efficacy*, whereas the ISAL group recorded the lowest.

Interestingly, the ISAL L1 speakers, the majority of whom were in the *At Risk* and *High Risk* groups, recorded the most positive interest in reading among the four language groups. Students' intrinsic motivation was low across all language groups. However, English L1 students displayed relatively higher motivation (lowest mean of 2.32). Students indicated very low extrinsic motivation across all language groups. ISAL L1 speakers showed relatively better extrinsic motivation (Lowest mean of 2.58). It seems that ISAL students are relatively more susceptible to extrinsic motivation than the members of English and Afrikaans groups. Surprisingly, students across all language groups scored

low on the cognitive/metacognitive factor of strategy use. In other words, all students indicated negative responses for strategy use. It is also surprising that the ISAL group, indicated the least negative strategy use compared to the other language groups. The theory that poor readers use few and inappropriate strategies, and proficient readers use a combination of strategies, did not seem to apply to this cohort of students. However, there may be other reasons for these unexpected results. These are self-report responses and it could also be that since weaker students are more likely to provide socially acceptable responses, these students may have been giving responses that they deemed to be acceptable. Self-reporting on strategy use is also not equivalent to effective strategy use.

On the whole, students indicated negative reading habits. Afrikaans L1 students displayed the most negative reading habits (M=2.69) and ISAL speakers the least negative (M=2.56). A probable reason for the Afrikaans students' negative reading habits could be from the kind of Afrikaans literature they read as children. Afrikaans students perceive Afrikaans texts read in school as old-fashioned, boring, biased and ideologically depressing (Grobbler, personal communication, August 2012)

English L1 students were the most positive on socio-affective factors, displaying means below 2.0 for three socio-affective factors. This group of students were also in the majority in the *No Risk* group, literacy level 5. Besides reading experience, Afrikaans L1 students were low on socio-affective factors compared to English LI students. Although one would expect the Afrikaans L1 group to display more positive affective factors than the ISAL group, since many of them were in the *Low/No Risk* group, their socio-affective ratings were lower than those of the ISAL group on five of the nine socio-affective factors. Besides attitude, the 'Other' group responded consistently negative on socio-affective factors and strategy use.

5.4.2 Inferential statistics

The results of the descriptive data given above in some way assisted in answering research question 1 (What is the relationship between socio-affective factors and students' academic reading ability?). However, inferential statistics give more definite results and are used together with the descriptive data above to answer question 1 and the sub-questions derived from it.

A two-way analysis of variance (ANOVA) was used to explore the relationship between the dependent variable, literacy groups/levels, and the independent variables, socio-affective factors. An ANOVA was also performed on the mediating variables: *gender, faculty, first language* and the nine independent variables of students' *reading experience, social literacy, interest, attitude, intrinsic* and *extrinsic motivations, self-efficacy, reading habits* and *strategy use*. Only two-way interactions were used, as three- and four-way interactions contained sparse data. The main effects of the significant results are discussed, together with the results of Scheffe tests, which were used for multiple comparisons. Graphical representations are used to further explain the interacting factors. A summary of the results are given and significant results (main effects and interactions) are discussed: first for literacy groups and language groups, thereafter for faculty and gender.

5.4.2.1 Reading experience

This factor proved to be statistically significant in relation to the dependent variable of literacy groups: $F(4)=4.92$, $p=0.0006$. Employing the Scheffe test, significant differences were found between *High/At Risk* (levels 1, 2, 3) and *Low/No Risk* (levels 4 and 5) students, but not within *High/At Risk* groups. The responses of *High/At Risk* students were negative (average mean 2.6) for *reading experience* compared to the *Low/No Risk* students on levels 4 and 5 (average mean 1.8). Responses of students on level 4 were also significantly different from the responses of those on level 5. This is understandable, as the margin for level 4 is much wider, with scores ranging from 55% to 74% (cf. § 4.3.1). On average, students on level 4 were less positive than those on level 5, who were most positive in their responses to *reading experience*. The results of a Scheffe test for multiple comparisons are shown in the Table 5.4 below.

Table 5.4: Scheffe groupings and mean scores for literacy levels in relation to reading experience

Scheffe Grouping	Mean	N	Literacy level/group
A	2.50	220	1 High Risk
A	2.43	439	2 At Risk
A	2.34	148	3 Borderline
B	1.93	806	4 Low Risk
C	1.70	203	5 No Risk

The results confirm the effect of previous reading experience on students' current reading ability. In other words, students whose past reading experience is poor demonstrate poor

academic reading ability at tertiary level. This is shown in their low academic literacy levels. On the other hand, students who had rich past reading experience are at a higher academic literacy level and are more likely to succeed at tertiary level. The results therefore show a relationship between past reading experience and academic reading abilities.

In relation to language groups and *reading experience*, the ANOVA test showed significant differences: $F(3)=28.41$, $p<.0001$. ISAL students indicated the most negative reading experience. English and Afrikaans L1 students had positive reading experiences, though English L1 speakers were more positive, as demonstrated by the mean scores in Table 5.5.

Table 5.5: Scheffe grouping and mean scores for first/home language in relation to reading experience

Means with the same letter are not significantly different			
Scheffe Grouping	Mean	N	Home/first language
A	2.54	650	ISAL
B	2.24	185	Other
C	1.87	495	Afrikaans
C	1.80	486	English

An interaction with faculty showed Afrikaans L1 speakers in the EBIT faculty to be the most positive. In the Law faculty students with English as L1 indicated the most positive reading experience, whereas Afrikaans L1 students in the same faculty indicated negative responses. Although the ISAL speakers in this group on the whole were the most negative, the variation between them and the L1 speakers of 'other' languages was most marked in the Humanities and Natural Science faculties. It is interesting to note that in the Law faculty the 'Other' group, consisting of languages outside South Africa, were more positive than the Afrikaans group. Also worthy of note is the fact that the ISAL L1 speakers, who were the most negative in all faculties, showed the least negative responses in the Law faculty. Since the females in the law faculty showed a markedly more positive response than the males, and ISAL students on level 5 were the most positive, it could be assumed that there were more level 5 ISAL L1 females than males in the Law faculty. The interactions are shown in Figure 5.1 below.
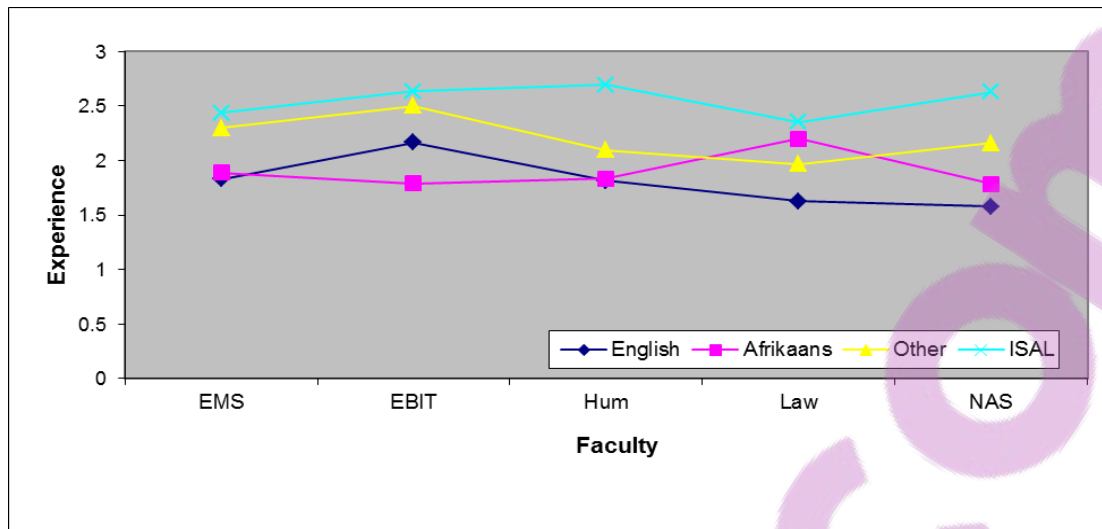
Fig 5.1: Interaction between faculty and home/first language with regard to students' reading experience

5.4.2.2 Social literacy/social reading environment

There seems to be no significant relationship between social literacy and reading ability, as ANOVA results did not show any statistical significance between students' literacy groups. However, significant results were shown for home language groups in relation to social literacy, which point to an indirect relationship between social literacy and reading ability. This is due to the fact that most ISAL speakers are in the *At Risk/High Risk* groups, and most Afrikaans and English L1 students are in the *Low/No Risk* groups. As a result, an underlying relationship between social literacy and reading ability (literacy levels) could be assumed. Statistically significant results were shown for social literacy and students' home language $(F(3)=4.08, p=0.0067)$. That is, poor *social literacy*, as indicated by ISAL students, indirectly corresponds with poor reading ability.

Students were inclined to rate their social reading environment as poor (high means). However, ISAL L1 students were most negative, whereas Afrikaans and English L1 groups were less negative and significantly different from the ISAL L1 group. In sum, as shown by ANOVA test results, students were overall negative, indicating a generally poor social reading environment.

Interaction between L1 and faculty showed significant results: $F(12)=2.48, p= 0.0032)$, and ISAL L1 students, especially those in the Humanities, were the most negative. These students indicated the lowest levels of social literacy. Since most students on levels 1 and 2

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(*High Risk and At Risk*) are from the ISAL L1 group, it can be assumed that poor reading ability is associated with low social literacy.

5.4.2.3 Perceptions of reading capabilities (self-efficacy)

ANOVA analysis showed a statistically significant relationship between literacy groups and students' *self-efficacy: F*(4)=8.84, *p* <.0001. This significance points to a robust relationship between self-efficacy and reading ability: the lower the literacy level of the student, the lower the self-efficacy. Literacy levels of students interacted with their home language (F(12)=1.77, p= 0.0473). The significant main effects and interactions are discussed below.

First, students in the *High Risk* (level 1) and *At Risk* (level 2) groups were not statistically different from each other in their responses to self-efficacy. Likewise, the borderline group (level 3) showed similarities with the *At Risk* (level 2) and *Low Risk* (level 4) groups on this affective factor. The fact that level 3 students were similar to level 2 *(At Risk)* students and also to level 4 (*Low Risk*) students confirms the borderline status of level 3 students (cf. § 4.3.1). Level 5 (*No Risk*) students were statistically different from students on the other four levels, which confirms their relatively higher academic literacy levels, as they are deemed to be academically literate with no risk of failure.

These results confirm the levels of the academic literacy test in relation to students' reading ability, and also indicate that the levels of students' self-efficacy are aligned to their reading ability. Students on level 5 usually achieve 75% and above in TALL (cf. §4.3.1). From the survey, these students showed highly favourable levels of self-efficacy. Students on level 4 are in the majority (N= 807) and usually fall within a wide margin (approximately 53% – 74%) (cf. § 4.3.1) This means that students on level 4 share characteristics with those on level 5 (strong reading ability) and with those on level 3 (average reading ability). The wide range of students on level 4 could have contributed to their responses being significantly different from level 5, but similar to level 3.

Students on levels 1 and 2 are deemed to be *At Risk or High Risk* of failure academically, according to TALL. Survey results show these students to have the lowest levels of self-efficacy. In other words, students on both levels responded negatively to statements on perceptions of their reading capabilities. They indicated the poorest perceptions of reading

capabilities. The responses of these students to statements on their self-efficacy corresponded to their reading ability, as indicated by TALL. Specifically, the survey showed that students who indicated that they were struggling readers and had the poorest perceptions of their reading capabilities were those on level 1, followed by students on level 2, then 3, then 4 and finally 5, as shown in TALL results. A clear relationship exists between students' perceptions of their reading capabilities and their actual reading ability, as presented in their TALL results ($F(4)=8.48, p=<0001$). Students with poor reading ability have negative perceptions of their reading capabilities, and therefore low self-efficacy. The Scheffe grouping in Table 5.6 below and the corresponding means illustrate this hierarchical relationship.

Table 5.6: Scheffe grouping and mean scores for literacy levels in relation to self-efficacy

Means with the same letter are not significantly different				
Scheffe Grouping		**Mean**	**N**	**Literacy level/group**
	A	2.43	220	1 (High Risk)
B	A	2.37	439	2 (At Risk)
B	C	2.19	148	3 (Borderline)
	C	2.09	806	4 (Low Risk)
	D	1.75	203	5 (No Risk)

The responses on perceptions of reading capabilities in relation to literacy levels interacted with students' first language. Students who spoke an ISAL as home language and who were mostly in the *High Risk* group indicated the lowest levels of self-efficacy. Although on the whole, the *High Risk* group responded negatively to perceptions of their reading capabilities, English and Afrikaans L1 speakers in this group were less negative in their responses than ISAL speakers. However, among the *At Risk* students, the Afrikaans speakers were the most negative. It is interesting to note that for students on level 5 (*No Risk*) the ISAL group were the most positive in their responses to perceptions of their reading capabilities, compared to their Afrikaans and English counterparts. A marked difference is shown on level 3: the English L1 speakers showed markedly high perceptions of their reading capabilities in comparison with the other three language groups. The interactions relating to students' responses to their self-efficacy are shown in Figure 5.2 below.
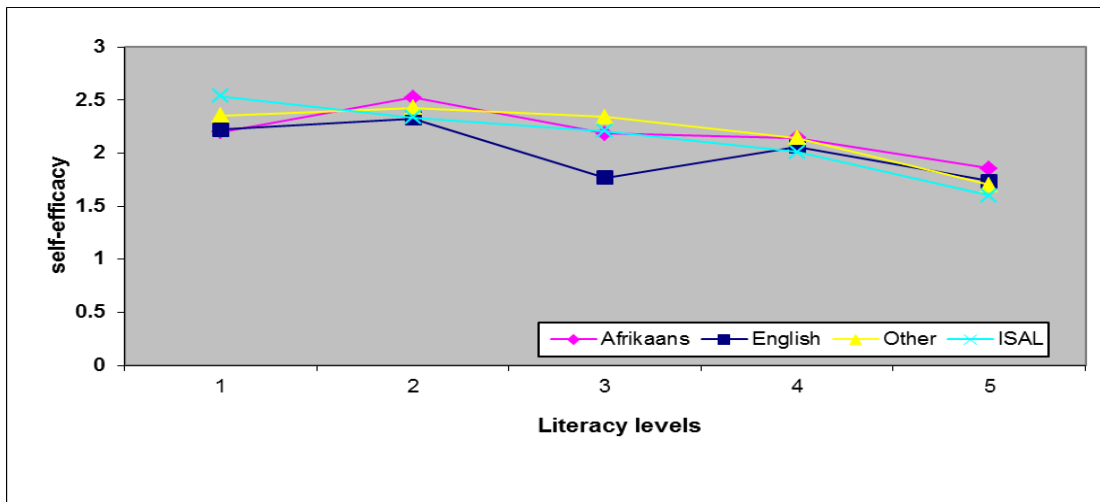
Fig 5.2: Interaction between literacy levels and students' home/first language in relation to their self-efficacy

5.4.2.4 Interest in reading

For this affective factor, the results of the ANOVA test showed that the relationship between students' interest in reading and their reading ability was statistically significant $(F(4)=5.14, p=0.0004)$. Students on levels 1, 2, 3, and 4 were negative in their responses, indicating low interest in reading, whereas students on level 5 were positive, indicating high interest in reading. This shows that students who are on a high academic literacy level (75% +) are generally students who are interested in reading. Thus, interest in reading corresponds with high reading ability for this cohort of students. It is surprising that students on levels 2 and 3 have lower interest in reading than those on level 1. For students on level 1, the level of interest did not correspond with their reading ability as indicated by TALL test results. This confirms Schiefele's (1992:176) findings that cognitive process variables mediate the effect of interest on academic achievement. However, considering the literacy groups on the whole, students' interest in reading corresponds to their reading ability, as shown in the Scheffe test results and mean scores in Table 5.7 below.

Table 5.7: Scheffe grouping and mean scores for literacy groups and interest

Means with the same letter are not significantly different			
Scheffe Grouping	Mean	N	Literacy level/group
A	2.16	148	3 borderline
A	2.14	438	2 At Risk
A	2.08	220	1 High Risk
A	2.08	806	4 Low Risk
B	1.74	203	5 No Risk

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Students' reading interest in relation to their home language was also statistically significant (F(3)=6.52, p=0.0002). On the whole, students responded in the negative (i.e. had low reading interest) across all language groups. However, Afrikaans L1 speakers had the lowest interest. The ISAL students were the least negative in their responses to reading interest. It is possible that interest in this regard may have been interpreted as aspirations. It is also possible that ISAL students may have given socially desirable answers, as weaker students have been shown to yield to desirability effects (Pretorius 2000:223). Surprisingly, the Afrikaans and English L1 speakers who indicated relatively better reading experiences, indicated lower interest than the ISAL group that had recorded negative reading experiences. These differences in home language groups showed significant interaction with faculty (F(12)=2.09, p=0.0148), in that there were marked differences in interest levels of different L1 groups in the Law faculty. For instance, the Afrikaans L1 students had the lowest levels of reading interest in the Law faculty and were markedly different from the ISAL group in this faculty. The ISAL Law group also had markedly lower interest levels than the English L1 group. The 'Other' L1 group had relatively higher interest levels compared to the L1 groups in this faculty. The distribution and interactions are shown in Figure 5.3 below.
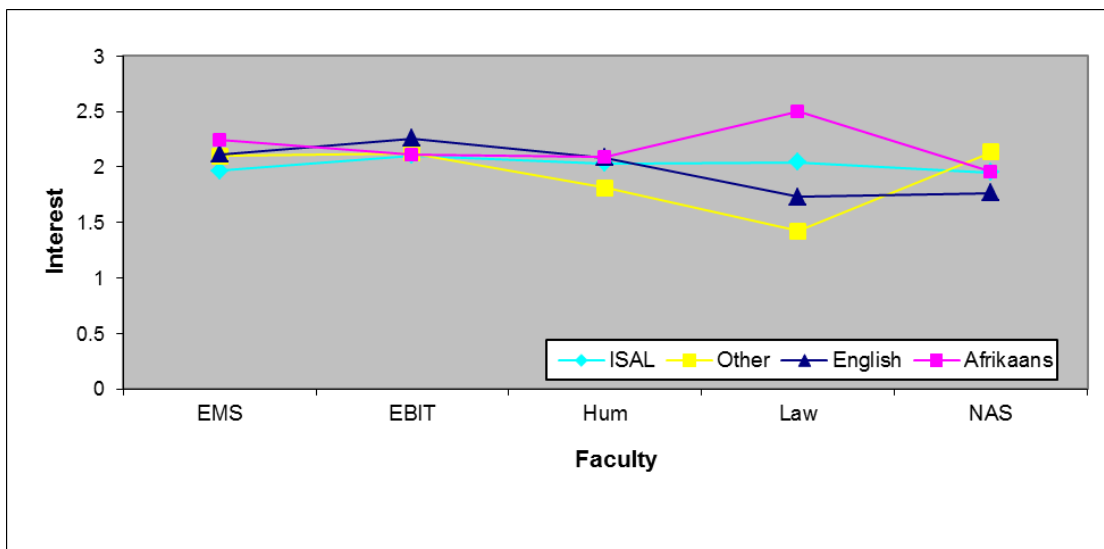
Fig 5.3: Interaction between students' faculty and their home language in relation to their interest in reading

5.4.2.5 Attitude towards reading

The ANOVA test for this factor did not show any significant results between literacy levels and students' attitude towards reading. There is therefore no direct relationship between reading ability and students' attitude towards reading for this cohort of students. However, statistically significant results were shown for home language groups and attitude (F(3)=7.58, p <.0001). As a result, an indirect relationship between literacy levels and attitude could be assumed. The Afrikaans L1 group demonstrated a negative attitude, whereas the other three L1 groups were positive in their attitude: ISAL L1 students were most positive and English L1 students least positive. The positive response from the ISAL L1 group, in contrast to the low reading ability of most ISAL students, could be associated with the mediating factor of intention, as explained by Mathewson. He states that "a positive attitude only results in reading if other influences favouring formation of positive intentions to read are present" (Mathewson 2004:1436). Another explanation could be the purposes which ISAL and Afrikaans L1 students attach to reading. These issues are discussed in more detail within the main discussion section.

The two-way ANOVA test showed interaction between first language and faculty, similar to that shown for interest. The responses were consistent across faculties, except for Law. Law students in the 'Other' group, together with English L1 group, indicated positive attitudes, and showed marked differences from the ISAL Law students, who showed fairly negative attitudes. The Afrikaans Law group, however, differed markedly from the other three L1 groups and indicated very negative attitudes towards reading. There seems to be no justifiable explanation for the negative attitude of the Afrikaans L1 speakers in the Law faculty, except that the negative attitude could have been levelled towards the reading of English texts, probably legal texts. This is an area for further investigation. The interactions are shown in Figure 5.4 below.
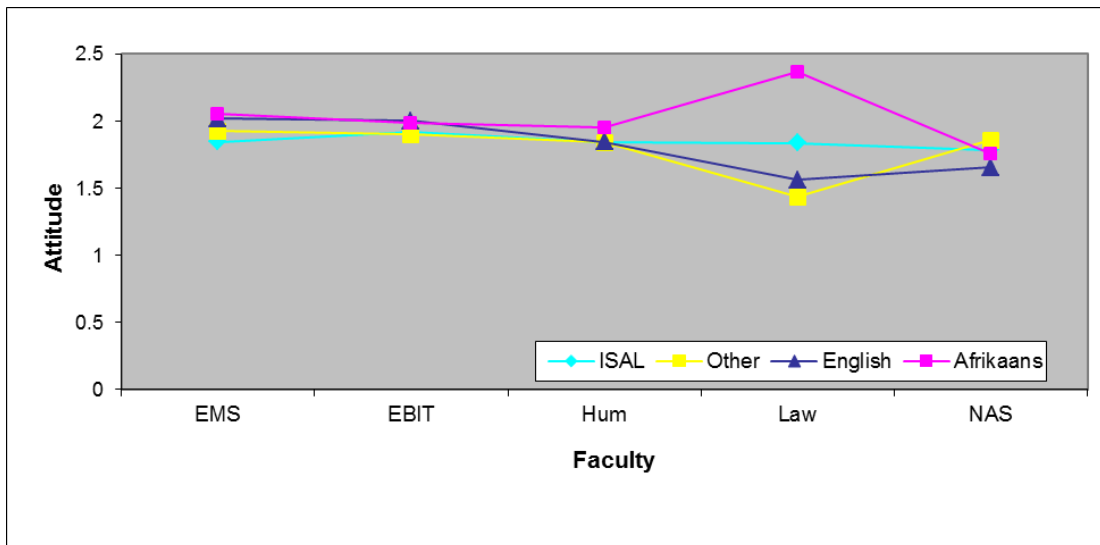
Fig 5.4: Interaction between students' faculty and home language in relation to their attitudes towards reading

5.4.2.6 Intrinsic motivation

As an important affective factor in this study, intrinsic motivation was shown to demonstrate a statistically significant relationship with reading ability: $F(1)=11.15$, $p<.0003$. The intrinsic motivational levels of the students were low for all literacy groups, as shown by the mean figures in Table 5.8 below.

Table 5.8: Scheffe grouping and mean scores for literacy codes on intrinsic motivation

Means with the same letter are not significantly different			
Scheffe Grouping	**Mean**	**N**	**Literacy level (group)**
A	2.49	439	2 (At Risk)
A	2.44	148	3 (Borderline)
A	2.39	805	4 (Low Risk)
A	2.37	220	1 (High Risk)
B	2.06	203	5 (No Risk)

Students on level 5 indicated the highest motivation among the groups. This group was significantly different from the other groups of students. Students on level 2 indicated the lowest motivation. It is interesting to note that students on level 1, extremely *High Risk*, indicated relatively higher motivation than students on levels 2, 3 and 4. This was unexpected, as poor reading ability is usually associated with low motivational levels, and vice versa. A possible reason for this unexpected result from level 1 students could be that

students may have misinterpreted the motivational questions or had given socially acceptable responses, as in their responses to reading interest. Another probable reason could be that although poor readers (as determined by TALL and also from their responses to reading experience, and self-efficacy), these *High Risk* students on level 1 have the desire and the motivation to improve on their reading proficiency. However, with regard to students on levels 2, 3, 4 and 5 a significant relationship exists between reading ability and intrinsic motivation, as shown by the hierarchical progression of the mean figures and the Scheffe test results in the above table. Except for students on level 1, the mean figures for the other groups showed that the lower the motivational level, the lower the reading ability, confirming the widely held view that low motivation corresponds with low reading ability. This refers to the 'Matthew effect', applied to reading ability by Stanovich (1986) and confirmed by Pretorius (2000) and others. In essence, the rich get richer and the poor get poorer in terms of reading ability – a cycle that is mediated by motivation.

Besides this direct relationship between reading ability and intrinsic motivation, students' first language also showed a relationship with motivation, indicating an indirect relationship between reading ability and motivation.

In relation to the L1, motivation was low for all language groups. However, the motivational level of ISAL and 'Other' L1 groups were significantly different from the Afrikaans and English L1 groups. Similarly, the Afrikaans L1 group and the English L1 group were significantly different from each other. Afrikaans speakers had the lowest motivation (again, this might be a response towards English texts, as a number of them receive tuition in Afrikaans and the questionnaire was in English). English L1 students reported the highest motivation compared to the other language groups. The Scheffe test for multiple comparisons shows these differences in Table 5.9 below.

Table 5.9: Scheffe grouping and mean scores for first language on intrinsic motivation

Means with the same letter are not significantly different				
Scheffe Grouping		**Mean**	**N**	**Home/first language**
	A	2.47	494	Afrikaans
B	A	2.37	650	ISAL
B	A	2.33	185	Other
B		2.31	486	English

5.4.2.7 Extrinsic motivation

ANOVA tests did not show a statistically significant relationship between extrinsic motivation and reading ability. Responses to statements on extrinsic motivation were statistically significant for home language (F3)=3.82, p=0.0096). Although overall responses were negative, indicating low extrinsic motivation among students, Afrikaans L1 students had the lowest extrinsic motivation followed by English L1. Both English and Afrikaans L1 students were significantly different from ISAL L1 students who had a relatively high extrinsic motivation. The mean figures and the Scheffe test results for the differences are shown below.

Table 5.10: Scheffe groupings and mean scores for first language on extrinsic motivation

Means with the same alphabet are not significantly different				
Scheffe Grouping		Mean	N	First/home language
	A	2.90	493	Afrikaans
B	A	2.78	485	English
B	C	2.64	185	Other languages
	C	2.57	649	ISAL

The consistent low motivational levels (intrinsic and extrinsic) shown by the students, especially Afrikaans students, point to the need for a reading programme that vigorously addresses this shortfall or inadequacy

5.4.2.8 Strategy use

Overall, the responses for this cognitive and metacognitive factor were negative. ANOVA tests did not show any statistically significant differences between reading ability and strategy use.

However, students' home language showed statistically significant differences with regard to strategy use (F(3)=9.07, p<.0001). Although students on the whole used poor reading strategies, the Afrikaans and English L1 students indicated a more inappropriate use of strategies than ISAL and 'Other' L1 groups. This may seem contradictory, as Afrikaans and English L1 groups indicated more favourable reading experiences, had better perceptions of their reading capabilities than the ISAL L1 group, and most of them were

on levels 4 and 5 (*Low or No Risk*). A possible explanation for proficient readers not using strategies explicitly is given by Brunfaut (2008). She found that students who use certain support strategies, such as underlining, annotating, etc., when reading academic texts, understand the texts less well than students who do not use them. She argues that potentially, there is a certain comprehension threshold, below which students apply support strategies. "Students who have crossed this threshold no longer apply them" (Brunfaut 2008: 402). However, questions for this study comprise not only support strategies, but processing and metacognitive strategies, which students are expected to use for successful comprehension of texts. Nevertheless, the responses, as shown in the mean results given in the table below, point to a general lack of appropriate strategy use, which should be addressed in reading instruction. Scheffe test results for multiple comparisons are shown in Table 5.11 below.

Table 5.11: Scheffe groupings and mean scores in strategy use for first language groups

Means with the same letter are not significantly different			
Scheffe Grouping	**Mean**	**N**	**Home/first language**
A	2.59	493	Afrikaans
A	2.53	486	English
B	2.35	185	Other
B	2.26	650	ISAL

The results show that on the whole this cohort of students use inappropriate reading strategies, as shown in the high mean figures.

5.4.2.9 Reading habits

ANOVA tests did not show a direct significant relationship between students' reading habits and their reading ability. However, responses to reading habits were statistically significant for home language groups (F(3)=4.14, p=0.0062). A statistically significant interaction was also shown between literacy levels and home language (F(12)=1.91, p= 0.0294), pointing to an indirect relationship between reading ability and reading habits.

On the whole, students demonstrated negative reading habits. Afrikaans L1 students reported the most negative reading habits, which were highly marked for levels 2 and 3, and which was significantly different from the ISAL and 'Other' groups. Although

students' reading habits were negative in all language groups, ISAL students on level 5 showed markedly better reading habits. A probable explanation to this could be that these students had done most of their reading in English and therefore those who reported positive reading habits possessed good reading skills in English. Since the ISAL group rarely read in their first language, those who indicated positive reading habits emerged with higher academic literacy levels. These are usually students who had attended private schools (received good reading instruction), and are from high SES families (rich literacy environment). The statistically significant results of students' reading habits are shown in Figure 5.5 below.
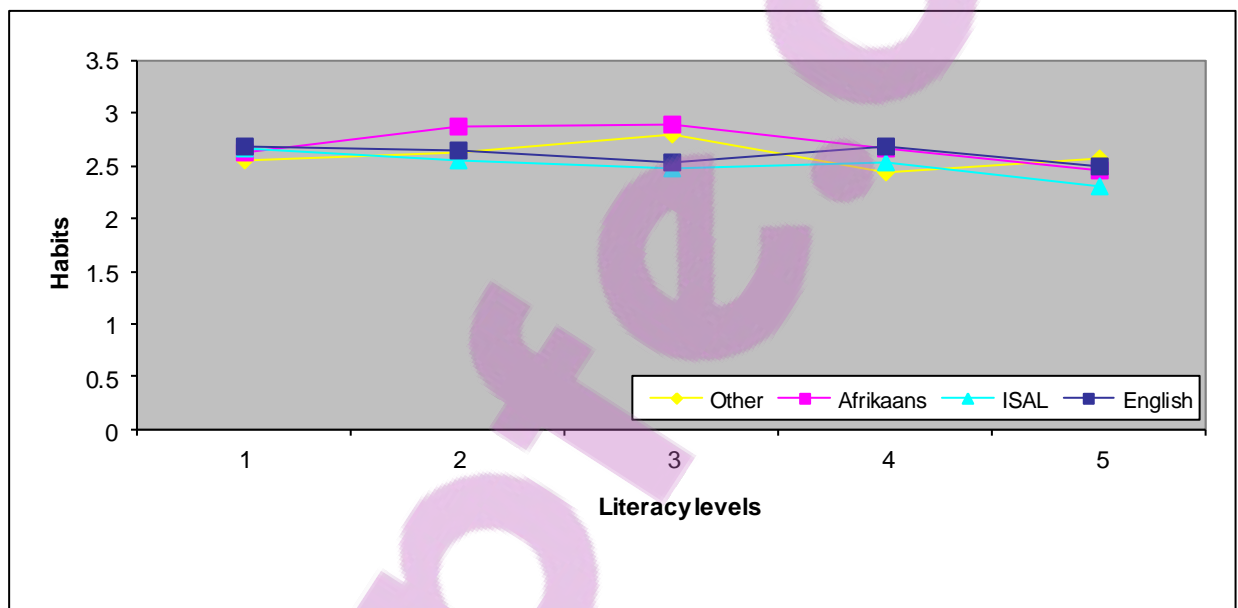
Fig 5.5: Interaction between literacy levels and home language in relation to their reading habits

The overall negative reading habits of students point to a need for positive reading habits to be developed – positive reading habits promote reading proficiency. Habits cannot be developed without the willingness of the participants. Thus a focus on the affective in reading instruction is highly relevant.

5.4.3 Summary statistics for gender and faculty

The previous section presented the analysis of students' reading ability in relation to their socio-affective levels in reading, and also presented an analysis of their home language in relation to the same factors. This section presents the analysis of students' registered faculty and their gender in relation to their socio-affective levels, in order to gain greater

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insights into students' reading profile. These relationships are presented below, as shown by ANOVA test results.

5.4.3.1 Gender

ANOVA results showed that females indicated more positive socio-affective levels for reading than males. With regard to both past reading experience and social literacy, females were more positive than males: $F(4)=31.94, p<.0001$. These differences interacted with faculty and will be discussed under Faculty in § 5.4.3.2 below. On the affective factors of interest and attitude, gender was statistically significant: $F(1)=20.6$, $p<.0001$ and $F(1)=18.21$, $p=<.0001$, showing the females to be positive and the males negative. This ties up with their reading experience. As expected, the positive reading experience of the females culminated in positive attitudes towards reading, whereas the negative reading experience of the males translated into negative attitudes towards reading. This difference was most marked in the Law faculty. For the cognitive factor of strategy use, a significant relationship emerged with gender $(F(1)=4.60$, $p=0.0322)$; the males being more negative than the females. In other words the females were less inappropriate in their strategy use than the males. As regards intrinsic motivation, there was a significant difference between males and females $(F(1)=11.15$, $p=0.0009)$. Although both males and females indicated negative responses, the females were less negative. Their motivational levels were higher than those of the males. ANOVA test results showed that the females indicated better reading habits than the males, although, on the whole, students demonstrated poor reading habits. In relation to self-efficacy and extrinsic motivation, ANOVA test results did not show any statistically significant relationship with gender. The results are shown in Table 5.12 below.

Table 5.12: Means and significant values for gender and socio-affective variables

	Males (N= 671)	Females (N=1144)	P- value
Socio-affective factors	M	F	
Experience	2.25	2.07	<.0001
Social literacy	2.80	2.57	<.0001
Interest	2.29	1.93	<.0001
Attitude	2.07	1.82	<.0001
Reading habits	2.79	2.51	<.0001
Intrinsic motivation	2.49	2.32	0.0009
Strategy use	2.52	2.39	0.0322
Extrinsic motivation	-	-	0.3657
Self-efficacy	-	-	0.0718

5.4.3.2 Faculty

The relationship between the faculty in which students were registered, with *reading experience* was not statistically significant on its own, but interacted with gender: $F(4)=3.08$, $p<0.0153$ and first language: $F(12)=3.32$, $p<0.0001$. The details of the interaction between faculty and home language in relation to reading experience have been presented under *reading experience* in section 5.4.2.1. An interaction between faculty and gender showed a marked variation between males and females in the Law faculty: the males oriented towards negative responses whereas the females were oriented towards positive responses.

On the whole, students' responses on social literacy were negative in all faculties. An interaction between home language and faculty showed that ISAL L1 students in the Human Sciences were markedly most negative, whereas the Afrikaans L1 EBIT group was markedly the least negative. ISAL L1 students in the Law faculty were the least negative compared to ISAL L1 students in other faculties. English L1 speakers in the EBIT faculty were the most negative among the English L1 group, whereas those in Law were the least negative. The interaction is graphically presented in Figure 5.6 below.
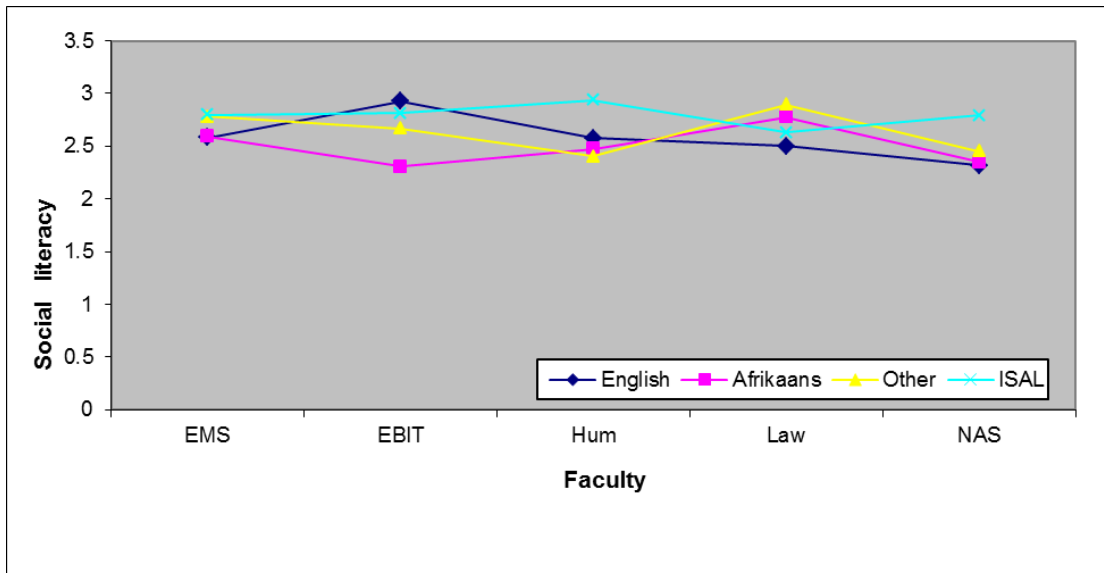
Fig 5.6: Interaction between faculty and students' first language with regard to their social literacy/reading environment

ANOVA tests also showed significant interaction between faculty and gender (F(3)=4.08, p=0.0125) for this social factor. Both males and females were consistently negative, though in the Law faculty females were markedly less negative than the males. The interaction between faculty and gender with regard to social literacy is shown in Figure 5.7 below.
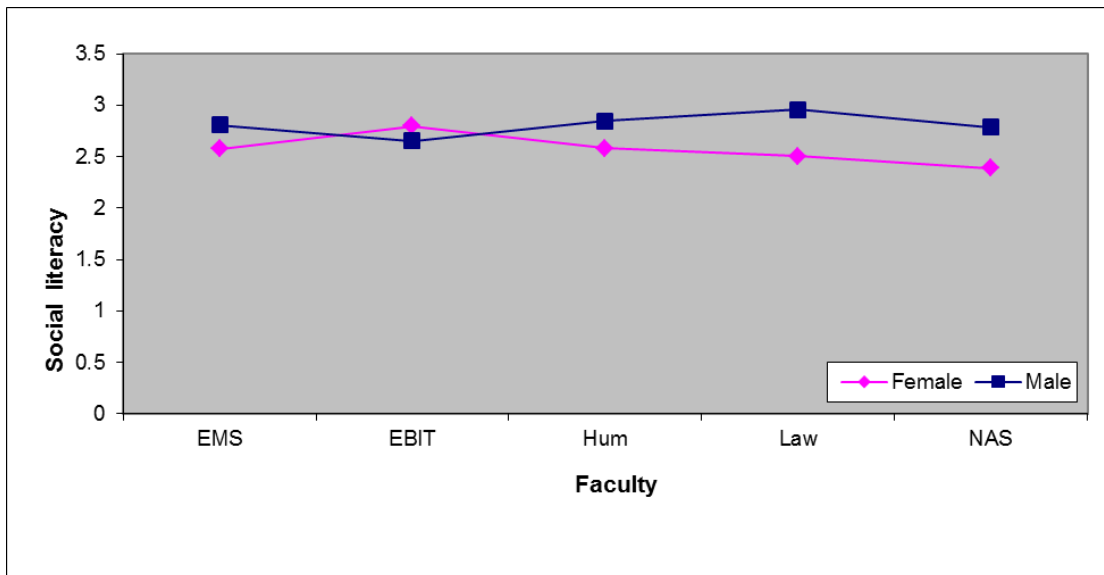
Fig 5.7: Interaction between students' faculty and gender with regard to their social reading backgrounds

Statistically significant differences were shown for different faculties and the use of strategies (F(4)=2.48, p <.0001). Results show that this cohort of first-year students was not applying appropriate strategies for academic reading. The Scheffe test for multiple comparisons showed that Law, Humanities and Natural Sciences students were not significantly different from one another in their strategy use, but were significantly different from students in the EBIT and EMS faculties. Students from these latter two faculties were also significantly different from each other. EMS students reported the worst strategies, whereas EBIT students reported the best reading strategies, relatively, as shown in the mean scores below. Law, Humanities and Natural Science students' responses fell between the two extremes. Admission point score (APS) and entrance requirements may have been the reason for these differences. For example, entrance requirements for EBIT were the highest for Language and Mathematics.

Table 5.13: Scheffe grouping and mean scores for faculty in relation to students' use of reading strategies

Means with the same letter are not significantly different				
Scheffe Grouping		**Mean**	**N**	**Faculty**
	A	2.49	896	EMS
B	A	2.45	128	Law
B	A	2.41	381	Humanities
B	A	2.35	206	Natural Sciences
B		2.29	203	EBIT

On *intrinsic motivation*, students responded negatively, indicating low intrinsic motivation. However, certain faculties were extremely negative. Responses according to faculty showed statistical significance: $F(4)=2.40$, $p=0.0485$. The mean figures for students' responses in relation to faculties showed that the EMS students had the lowest intrinsic motivation (mean 2.42), whereas students in the Faculty of Law could be considered the least negative (mean, 2.26). The overall negative responses to motivation point to the fact that the building of motivation in reading instruction is crucial.

ANOVA tests did not show statistically significant relationships between extrinsic motivation, interest, attitude, self-efficacy, and reading habits on one hand, and faculty on the other. A summary of the significant values are shown in Table 5.14 below.

Table 5.14: Summary of significant results of ANOVA: main effects and Interactions

Variables	Independent variables								
	Experience	Self-efficacy	Social literacy	Interest	Intrinsic Motivation	Extrinsic motivation	Reading Habits	Attitude	Strategy Use
Faculty					0.0485				0.0420
Gender	<.0001		<.0001	<.0001	0.0009		<.0001	<.0001	0.0322
Literacy level	0.0006	<.0001		0.0004	0.0003				
Home language	<.0001		0.0067	0.0002	<.0001	0.0096	0.0062	<.0001	<.0001
Interactions									
Gender/ Faculty	0.0153		0.0125						
Literacy level/ Faculty									
Home language/ Faculty	<.0001		0.0032	0.0148				0.0020	
Literacy level/Home language		0.0473					0.0294		

5.4.4 Summary of the results

This section provides a summary of both the descriptive and inferential statistics. In relation to *reading experience, social literacy* and *self-efficacy*, ISAL L1 students were the most negative. This indicates that most of the ISAL L1 students in this study had poor reading experiences at home and at school, impoverished social literacy environments and low perceptions of their reading capabilities. This confirms the link between social factors and affective levels (Bandura 1986; 2001; Giddens 2001; Grabe & Stoller 2002). Various researchers have pointed out that social factors influence students' affective levels, which has been confirmed in this study. Students who reported poor social reading experiences, also reported low self-efficacy, and those who indicated rich social reading experiences also indicated high self-efficacy.

All the students' affective levels in reading were low for all the affective variables. They had low interest in reading, low intrinsic and extrinsic motivation and negative attitudes. Interestingly, ISAL L1 students reported relatively higher levels of interest than students in other language groups. However, this higher level of interest is not realised in most of the ISAL students' reading ability or literacy levels. An explanation could be based on Schiefele's (1992:176) findings that cognitive process variables mediate the effect of interest on academic achievement, and that the level of interest produces outcomes through the use of these cognitive processes. In other words, high level of interest without the use of cognitive processing factors may not yield high academic reading achievements. An alternative explanation is that weaker readers may have produced socially acceptable responses, as indicated by Pretorius (2000:223).

Intrinsic motivation was the only factor that showed consistent significantly low levels for all variables: gender, faculty, home language and literacy groups. This indicates that regardless of their gender, faculty, home language or literacy levels, these students did not experience reading as a pleasurable activity. However, there were variations in their motivational levels. This supports Grabe and Stoller's (2002: 56-57; 242) assertion that L2 students have varying affective levels for reading. Although students at level 5 had relatively higher levels of intrinsic motivation the general picture was that this cohort of first-year UP students had low motivation (lowest mean above 2.5). This confirms other research findings that intrinsic motivation declines as students climb the educational ladder (Guthrie & Wigfield 2000:404). Considering the fact that at tertiary level the main

academic activities are reading and writing, this is a grave concern. The low motivation of students further strengthens the argument that reading instruction should incorporate affective components. Although, generally, students showed low extrinsic motivation ISAL students indicated the lowest motivational levels. This was expected, as this L1 group had also indicated the poorest reading experience and impoverished social literacy environments. This supports the view that social factors greatly influence students' affect and motivational levels (Bandura 1986; 2001; Giddens 2001, Grabe & Stoller 2002). However, attitude, which is also an affective variable and was expected to correspond with motivational levels of ISAL L1 students, showed different results. ISAL L1 students were the least negative among the respondent groups. Possible explanations are that students may have translated attitude into aspiration or that the complexity of attitude, as discussed by Mathewson (2004:1436), could be at play here. According to Mathewson, the three components of attitude (cognitive, affective and conative) should all be present to yield the effect of attitude on reading. The complexity in the attitude variable may have contributed to this unexpected result.

Negative reading habits were indicated by all the students, which meant that students do not read much, presumably due to the influence of the technology-driven 21st century, which is conducive to interacting with TV, computers and cell phones, instead of the printed word. Significant results, indicating a relationship between reading habits on the one hand, and L1 and literacy levels on the other, showed that Afrikaans L1 students had the most negative reading habits whereas ISAL L1 speakers on level 5 had the best reading habits among this cohort of students. This group of ISAL L1 speakers, as mentioned above, displays different reading characteristics from ISAL L1 speakers in the other literacy groups, probably because of their higher SES family background; pointing to the link between SES and reading ability. The fact that negative attitudes, when translated into behaviour, leads to negative habits, is confirmed here. Afrikaans L1 students indicated negative attitudes towards reading, which was further translated into negative reading habits. Appropriate use of strategies, which has cognitive, metacognitive and affective benefits, was seriously lacking in these students. Their responses to the questionnaire showed their inappropriate use of strategies irrespective of gender, home language or faculty. Explicit strategy instruction is crucial for this cohort of students. Strategy instruction builds self-efficacy, increases metacognition and conceptual use of strategies in reading (Guthrie, Wigfield & Von Secker 2000).

To summarise, the socio-affective variables that did not show significant results for reading ability from the ANOVA tests were *social reading environment, extrinsic motivation, attitude* and *strategy use*. The rest of the variables corresponded with reading ability, sometimes in a robust relationship. However, all the variables that did not show a direct relationship with reading ability showed a relationship with students' first language indicating an indirect relationship with reading ability, as literacy levels relate to L1 groups. Thus, it can be concluded that there is a direct relationship between reading ability and students' reading experience, self-efficacy, interest, and intrinsic motivation; whereas an indirect relationship exits for *social reading environment, extrinsic motivation, attitude* and *strategy use*. Thus ANOVA tests showed that all the independent variables – social, affective and cognitive/metacognitive – may have a direct or indirect relationship with the dependent variable of reading ability.

5.4.5 Strongest predictors of reading ability

In order to answer research question 2: *Which of the socio-affective factors strongly predict students' reading ability?* a Cumulative Logit (regression) analysis was applied, with literacy group as the dependent variable and socio-affective factors (i.e. experience, social literacy, etc) as the predictor variables. A total of 2160 cases were analysed and the overall model was significantly reliable: chi-square=562.3874, df=9, p<0.0001. The percentage concordant was 72%. In other words, overall 72% of the predictions were accurate. Table 5.15 gives the maximum estimates, the Wald statistics, and associated degrees of freedom and probability values for each of the predictor variables. The results show that *reading experience, self-efficacy, strategy use, intrinsi*c and *extrinsic motivation* reliably predicted students' literacy levels and therefore their reading ability. *Social literacy, interest, attitude* and *reading habits* were not significant in this analysis. The results are shown in Table 5.15 below.

Table 5.15: Cumulative Logit analysis results of predictor variables

Predictor	Estimate	Df	Wald chi-square	p-value
Experience	0.8257	1	179.4392	<.0001
Strategy use	-0.6411	1	72.6045	<.0001
Self-efficacy	0.0478	1	60.6281	<.0001
Extrinsic motivation	-0.2506	1	24.4961	<.0001
Intrinsic motivation	0.4027	1	19.1083	<.0001
Reading habits	-0.1336	1	2.6433	0.1040
Attitude	-0.1506	1	2.5817	0.1081
Interest	0.1219	1	2.3353	0.1264
Social literacy	-0.0279	1	0.1924	0.6609

The odds ratio can be interpreted as the effect of the variable on the odds of being in a lower rather than in a higher category. For example, the adjusted odds ratio for experience is 2.284, which indicates that as the average experience score increased by one unit, the odds of being in a lower category are more than twice the odds of being in a higher category. In other words, as the average responses of students increased for *experience*, the higher the probability that they would belong to a lower literacy level (i.e. *At Risk* or *High Risk*). Thus, the higher the average responses for a socio-affective variable, the lower the literacy level of the students.

The first five predictor variables strongly predict students' reading ability (p<.0001). In other words, the analysis shows that students' *past reading experience, use of strategies, self-efficacy, intrinsic* and *extrinsic motivation* strongly indicate their level of reading proficiency. That is, when these affective levels are high, reading proficiency is also high. The indication of this analysis to reading instructors is to improve students' affective levels concomitantly with cognitive instruction in order to achieve maximum results in developing their reading ability.

5.5 Discussion

This section discusses the results of the analyses and attempts to answer the first and second research questions from this data set. Thereafter, the implications for designing a reading programme that incorporates socio affective factors are discussed.

Regarding the first research question of whether there is a relationship between socio-affective factors (independent variables) and students' reading ability (dependent variable), both the descriptive statistics and the inferential analyses from the ANOVA tests showed

that a robust relationship exits between these two variables. The responses from the questionnaires were often aligned with students' literacy groups, indicating that socio-affective factors corresponded either positively or negatively with reading ability.

Students on level 5 showed positive reading experience, high self-efficacy, positive social literacy, and high interest in reading. These factors, as discussed in Chapter 3, are foundations for good proficient reading, and it is therefore not surprising that these students have the highest academic literacy levels (*No Risk*) as determined by TALL. This further confirms the reliability of the test in determining students' risk of failure. The relationship between reading experience, social and affective factors pertaining to reading on the one hand, and academic reading ability on the other, has been confirmed (cf. § 2.4)

Although students on level 4 are perceived to have low risk, the wide range of students within this group may have contributed to these students being significantly different from those on level 5. Their interest in reading was lower than that of students on level 5, but not significantly different from students on levels 1, 2 and 3, as shown in the Scheffe tests (Table 5.7). This justifies a separation of students on these two levels (4 and 5) in order for appropriate academic support to be given. Another recommendation will be to narrow the percentage range for level 4 so that only the higher percentage scores will be placed on level 4. This will show level 4 students to be similar in characteristics to those on level 5, which will make it more feasible for students on the two levels to be combined for academic support.

Similarly, for both *self-efficacy* and *reading experience* students on level 5 were statistically different from those on level 4. This shows that students on these two levels differ in some ways. As explained earlier the wide range within level 4 may have contributed to this difference. A separation of the two levels for instruction is highly recommended. Students on level 5 *(No Risk)* should be advised to take a more challenging ancillary module, whereas those on level 4 could register for a reading and writing support programme that is structured to meet their needs.

ISAL L1 students on levels 1 *(High Risk)* and 2 *(At Risk)* who were registered for the compulsory Academic Literacy module were consistently negative in their perceptions of their reading capabilities. Thus instruction for these students should also focus on

improving their self-efficacy. Explicit strategy instruction is said to improve self-efficacy, and therefore explicit instruction of various reading strategies, (both processing and monitoring strategies) should be given to these students on a continuous basis. Self-efficacy, which is the affective variant of metacognition, is known to be crucial for successful academic reading at higher (tertiary) levels (Mills et al. 2007). Thus instruction on metacognition should be done concurrently with the improvement of self-efficacy. The fact that self-efficacy and strategy use are two of the predictor variables for reading ability indicates their importance in reading instruction.

The consistent negative response of ISAL students to *reading experience* indicates that they were not exposed to reading as children and did not have a reading culture in the home or at school. For such students, it is even more crucial to have a reading programme that focuses on affect, and develops their love for reading to enable them to read frequently in order to develop the reading efficiencies that are lacking due to poor reading experience. Although ISAL L1 students in all faculties were consistently the most negative in their reading experience, those in the Law faculty were less negative and those in the Humanities faculty were most negative. These differences with the relationship between reading experience and reading ability in mind, indicate that ISAL students in the Humanities have lower reading ability and are therefore weaker academically than those in Law. It seems that the Admission Point Score (APS) may have contributed to this difference. Although, in 2009, the APS for Law was 24, an additional clause stated that students with APS of 28 and above would be considered first, and only when there is still space would those with APS between 24 and 27 be considered. On the other hand, apart from selection programmes such as Communication Pathology, Human Movement Science and Journalism, the other courses in the Humanities admit students with an APS of 26 and below. This implies that whereas most Law students would have obtained an APS of 28 and above, most of the students in the Humanities were admitted on an APS of 26 in 2009, placing their academic level lower than the Law students. Given that most Humanities subjects require extensive reading, these students may be facing huge challenges in reading texts in their subject fields. Reading instruction for these students should involve extensive practice and explicit strategy instruction based on generic texts as well as texts related to their subject fields. As indicated by a number of researchers and pedagogues, both generic and subject-specific texts have their place in reading instruction (Brunfaut 2008:37).

The low interest indicated by Afrikaans and English L1 students is in line with research that students' motivation and interest in reading declines as they climb the educational ladder (Guthrie and Wigfield 2000). Students who have had a good reading background would have already developed the efficiencies in reading, and would be able to apply these abilities to academic reading at tertiary level, even if their interest in reading is low. However, students who have had poor reading backgrounds, and are non-traditional students (§ 2.3.4.3) would not have developed the relevant skills to apply to tertiary level reading. Such students, therefore, stand at a vast disadvantage as they climb the educational ladder. Without the development of the relevant reading abilities, and having little or no interest in reading, these students do not engage in frequent reading to develop the required abilities. As a result, the gap between these poor readers and the proficient readers become even wider. Thus reading instruction that incorporates the affective is crucial for these students in order to develop their interest and love for reading; and motivate them to read frequently, become engaged readers and develop their reading abilities to cope with academic reading at tertiary level.

The highly positive response of ISAL students to the *Attitude* factor, given the poor reading experience, poor social reading environment and low intrinsic motivation, could be explained as follows: first, it could have been an expression of a positive desire to improve reading, since a number of these students are conscious of their reading challenges. Second, they may also have been unable to apply the cognitive processes that are needed to transform the effect of interest and attitude into reading achievement. Third, they may have provided socially acceptable responses, which is one of the weaknesses in self-reported questionnaire surveys. The negative attitude expressed by the Afrikaans students could be in relation to English texts, probably legal texts, as most of them indicated (through informal conversation) that they had done most of their extensive reading in Afrikaans.

On the whole, students' responses showed inappropriate use of strategies. These results raise concerns, as students in the Human and Social Sciences are assessed mainly on their attainment of meaning from the reading of texts, and therefore appropriate use of comprehension and critical reading strategies is crucial. Direct and explicit instruction in strategy use is necessary for all students, but more so for those in Law, EMS and

Humanities, as they showed the poorest use of strategies. Explicit instruction will also assist in developing and increasing self-efficacy.

The low motivational levels of the students point to the importance of applying motivational principles in reading instruction. The low motivation shown in students' responses is in line with research that intrinsic motivation declines with advancement in education.

In relation to the second research question, of which socio-affective factors best predict students' reading ability, the results of the Cumulative Logit analysis, illustrated in table 5.15, show that reading experience, self-efficacy, intrinsic and extrinsic motivation and strategy use, all strongly predict ($p<.0001$) students' reading ability. An intervention to improve students' reading ability should therefore incorporate these factors, as well as extensive reading to develop positive reading habits.

5.6 Implications of survey results for intervention instruction

As discussed above, a robust relationship exists between socio-affective factors and academic reading ability using TALL results. These relationships were determined by ANOVA tests on responses to a questionnaire survey. ANOVA tests showed that *experience, self-efficacy, interest* and *intrinsic motivation* all showed statistically significant relationships with reading ability. Indirect relationships were shown between reading ability and each of the five remaining factors. Although questionnaire surveys have their weaknesses (respondents may give socially desirable answers), most of the findings of this survey are in line with findings from previous research.

The second research aim was to identify the socio-affective factors that strongly predict students' reading ability. A Cumulative Logit analysis showed that, of the nine socio-affective factors only *attitude, interest* and *social literacy* did not predict reading ability. In other words, *past reading experience, strategy use, self-efficacy, intrinsic motivation, extrinsic motivation* and *current reading habits* all predicted students' reading ability.

It seems that for this cohort of students (*At Risk and Low Risk*), cognitive instruction alone may not be adequate for developing reading ability. A focus on the affective is crucial for

successful outcomes. Although social factors also showed significant relationships with reading ability, past reading experiences and social reading environments (home and previous schools) cannot be reversed by tertiary educators. Besides, social factors, as explained by psychological theories (Chapter 2), influence affective levels of individuals, which then manifest in their behaviour (reading ability). The focus at tertiary level should then be on addressing both cognitive and affective issues in reading development. This line of redress is adopted for this cohort of students whose low affective levels strongly correspond with their reading ability.

An important area that emerged from this survey is related to students' first language. This variable was statistically significant for all the socio-affective factors. It indicates that the students' first language corresponds with their social reading experience, their affective reading levels, reading habits and strategy use. Worthy of note is the significant interaction between first language and reading ability for self-efficacy. ISAL L1 students who were proficient readers (level 5) indicated high self-efficacy (the highest of all the groups), whereas ISAL students, identified as being at *High Risk* (level 1) indicated low self-efficacy (the lowest of all the L1 groups). Also, English L1 students indicated high levels of self-efficacy. The assumption here is that it is not the home language per se that influences students' self-efficacy and reading ability, but there seems to be a combination of factors that include SES, educational background, reading experience, social environment, and other socio-cultural factors associated with certain L1 groups that lead to poor reading ability. Given the low self-efficacy and poor reading ability of the majority of ISAL students, these students would need instruction that adequately and directly addresses their affective needs, while developing their cognitive reading abilities.

On the basis of these results, a reading programme that incorporates the affective to develop students' reading ability was designed. The programme, for purposes of intervention, was built on the existing reading programme for the relevant module(s) with enrichment to suit the affective needs of the students.

5.7 Conclusion

This chapter has shown that a robust relationship exists between socio-affective factors and reading ability, and that significant differences exists between academic groups in

terms of their socio-affective profiles and their academic literacy levels. It has also shown that a number of socio-affective factors, especially self-efficacy, strongly predict students' reading ability. The relationship between socio-affective factors and the mediating variables of students' home language, registered faculty and gender has also been discussed. The next chapter presents an instructional framework that was used to conduct the intervention programme aimed at developing students' reading ability through cognitive, and most importantly, affective means.

Chapter 6: Reading intervention programme

6.1 Introduction

Chapters 2, 3 and 5 have provided theoretical and empirical evidence that incorporating an affective dimension in a reading instruction programme is crucial. This chapter presents the details of the affective components integrated with the standard curriculum for the standard Academic Reading programme that was offered as an elective module to *Low Risk* first-year students. The standard module focused on cognition and metacognition, comprising strategy use, vocabulary development, and critical reading. Although these are important aspects of reading (which are dealt with in most reading textbooks), the students' reading profile given in Chapter 5, demanded a restructuring to cater for their affective needs. In addition to the absence of the affective, the workbook for this reading module leaned more toward theoretical explanations than practical work. This called for inclusion of more exercises and tasks, and more real-life, practical work to give students competence support and increase their self-efficacy, which was found to be lacking. Furthermore, all the texts used in the workbook are generic. In order to provide interesting, stimulating and relevant texts, which are motivating to students, discipline-related texts and extracts from students' textbooks were included in the teaching materials for the intervention.

At Risk students on the compulsory Academic Literacy module also went through the same intervention programme, although the syllabus for their standard first semester programme did not overtly focus on academic reading. The intervention groups (*At Risk* and *Low Risk*) did not receive any extra tutorials but had the same contact hours as the control groups.

Given that students improve their reading ability by reading frequently, an extensive reading section was included in the intervention programme. This was to provide students with the opportunity to read for pleasure and to enjoy the activity.

6.2 Intervention: enrichment and tasks

Since all students registered for the Academic Reading and Academic Literacy modules were subjected to the same major assignments the programme for the intervention groups could not be completely restructured. Thus it was only affectively enriched with additional

tasks and exercises, as shown in Appendices 4A and 4B. The sections in the Academic Reading workbook were augmented with additional tasks and exercises using generic, discipline-related and subject-specific texts within motivational practices, as proposed and applied by Guthrie and Wigfield (2000); Guthrie, Wigfield and VonSecker (2000); Guthrie, Wigfield, Barbosa et al. 2004. Specifically, the focus was on *autonomy support* (choice), *collaboration* (community of literacy), *real-world interactions*, *learning goals, rewards and praise, competence support* (strategy instruction) and *teacher support.* Below, the main sections of the workbook are discussed. In each section a brief summary of the current or standard workbook is given, followed by details of the enrichment programme for the intervention, which includes additional tasks and exercises within an affective approach that supports Guthrie and Wigfield's instructional practices for motivation and engagement. Sections 6.2.1 to 6.2.4 deal with the main components of the workbook, and 6.2.5 deals with an added component to further enrich the programme as a whole.

6.2.1 Section 1: Theories of reading, reading speed and background knowledge

Standard content

This section of the workbook introduces academic reading by giving the definition of reading and the various components involved in reading. This is followed by a discussion of the theories of reading, namely top-down, bottom-up and interactive reading. The role of background knowledge is explained with one fill in the gap exercise on predicting. The importance of reading speed is explained and a generic text is provided for speed reading practice. Finally, the various techniques of reading – scanning, skimming, comprehension reading and critical reading – are explained together with the four text types or the rhetorical modes: narration, description, exposition, and argumentation. These explanations are followed by a task that requires students to identify the dominant rhetorical mode of excerpts from larger texts.

Enrichment

The theoretical weight of the workbook is evident in the many explanations but few exercises in this section. For the intervention, additional exercises on background knowledge and prediction were added. The concept of SQ3R/SQRS (survey, question, read, recite, review or survey, question, read, summarise), corresponding to the three stages in the reading process (before, during and after), was introduced in this section.

Tasks

Using texts from a first-year Economics textbook, students were asked to write what they knew about the topic and to discuss the information with fellow students. They then skimmed the text, reading the first and last paragraphs and the first sentence of each paragraph, and then predicting what the text was about. After skimming and predicting, students read texts to confirm or refute their predictions. In other words, after skimming individually to activate their background knowledge on the topic, students compared their predictions with their discovery upon reading the text, and then discussed these findings in groups. The nature of these exercises enabled students to activate their background knowledge, practise prediction in reading, and engage in motivational activities, such as collaboration, learning goal and competence support, which develop self-efficacy.

Other activities on background knowledge included the following: (1) students wrote down how they generated background knowledge while reading textbooks and shared these ideas with fellow students; (2) students were given academic words and asked to generate words or concepts they associate with the keywords; (3) working in groups, students identified transitional and linking words in a given text, then categorized them according to their functions; (4) an economics text with every fifth word omitted was given to students to fill in the omitted words using background knowledge and prediction. (5) using vocabulary to activate background knowledge students chose a discipline-related text and wrote down 20 words they anticipated would occur in the text. After discussing the words and how they could be linked to the text, students sorted words into their appropriate word classes, and then read the text to confirm the predictions. The best performing student or group was rewarded with a book prize or given 5% towards the continuous assessment mark. These hands-on collaborative exercises were aimed at generating background knowledge, but also at holding students' interest and instilling motivation. Anticipation and prediction entails curiosity, which leads to motivation. The group work involved in these activities removes anxiety and apprehension and therefore opens students up for learning. The opportunity to choose texts from various options provided them with some autonomy, which is motivating. Besides, the tasks were undertaken in a relaxed, non-threatening environment.

To increase reading speed, students engaged in a matching activity, first using letters, then words, phrases and concepts. They were given extracts from their Economics textbook and

asked to scan for specific words. Thereafter, they skimmed the text to obtain an overview, and then read for comprehension and wrote down the reading time. Another activity to increase reading speed required students to read for a minute and mark the point where they stopped; then reread the same section for a minute again and mark the stopping point. The aim was to get students to read longer texts as they go over information read earlier. Generic texts were initially used, and then as students became used to the exercise, discipline-related texts were used. Students saw immediate results in reading speed: time used for reading text decreased, and students read longer texts on the second and third readings within the given one minute. As awareness of progress is motivating, the exercise was to help increase students' intrinsic motivation. In addition, extrinsic motivation was enhanced by rewarding the best performing five students for each activity with sweets, chocolates or books for correct answers and speed.

Another exercise for reading speed was for students to reread a text until they read an acceptable number of words per minute with 70% comprehension (this exercise was given as homework, but due to time constraints could not be followed up).

Texts for speed reading exercises were initially very simple narratives, a level below students' proficiency level. Generic and discipline-related texts with multiple choice questions were used. Students initially chose texts and topics they were comfortable with. Generic texts were introduced first and gradually replaced by discipline-related texts. Rereading builds fluency and enhances comprehension. Students were also encouraged to use ReadOn, a computer-based programme available at the Student Support Centre, for further practice to improve their speed and comprehension abilities. Unfortunately a follow-up was not done to find out whether students did use this facility, how many of them did and whether it was beneficial to them.

6.2.2 Section 2: Reading strategies

Standard content

This section of the standard workbook deals with reading strategies. It explains some of the strategies that good readers use for comprehension. Strategies such as identifying main ideas and topic sentences of paragraphs, highlighting, summarizing and making visual representations (e.g mind maps) are explained. These explanations are followed by a

number of exercises. Since the needs analysis showed students to be poor at using strategies in all language groups and literacy levels, while strategy use was identified as crucial for successful reading, these exercises were inadequate. Anderson (1991:468) sums up the important use of strategies:

> [S]trategic reading is not only a matter of knowing what strategy to use, but also the reader must know how to use a strategy successfully and orchestrate its use with other strategies. It is not sufficient to know about strategies; a reader must also be able to apply them strategically.

Enrichment

Anderson's (1999:72) six steps and corresponding questions for L2 strategy instruction were applied using motivational practices that lead to engagement (Guthrie & Wigfield 2000) in reading. The six strategy instruction questions, Anderson's explanations and the corresponding motivational practices are given in Table 6.1 below, in relation to a specific skill: main idea comprehension.

Table 6.1: Six steps to motivational strategy instruction (main idea comprehension)

Step	Guiding question	Anderson's explanation	Motivational strategy
1	What is the strategy?	Identification of main ideas An important reading strategy	**Learning goal** The strategy is explained to students
2	Why should the strategy be learned?	Main idea identification: Facilitates comprehension Assists in distinguishing between main ideas and supporting details Assists in the organisation of information	**Learning goal** Explanation of why strategy should be learned and mastered is given to students
3	How can the strategy be used?	To locate thesis statement and topic sentences	**Competence support** Students competence is enhanced by being given directions, and engaging in activities to locate thesis statements and topic sentences
4	When should the strategy be used?	Expository texts with new information	**Relevant texts** Expository texts from students text-book and discipline-related texts were used to make texts and activities relevant and significant to generate students' interest

5	Where should the reader look to facilitate the use of the strategy?	Reader should read first and last paragraphs, first sentence of each paragraph; ask questions such as: what idea is common in the text? What idea relates the parts to the whole? What opinion do all the parts support? What idea do the parts explain or describe?	**Competence support; Relatedness support: collaboration, teacher involvement**. The teacher/lecturer models the strategy with specific texts. Students use relevant texts to do exercises in pairs then on individual basis.
6	How does the reader evaluate the use of the strategy	Open class discussions on strategy use	**Competence support** through metacognition; **Relatedness suppor***t* through collaboration and teacher involvement

The steps, questions, explanations and motivational strategies were also applied to argumentative texts.

Tasks

In implementing step 6, students explained the strategies they had used, which helped them become more aware of the strategies they were using, and also enabled others to learn from them. Exercises to improve strategy use included students' selection of discipline-related texts and application of the six steps explained above in their reading. In addition, students wrote down questions while reading to activate background knowledge. Afterwards, they listed the strategies they had used and explained why they used them. Finally students wrote brief summaries of the texts. The summaries were discussed, and the strategies used to obtain meaning were also discussed in groups. Presentations were made from each group and the lecturer evaluated and commented on each presentation. Students learn from their peers in these discussions, as they see the usefulness of the strategies. Again, due to time constraints, individual summaries could not be assessed by the lecturer.

To further assist students in their use of strategies, the lecturer read a text aloud, and modelled think-aloud protocols. For example, thoughts were verbalised, questions were asked and reading strategies were also mentioned. Students then read individually, following the teacher's modelling, and writing down questions as they read. Afterwards, students wrote down the strategies they had used while reading. Finally, in groups

students, discussed the strategies they used in terms of their appropriateness and effectiveness using the inventory expounded in Table 6.2.

Table 6.2: Example of inventory used for evaluating strategies

When I don't understand :	A word	a phrase	a sentence	a paragraph
I reread				
I read ahead				
I look it up				
I ask someone				
Skip it and read on				

The lecturer commented on the oral discussion that ensued in relation to the inventory responses.

In order to help students overcome their fears of using new strategies, and to instil self-confidence in them, immediate confirmation was given to a group or an individual student. Whenever difficulties were encountered by students in their reading, the lecturer went through the process/steps with the student. Once the analysis or steps were completed, immediate confirmation was given to reassure the student that the analysis was correct. This was done in order to increase students' confidence in strategic reading. Students from poor reading backgrounds usually need constant reassurance and reinforcement in the process of revising old strategies to adopt new ones. This nurturing was frequent at the beginning and gradually reduced as students became comfortable in using strategies for comprehending academic texts. To develop the confidence and the security involved in problem-solving during reading at tertiary level, students needed to work gradually from the group level to individual applications. These applications made use of a number of generic and discipline-specific texts, and the two rhetorical modes favoured at tertiary level: expository and argumentative.

These exercises, besides providing practice for developing competence, were also aimed at providing learning goals: first, students were given clear steps to follow; second, it was explained to students why strategy should be learned; and third, discipline-related texts were introduced, as students became more comfortable with the strategies. Furthermore, scaffolding in the format of gradual introduction of more challenging texts and tasks was introduced, as it reduces anxiety and increases motivation. First, less difficult texts were

used, with a gradual shift to challenging texts. Second, short generic texts progressively shifted to longer subject-specific texts; third, class and group work gradually changed to peer work and then to individual work for assessment. Since the distinction between main ideas and supporting details is a major challenge for students, yet an important aspect of comprehension, important ground was deemed to have been covered

6.2.3 Section 3: Academic vocabulary

Standard content

Section 3 in the standard workbook deals with vocabulary building; the use of contextual clues and word parts, to determine the meaning of words. Similar to the other sections, there are very few exercises in this section of the workbook for practice. Also, the exercises comprise single sentences: e.g. students identify the meaning of words using clues in each sentence. As discussed earlier, the exercises are purely cognitive-oriented and do not have any affective dimensions.

Enrichment

Exercises using whole paragraphs were included and instruction was grounded in developing positive affect. Students chose from a list of given topics and engaged in brainstorming on core vocabulary for the topic. Thereafter, students grouped words into related concepts. In groups, they compared their lists, deleted unrelated words and grouped relevant words into parts of speech. Students also discussed the semantic relationship of words to the topic and or theme. Finally, they silently read the texts individually to confirm or adjust predictions. They also established which words had actually been used in the texts, and identified the part of speech.

Tasks

To use texts that are relevant and interesting to students, they were requested to write down themes that were of interest to them, as well as some topics from their various disciplines. The lecturer then selected texts related to the topics and/or disciplines for the activities. The activities included guessing the meanings of words using contextual clues.

Students were also required to complete Gerry's Academic Vocabulary Exercises, electronically through the Unit for Academic Literacy's website. The exercises required students to complete sentences in a cloze test by selecting the appropriate word from

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Coxhead's Academic Word List (AWL). An example of the test is included as appendix 5. They completed the cloze test exercises in all ten AWL groups, and submitted them as part of their portfolios. These exercises were done electronically and were aimed at increasing students' interest while providing them with the opportunity to learn important academic words to be used in writing assignments in their various disciplines. Although research indicates that students acquire the bulk of their vocabulary through wide reading (Bus 2001), a practical approach, as undertaken in these online exercises on the AWL, is necessary for academic vocabulary development, especially for weak L2 readers (Scheepers 2008). Most of the students reported enjoying the task, and about 90% of them obtained 100% for the tasks. The high scores in this particular task enabled students, even the weak students, to feel successful and increased their self-efficacy. The experience of frequent success raised students' interest and instilled high motivation and positive attitudes, as predicted by Dornyei (2001b:57). It is expected that the interaction with the various academic words would help increase students' vocabulary and enhance their reading comprehension. Questions relating to these expectations were raised in the interview sessions with students and are reported on in Chapter 8.

6.2.4 Section 4: Critical reading

Standard content

This section introduces students to critical reading – an important aspect of reading that is crucial at tertiary level. However, as with all sections in the workbook, exercises for practice are inadequate and are not linked to the affective. Bloom's taxonomy of cognitive levels is explained with examples of verbs given for each level. The distinction between fact and opinion is also given, with different types of opinions explained. Inference generation should have been given more emphasis. Although inferencing is required for successful reading at higher education levels, second language readers, especially first-year students, struggle with this aspect of reading (Perfetti 1993; Pretorius 2000, 2002). Interviews with students (Chapter 8) revealed that a number of ISAL speakers had had little experience in this type of reading, either at school level or on a personal level.

Other critical reading topics in the workbook include the distinction between bias and prejudice, fact and opinion. The writer's stance (i.e. attitude, tone, use of hyperbole, understatement and irony) is explained with two very basic and low-level exercises. Evaluating arguments in texts is briefly mentioned with a single example of an illogical

argument. Caution is also given on the use of spurious arguments. However, no explanation, guidance or exercises to assess students' understanding are given.

As critical reading constitutes a crucial part of academic reading and poses challenges for L2 readers it was given careful consideration. The section is divided into three parts: inferencing, writer's stance, and evaluating arguments. The enrichments and tasks for each section are discussed below.

6.2.4.1. Inferencing

In terms of inferencing, notes were made available on Clickup (blackboard learning). Follow-up explanations on the different types of inferencing (anaphoric, thematic, text-semantic, textual, vocabulary and academic,) as identified by Pretorius (2000:93), were provided in class. These aspects of critical reading received intensive focus (many practice exercises), since various research studies, such as Daneman (1991), Holmes (1987), Franks, Mulhern and Schillinger (1997) and Oakhill (1984) (presented in Pretorius 2000:66) have shown a relationship between reading ability and the ability to make logical inferences. As a result of the crucial, yet challenging, nature of this aspect of reading, exercises were mainly done in groups to reduce anxiety. This enabled students to share ideas (community of literacy) and enabled weak students, particularly those for whom this was a novel exercise, to learn mutually from one another. This assumption was confirmed by students during interview sessions.

Tasks

Students were given texts and asked to draw conclusions based on inferencing. They were required to identify clues in the texts that led to the conclusions. A general class discussion was then undertaken on the list of clues and conclusions drawn by each group. Collaborative problem-solving was the main approach for the tasks. For example, students were required to select a text, discuss clues, draw conclusions, and make presentations to the class. The best group was always rewarded with sweets and chocolates. Another activity required students to find and cut out a newspaper cartoon. They discussed the inferences and the theme of the cartoon, and exchanged it with another group to find out if the other group had identified the same inferences and theme. They then discussed the differences in inferencing and provided possible reasons. This activity provided students with a real-life situation. It presented inferencing on a lighter note to enable students to

easily grasp the concept. Thereafter, discipline-related texts were used for inference generation exercises. The motivating classroom practices, such as collaboration (group work) and choice (selecting own text), raised interest and laid the foundation for engaged reading**.**

6.2.4.2 Writer's stance

With regard to the writer's stance (i.e. tone and attitude, use of facts and opinions) guidelines and explanations were given in class and also made available electronically. Given that a number of students rarely engage in critical reading, due to cultural background, educational and/or social background, a number of exercises were provided for this section. Furthermore, since texts and tasks that are below students' ability level decrease their motivation (Guthrie, Wigfield, Humenick, et al. 2006), tasks, that were at students' level or slightly above, were included to increase motivation. Some exercises were done in groups and discussed in class, while others were given as homework for individual assessment.

Tasks

Generic as well as discipline-related texts were used for exercises. Generic texts were read and the writer's stance (tone, attitude, and possible bias) as well as his/her presentation of facts and opinions were discussed in groups, in a non-threatening environment. Students were also asked to select their preferred texts from a number of discipline-related texts, and in groups discussed the writer's tone, stance, attitude, the presentation of facts and opinions. Afterwards they had to present their responses as part of their portfolio. These discussions were always undertaken in a relaxed, non-threatening environment, where students were free to share their views and ask for assistance if necessary. The general picture was similar to that of students engaged in an experiment of problem-solving in a science laboratory; only, in this case it was in a lecture hall and the hands-on problem-solving activity that the students were engaged in was reading-oriented and was aimed at developing their academic reading ability. The non-threatening environment, the options and choice given with texts, the rewards given to the best performing student or group of students, together with the collaborative problem-solving activities that go hand in hand with peer and teacher support, were all aimed at enhancing students' self-efficacy, intrinsic and extrinsic motivation, and developing appropriate use of strategies for conceptual learning.

6.2.4.3 Evaluating arguments

In relation to evaluating arguments, notes and explanations of various fallacies in argumentation were made available electronically. Follow-up discussions were done in class. Students were made aware of faulty arguments to be avoided, and were given examples of logical arguments. Given that argumentation is the required mode of student writing at tertiary level, a number of practice exercises were given. Exercises were done collaboratively before individual homework was given, and texts were on general topics as well as discipline-related.

Tasks

Students were asked to collect faulty arguments from their readings, for discussion in class. In addition to providing them with competence support, this project gave students a hands-on practical activity, which was motivating for them. These instructional techniques allow for autonomy support (students select texts themselves), which is motivating; collaboration and community of literacy, which provides for social literacy; and competence and teacher support in and out of class (weak students who obtained less than 40% in tasks were given further explanations and extra exercises). It also assisted in the promotion of intrinsic motivation and the development of extrinsic motivation (rewards were given for recognition and challenge, in order to instil extrinsic motivation and hopefully lead to internalisation).

6.2.5 Extensive reading

Additional enrichment

The second part of the intervention programme comprised extensive reading. Extensive reading or wide reading was included for developing and automatising efficiencies in reading, such as increasing speed, acquiring and applying background knowledge, increasing vocabulary, and mainly instilling joy and pleasure. Due to the poor reading habits of students and their low affective levels for reading, the extensive reading section was necessary. Besides, research indicates that students develop reading skills and automatise reading efficiencies through wide reading. Whereas intensive academic reading – using generic, discipline-related and academic texts – provided competence (strategies), background knowledge activation, academic vocabulary knowledge, increased comprehension, and critical analysis, the purpose of the extensive reading was mainly to instil joy and pleasure, and to develop students' interest in reading.

Extensive reading tasks

In order to instil a love of reading in students and to increase their intrinsic motivation for reading, extensive reading (reading for pleasure) was added to the programme. This form of reading also enables students to read across genres and topics and to develop the efficiencies required for successful reading. Students were required to read various (non-academic) texts to enhance comprehension and increase reading speed. Although the inventory for the extensive reading was presented as part of students' portfolio for evaluation and grading, other rewards (e.g. books, sweets, chocolates) were also given to the best performing students. Students were required to start their reading using less challenging texts (texts that meet their level of competence) and progress to a higher level of competence (texts at a level beyond their level of competence). Students were required to do extensive reading every week. They started with shorter texts of a minimum of 50 pages for the first two weeks and progressed to novels or longer texts of a minimum of 100 pages per week for the rest of the term/semester. They were also required to make inventories using the template in Table 6.3 below:

Table 6.3: Template for extensive reading

Date	
Title	
Author	
Type of text	
Reading time	
Number of pages	
Comments	

*Type of te*xt referred to the genre. Students were encouraged to read across genres. The number of pages and reading time gave an indication of progress in students' reading speed. Students were to comment on any cognitive, metacognitive or affective challenges and developments. The comments were intended to reveal challenges faced by students while reading (e.g. the frustrations, difficulties, boredom) and the positive experiences (e.g. increase in speed, joy, pleasure, excitement, and involvement in the readings). In essence, students were to provide cognitive, metacognitive and affective reflections on their readings. These reflections were presented as part of their portfolios.

6.3 Synopsis

The affective support given to students can be summarised in five categories: *competence support* for *self-efficacy, relatedness support, learning goal, relevant texts,* and *autonomy support.* Blended learning (online and face to face) added variety to the programme. Online activities, in addition to providing competence support, were also aimed at developing curiosity and interest in students to increase motivation. The motivational practices below were the main focus, although others were included as deemed necessary in class.

- **Competence support** was given during direct instruction, as this leads to awareness and appropriate strategy use, both of which promote *self-efficacy* and *motivation*.

- **Relatedness support** was given during collaboration. Collaboration was applied when students were involved in group tasks. These collaborative activities enabled students to learn from their peers, as collaboration is associated with higher cognitive engagement (Niemiec, Lynch, Vansteenkiste, Bernstein, Deci & Ryan 2006). Collaboration also enables students to engage in community of literacy, which fulfils the social aspect of reading (Guthrie & Wigfied 2000:417). Evidence of relatedness support was also shown in the lecturer's support; attention to students' learning process and demonstration of interest in students' welfare. These were done by identifying weak students and encouraging them to consult with the lecturer during consultation hours. Research indicates that students who receive support and believe that the teacher cares about their progress learn better (Deci & Ryan 2000:59; Dornyei 2001b:32-34; Niemiec & Ryan 2009:133).

- **Learning and knowledge goals,** for example explaining the link between task and outcome; and encouraging students to focus on learning and work diligently, even when tasks are only for practice purposes, were emphasized by the lecturer, as this is known to influence students' intrinsic motivation. The aim was to instil *intrinsic motivation* that would propel them to read independently beyond their prescribed academic texts. Students were informed that some of the exercises would not be included in the continuous assessment semester mark, but were encouraged to perform tasks diligently, as the exercises were to assist in developing their

academic reading proficiency. Marks awarded for such tasks and projects enabled students to become aware of and to assess their level of academic reading proficiency. Different rewards were given to the best performing group or student, in order to enhance and internalise *extrinsic motivation.*

- **Relevant and stimulating texts** were used for illustrations and modelling in various tasks and activities. These texts consisted of extracts from textbooks, and stimulating, discipline-related texts to increase students' interest and motivation.

- **Autonomy support** was given in the form of students given choices and ownership to increase motivation. Students chose texts from a number of options, and provided extracts from textbooks for practice and instruction. For extensive reading, students chose their own texts, according to their reading proficiency level and interest.

It should be added that these practices were undertaken in a non-threatening, relaxed environment. Students were free to interact with their peers and with the lecturer during class. This environment, and the bonding that resulted between students themselves and between the students and the lecturer, were positively evaluated by students during interview sessions (Chapter 8).

From the framework expounded above, the following guidelines are given for a reading intervention that aims to increase motivation:

- Academic texts should be taken from different disciplines, and should be stimulating to students. Activities on these texts should also activate background knowledge and build vocabulary (academic vocabulary and subject-specific terms and concepts). This does not preclude the use of interesting generic texts.

- Teaching strategies should involve cognitive (e.g. synthesis, summary) metacognitive (e.g. monitoring, rereading, evaluating comprehension) and affective (e.g. interest, motivation) moves.

- Teaching for comprehension and strategy use should include the identification of main ideas and supporting details.

- Teaching critical reading should include critical analysis and critical thinking skills, such as inferencing and evaluation.

- Teaching should be scaffolded – (1) group work or class discussion before pair and individual work (2) short, generic texts at the beginning, and later, longer discipline-related and academic texts.

- Teaching should be done with texts that students appreciate and enjoy (using a needs analysis or texts on current issues, and texts from disciplines). Texts should be interesting or serve the purpose of the reading.

- Students should be rewarded for progress, and rewards should vary.

- Moderately challenging texts (not too easy and not too difficult, but at the appropriate level of proficiency) should be used.

- Students should see progress: reading speed and comprehension exercises provide immediate feedback.

- A variety of instructional techniques should be used – projects, group work, pair work, individual work, direct instruction, electronic instruction, portfolios.

- Activities, tasks and projects should be relevant to students' goals and interests. An instructional intervention that seeks to enhance motivation, and leads to engagement in reading for conceptual learning among L2 students at tertiary level, should preferably include a number of these instructional techniques.

- Finally, needs (academic success in the subject field, and reading and comprehension of academic texts), strategies (summary writing, synthesising and evaluation), interests (topics that interest students) and ability (texts at reading proficiency level) should influence teaching materials, including choices within and between generic texts, discipline-related texts, subject-related texts).

The structure of the intervention in relation to time allocation for each item and the motivational gains are included as Appendices 4A and 4B for *Low Risk* and *At Risk*, respectively.

Having provided the above framework and guidelines for a reading programme that focuses on the affective, and having outlined the enrichment practices and tasks that were applied in class, it is necessary to add that due to institutional (time) constraints a number of tasks and activities were omitted. Furthermore, as students had to do the tasks assigned for the Academic Reading module and the Academic Literacy module, there was not adequate time to handle all the tasks and exercises planned for the intervention. However, interviews with students (as reported in Chapter 8) revealed that students nevertheless

perceived gains in their reading ability and reading habits. The main issue of the intervention programme is that due to institutional constraints not all the enrichment exercises included in the programme outline (Appendices 4A and 4B) could be done. However, as indicated by the results from the quantitative study (Chapter 7) as well as the qualitative research (Chapter 8) students' reading ability and affective levels in reading did seem to benefit despite these shortfalls.

6.4 Conclusion

This chapter discussed the enrichment programme, in relation to the standard programme, with emphasis on the types of tasks and exercises that were added to provide the types of support that would enhance the affective component of reading instruction: competence support, relatedness support, autonomy support, learning goal and teacher support. The next chapter reports on the results of the questionnaires that were administered before and after the intervention.

Chapter 7: Quantitative analysis of the pre- and post-intervention questionnaires

7.1 Introduction

The details of an intervention programme to develop students' reading ability using an integrated approach that is based on engagement was presented in the previous chapter. This chapter evaluates its efficacy in enhancing students' affective levels and strategy use in reading. A survey questionnaire was administered before and after the intervention to both the control and intervention classes. The data were analysed using t-tests, and the findings are discussed in answer to the fourth research question, *How effective is a reading intervention programme that uses an affective approach?* Although the overarching research methodology has been presented in Chapter 4, specific methodological issues that pertain to the quantitative dimension of the study are reported here. The chapter presents the research procedure and instrument, followed by the findings and analysis based on descriptive and inferential statistics, including effect sizes, and concludes with a discussion of the findings.

7.2 Methodology

To answer the fourth research question stated above, a questionnaire on socio-affective factors, reading habits and strategy use was administered to students. The aim was to elicit students' responses on their perceived affective levels, reading habits and strategy use before and after the intervention.

7.2.1 Participants

As indicated in § 4.3.2, participants were first-year students at the University of Pretoria who had enrolled for the Academic Literacy and Academic Reading modules in 2010. Students who were taking the compulsory Academic Literacy module had been identified by the Test for Academic Literacy Levels (TALL) to be *At Risk* or at *High Risk* of failure academically (detailed description given in Chapter 4). This group is referred to as the *At Risk* group. The other group of students who were enrolled for the elective Academic Reading module was identified by the test as having low or no/negligible risk, referred to as the *Low Risk* group. For each group, *At Risk* and *Low Risk,* two classes comprising

intervention and control were used for the study. Four classes therefore participated, two of which were control classes and the other two intervention classes. Students in the control groups followed the standard programme they were registered for. The *Low/No Risk* control group on the Academic Reading programme were given theoretical explanations on reading theories and reading strategies with very few exercises and little opportunity for practice, and had no affective focus. The *High/At Risk* group's standard programme for the Academic Literacy module consisted of exercises on speaking and listening skills, as well as guidance on, and participating in collecting information, drawing graphs and tables and analysing the information.

Although there were 323 students in the combined classes, only 195 questionnaires were used in the final analyses. The reason for the difference is given in Chapter 4 (cf. § 4.3.2). The 195 questionnaires consisted of 76 in the *At Risk* group (41 intervention, 35 control) and 119 in the *Low Risk* group (49 intervention, 70 control). The distribution is given in Table 7.1 below.

Table 7.1: Distribution of questionnaires used for the study according to students class and group

	Control class	Intervention class	Total
High/At Risk group	35	41	76
Low/No Risk group	70	49	119
Total	105	90	195

7.2.2 Procedure

Students completed the pre-intervention questionnaire during one class period in the first two weeks of the first quarter of the academic year in 2010. The post-intervention questionnaire was completed after the intervention at different times by the two groups. The *Low Risk* group completed the post-intervention questionnaire during one class period in the last week of the first quarter (7 week module), whereas the *At Risk* group completed the post-intervention questionnaire during one class period in the last lecture week of the second quarter, which is the end of the first semester (14 week module). Due to incorrect or incomplete data, a number of questionnaires could not be used. Also, since the pre- and post-intervention questionnaires had to be matched, those that could not be matched were

discarded. The unmatched questionnaires resulted from the fluidity of the classes. Although students in the intervention classes were advised not to change classes, if possible, one could not prohibit new students from joining the class. There was thus a large number of post-intervention questionnaires that could not be used because there were no matching pre-intervention questionnaires. Class registers were kept and the responses of students who had attended less than 50% of the classes were also discarded.

Research ethics were adhered to. Students were requested to read and sign the informed consent section, which was included with the questionnaire. The letter informed them about confidentiality, and assured them that they would not be disadvantaged in any way by their responses (cf. § 4.9).

7.2.3 Instrument

As explained in §4.5.2, the pre-intervention questionnaire consisted of a 5-point Likert scale (positive to negative), comprising 65 questions divided into nine categories, as was used for the 2009 questionnare discussed in Chapter 5. The nine categories dealt with eight socio-affective factors and one cognitive/metacognitive factor, which is strategy use. The categories were: *reading experience, reading environment/social literacy, perceptions of reading capabilities/self-efficacy, interest, attitude, strategy use, intrinsic motivation, extrinsic motivation,* and *reading habits* (see Appendix 1 for a copy of the questionnaire). The first two sections of the pre-intervention questionnaire (*past reading experience,* which included past school and childhood reading experiences, and *social literacy,* which included family and social reading experiences) were deleted from the post-intervention questionnaire, as the questions elicited fixed past experiences (e.g Were you read to as a child?). The post-intervention questionnaire therefore consisted of 56 questions divided into seven sections. The pre- and post-intervention questionnaires were therefore compared on seven categories viz: *interest in reading, attitudes towards reading, self-efficacy or perceptions of reading ability, intrinsic motivation, extrinsic motivation, reading strategies* and *current reading habits.*

The categories have been discussed in detail in Chapter 4, but are briefly presented with Cronbach Coefficient Alpha reliability figures below.

1. *Interest in reading* ascertained students' level of passion and pleasure in reading. A high interest in reading will invariably lead to frequent reading activities that will develop students' reading proficiency. The Cronbach Alpha for reliability was 0.84 for the pre-intervention questionnaire and 0.83 for the post-intervention questionnaire.

2. *Attitude towards reading* determined the perceptions that students have of reading, the ease with which they settle down to read and the importance and usefulness of reading. The Cronbach Alpha reliability was 0.83 for the pre-intervention questionnaire and 0.86 for the post-intervention questionnaire.

3. *Perceived reading capability* or *self-efficacy* was to find out the extent to which students perceived themselves as readers and whether they believed they have the ability to handle reading tasks successfully. Self-efficacy has been known to correspond with reading ability and academic performance. The Cronbach Alpha reliability was 0.88 for the pre-intervention questionnaire and 0.89 for the post-intervention questionnaire.

4. *Intrinsic motivation* determined students' curiosity, and involvement in reading. Students with high intrinsic motivation become engaged readers and develop their reading proficiency. The Cronbach Alpha was 0.85 for the pre-intervention questionnaire and 0.89 for the post-intervention questionnaire.

5. *Extrinsic motivation* ascertained the level of external influences on students' motivation for reading. Extrinsic motivation assists in increasing the amount and frequency of reading. The Cronbach Alpha was 0.85 for the pre-intervention questionnaire and 0.80 for the post-intervention questionnaire.

6. *Strategy use* determined whether students use appropriate reading strategies. Proper orchestration of appropriate reading strategies leads to high reading comprehension and high self-efficacy. The Cronbach Alpha was 0.64 for the pre-intervention questionnaire and 0.66 for the post-intervention questionnaire.

7. *Reading habits* determined the current reading behaviour of students: how frequently they read, the kind of texts they read, and whether they read for pleasure. Positive reading

habits develop reading proficiency. The Cronbach Alpha was 0.68 for the pre-intervention questionnaire and 0.67 for the post-intervention questionnaire.

The overall Cronbach coefficient alpha for the pre-intervention questionnaires was 0.83, and 0.84 for the post-intervention questionnaires. Cronbach's Alpha ranged between 0.64 and 0.89 for the pre-intervention questionnaires and between 0.67 and 0.89 for the post-intervention questionnaires. The reliability index of the criteria was therefore satisfactory.

7.3 Results of the quasi-experiment

In presenting and analysing the data, the two groups, *At Risk* and *Low Risk*, are reported on separately. This is due to a number of reasons. First, the duration of the intervention differed: seven weeks for the *Low Risk* group, as this was the duration of the module; and fourteen weeks for the *At Risk* group, as their module spanned across a semester. Secondly, the two groups were registered for two different modules. The *Low Risk* group were taking the Academic Reading module, which made it more convenient to apply the reading intervention. The *At Risk* group were registered for a general Academic Literacy (AL) module. Although reading is included in the AL programme, it is only taught in the second semester. The intervention was undertaken in the first semester, when the AL programme focussed mainly on gathering information and presenting it graphically. It was therefore more challenging to apply the reading intervention to this group, as the standard programme had to be followed as well. Thirdly, as the two groups differed in affective levels, as shown in the 2009 study (Chapter 5), affective issues were strongly emphasised in the affectively enriched programme for the *At Risk* group, whereas strategy instruction was more predominant in the affectively enriched programme for the *Low Risk* group. For instance, there was a relatively higher level of informality and distribution of rewards in the *At Risk* group than in the *Low Risk* group. A detailed comparison of the affective levels, reading habits and strategy use of the two groups (*At Risk and Low Risk*) is discussed in Chapter 5.

To determine the efficacy of the intervention, students' responses to the pre- and post-intervention questionnaires were compared for significant differences using t-tests. T-tests were used, as there were two groups of equal variance and adequate sample size.

7.3.1 Presentation and analysis of pre-questionnaires

Levene's test for variance or homogeneity was conducted on the pre-intervention questionnaires to compare control and intervention classes to determine if there were any differences before the start of the intervention. The test determined the homogeneity of the groups. There were no significant differences between control and intervention classes in either *At Risk* or *Low Risk* group. The results of the Levene's test are given in Table 7.2.

Table 7.2: Levene's test for homogeneity for intervention and control classes in High/At Risk and Low/No Risk groups

Categories	High/At Risk (n=76)				Low/No Risk (n=119)			
	Mean	SD	F	p-value	Mean	SD	F	p-value
Reading experience								
Intervention	2.74	0.69	0.106	0.93	2.04	0.66	0.841	0.84
Control	2.73	0.83			2.01	0.63		
Social literacy								
Intervention	2.80	0.79	0.481	0.55	2.68	0.76	0.716	0.99
Control	2.69	0.83			2.68	0.74		
Interest in reading								
Intervention	1.87	0.66	0.535	0.80	2.04	0.79	0.146	0.62
Control	1.92	0.81			2.12	0.90		
Attitude towards reading								
Intervention	1.67	0.48	0.414	0.79	1.93	0.74	0.595	0.94
Control	1.70	0.63			1.92	0.74		
Self-efficacy								
Intervention	2.24	0.79	0.439	0.66	1.95	0.42	0.006	0.48
Control	2.32	0.75			2.02	0.72		
Strategy use								
Intervention	2.26	0.69	0.953	0.62	2.52	0.51	0.418	0.53
Control	2.33	0.67			2.59	0.57		
Intrinsic motivation								
Intervention	2.25	0.58	0.800	0.51	2.24	0.65	0.970	0.34
Control	2.34	0.60			2.36	0.67		
Extrinsic motivation								
Intervention	2.51	0.86	0.508	0.08	2.72	0.97	0.002	0.56
Control	2.18	0.77			2.63	0.68		
Current reading habits								
Intervention	2.43	0.69	0.938	0.06	2.67	0.71	0.745	0.53
Control	2.71	0.65			2.58	0.70		

df = (74) for each analysis in High/*At Risk* group.

df = (117) for each analysis in *Low Risk* group except for *self-efficacy* df = (113.5) and *extrinsic motivation* df = (79.7).

Considering the mean scores, students in both intervention and control classes of the *At Risk* group had interest in reading and had positive attitudes towards reading. However, their past reading experience, social literacy, extrinsic and intrinsic motivation, reading habits and strategy use border on the negative. In other words, students displayed poor reading experience, poor social literacy interaction, low extrinsic and intrinsic motivation

for reading, poor reading habits and inappropriate use of reading strategies. There were no marked differences between the classes, as results did not show any significance at 5%. On the whole the intervention and control classes for the *At Risk* group were similar in their affective levels, reading habits and strategy use. In other words, both the intervention and control classes started off at a comparable level. The same was found for the *Low Risk* group.

Considering the mean scores above, students in both classes of the *Low Risk* group had positive attitudes towards reading. However the mean scores were high for other affective factors, indicating poor reading experience, low social literacy interaction, low interest, low self-efficacy, low extrinsic and intrinsic motivation, poor reading habits and inappropriate use of reading strategies. The results of the pre-intervention questionnaires from the *Low Risk* group did not indicate any significant differences between the control and intervention classes, as shown above. Given the above p-values, the intervention and control classes of the *Low Risk* group were similar in their affective levels and strategy use in reading.

Mean scores indicate that students in both *At Risk* and *Low Risk* groups showed similarity in their positive *attitude* towards reading. However, with regard to *interest* the *At Risk* group was relatively more positive than the *Low Risk* group, though the differences were minimal (*At Risk*: 1.87, 1.92; *Low Risk*: 2.04, 2.12). Nevertheless, for the other seven categories, the *Low Risk* group had relatively lower mean scores and could therefore be said to be relatively more positive on *reading experience, social literacy, self-efficacy, strategy use, extrinsic* and *intrinsic motivation* and *current reading habits*, than the *At Risk* group. Despite the differences between the *Low Risk* and *At Risk* groups (which was expected), the control and intervention classes of each group started off at comparable affective levels.

7.3.2 Presentation and analysis of post-intervention data

The fourth research question on the efficacy of the intervention was supported by the hypothesis that after receiving instruction using an affective approach, students in the intervention classes will show improvements in their affective levels.

Given that for each group the responses of the control and intervention classes were similar at the beginning of the intervention, the questionnaires were administered again at the end of the intervention. The nine sections of the pre-intervention questionnaires were reduced to seven, as the first two sections, *past reading experience* and *past social literacy interaction*, could not be influenced by the intervention. Two tests were administered. First, paired t-tests were used to determine differences between pre- and post-intervention questionnaires for each group. Second, independent t-tests were administered to determine the level of improvement across the groups. For both tests effect size procedures were also applied.

7.3.2.1 Descriptive statistics: Presentation of pre- and post-intervention results

The mean scores of the post-intervention questionnaire showed that there were differences between the pre- and post- results in the intervention classes. The intervention classes had more positive responses than the control classes. As the scale of the questionnaire ranged from positive 1 to negative 5, the lower the mean figure, the relatively better the response. The mean scores for pre- and post-intervention responses in the control and intervention classes of both *At Risk* and *Low Risk* groups are given in Table 7.3 below.

Table 7.3: Pre-and post-intervention means for High/At Risk and Low/No Risk groups

Categories	High/At Risk (n=76)				Low/No Risk (n=119)			
	Pre-intervention		Post-intervention		Pre-intervention		Post-intervention	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Interest								
Intervention	1.87	0.66	1.57	0.53	2.04	0.79	1.64	0.42
Control	1.92	0.81	1.93	0.76	2.12	0.90	2.08	0.87
Attitude								
Intervention	1.67	0.48	1.53	0.57	1.93	0.74	1.67	0.47
Control	1.70	0.63	1.72	0.72	1.92	0.74	1.85	0.71
Self-efficacy								
Intervention	2.24	0.79	1.88	0.48	1.95	0.42	1.72	0.42
Control	2.32	0.75	2.37	0.79	2.02	0.72	1.80	0.70
Strategy use								
Intervention	2.26	0.69	1.89	0.43	2.52	0.51	2.25	0.42
Control	2.33	0.67	2.20	0.56	2.59	0.57	2.55	0.62
Intrinsic motivation								
Intervention	2.25	0.58	1.72	0.41	2.24	0.65	1.98	0.47
Control	2.34	0.60	2.27	0.53	2.36	0.67	2.44	0.77
Extrinsic motivation								
Intervention	2.51	0.86	2.01	0.61	2.72	0.97	2.50	1.10
Control	2.18	0.77	2.15	0.78	2.63	0.68	2.75	0.96
Current reading habits								
Intervention	2.43	0.69	1.82	0.46	2.67	0.71	2.22	0.51
Control	2.71	0.65	2.61	0.60	2.58	0.70	2.60	0.62

Mean scores for the post-intervention results indicate that the intervention classes (*At Risk and Low Risk*) had more positive responses indicating better affective levels, strategy use and reading habits than in the pre-intervention questionnaires. The mean scores also show that the control group had generally worsened or merely retained their pre-intervention affective levels in the post-intervention questionnaires.

7.3.2.2 Inferential statistics: Paired t-test and independent t-test Analysis of differences between control and intervention classes

This section discusses the statistical results of the paired t-test (comparing pre- and post-intervention questionnaires of students to determine differences within groups) and independent t-tests (differences in post questionnaires to determine level of improvement between groups). Results of the paired t-test for both *At Risk* and *Low Risk* groups are discussed together (§7.3.2.2.1), whereas the results of the independent t-test for the groups are presented separately, first for the *At Risk* group and then for the *Low Risk* group (§7.3.2.2.2).

7.3.2.2.1 Paired t-test

There were no marked differences in the pre and post-intervention questionnaires of the control classes. However, as Table 7.4 shows, there were significant differences in six of the seven categories for the intervention classes, viz: *interest (At Risk,* p=0.0018; *Low Risk,* p=0.0001), *self-efficacy (At Risk,* p=0.0003; *Low Risk,* p=0.0002), *strategy-use (At Risk,* p=0.001; *Low Risk,* p=0.0005), *intrinsic (At Risk,* p=0.0001; *Low Risk,* p=0.0012) and *extrinsic (At Risk,* p=0.0017) motivation* and *reading habits (At Risk,* p<0.0001; *Low Risk,* p<0.0001).* The *Low Risk* intervention group showed a significant difference for attitude (p=0.0055) but the *At Risk* group did not, and the *At Risk* group showed significant difference for extrinsic motivation whereas the *Low Risk* group did not. Paired t-test results showing p-values are given in Table 7.4 below.

Table 7.4: Results of paired t-test for control and intervention classes in High/At Risk and Low/No Risk groups

Categories	High/At Risk (n=76)		Low/No Risk (n=119)	
	Paired t-	p-values	Paired t-	p-values
Interest				
Intervention	**3.35**	**0.001****	**4.32**	**0.000****
Control	**-0.12**		**0.44**	
Attitude				
Intervention	**1.45**	**0.153**	**2.91**	**0.005****
Control	**-0.21**		**0.73**	
Self-efficacy				
Intervention	**3.95**	**0.000****	**4.1**	**0.000****
Control	**-0.4**		**2.22**	**0.029***
Strategy use				
Intervention	**3.56**	**0.001****	**3.76**	**0.000****
Control	**1.61**		**0.48**	
Intrinsic motivation				
Intervention	**5.55**	**0.000****	**3.45**	**0.001****
Control	**0.9**		**-0.86**	
Extrinsic motivation				
Intervention	**3.37**	**0.001****	**1.6**	**0.117**
Control	**0.33**		**-1.28**	
Current reading habits				
Intervention	**5.11**	**0.000****	**5.36**	**0.000****
Control	**0.1**		**-0.24**	

t (t-values); p (p-values)

* p= p<0.05; **p= p<0.01

These results are further elaborated on with effect sizes in section 7.3.3. below.

7.3.2.2.2 Independent t-test

This section presents analyses of the improvement scores from the independent t-test, first for the *At Risk* group and then for the *Low Risk* group. The results for the *At Risk* group showed statistically significant differences between control and intervention classes on five of the seven categories: *interest* (t(74)=2.36,p=0.021), *self-efficacy* (t(74)=2.82,p=0.006), *intrinsic motivation* (t(74)=3.57,p<0.001), *extrinsic motivation* (t(74)=2.63,p=0.010), *and current reading habits* (t(74)=3.09,p=0.002). The category of strategy use was not significant at 5% (p=0.092). There was no statistically significant difference between the control and intervention classes of the *At Risk* group on their attitude towards reading. However, whereas the mean scores showed improvement for the intervention class (M= 0.13) the control class recorded a decreased mean of -0.019. In other words the improvement in attitude of the intervention class in the *At Risk* group, though not statistically significant, was more positive in terms of the mean scores. It seems that the positive attitude of the students at the start of the year decreased, possibly, as

tertiary workload increased. On the whole, whereas the affective levels of the intervention class in the *At Risk* group improved, those of the control class decreased, even sometimes worsening into negative figures, as shown in the mean figures. The results with significant p-values are given in table 7.5 below.

Table 7.5: Improvement scores for control and intervention classes in terms of values and means

Categories	High/At Risk (n=76)				Low/No Risk (n=119)			
	Improvement				Improvement			
	Mean	SD	t	p-value	Mean	SD	T	p-value
Interest								
Intervention	0.302	0.57	2.36	0.021*	0.395	0.64	-2.69	0.008**
Control	-0.011	0.57			0.040	0.75		
Attitude								
Intervention	0.138	0.60	1.19	0.239	0.261	0.63	-1.42	0.157
Control	-0.019	0.53			0.069	0.78		
Self-efficacy								
Intervention	0.363	0.58	2.28	0.006**	0.222	0.37	0.02	0.983
Control	-0.045	0.67			0.225	0.84		
Strategy use								
Intervention	0.365	0.65	1.7	0.092	0.277	0.51	-2.07	0.041
Control	0.134	0.49			0.038	0.68		
Intrinsic motivation								
Intervention	0.531	0.61	3.57	0.001**	0.266	0.54	-2.68	0.008**
Control	0.073	0.48			-0.081	0.78		
Extrinsic motivation								
Intervention	0.501	0.95	2.75	0.007**	0.221	0.97	-2.11	0.036*
Control	0.028	0.50			-0.122	0.80		
Current reading habits								
Intervention	0.601	0.75	3.09	0.002**	0.44	0.58	-4.49	0.001**
Control	0.010	0.64			-0.016	0.52		

DF = (74) for each analysis in *At Risk* group except for extrinsic motivation. DF= (62.8)

DF = (117) for each analysis in the *Low Risk* group. t (t-values); p (p-values); * p= p< .05; **p= p<.01

In general, the control classes did not exhibit better affective levels and strategy use than the intervention classes. Where there was no statistically significant difference the mean figures show that the intervention class still improved. The intervention class for *At Risk* group had developed significantly higher interest (p=0.021), higher levels of self-efficacy (p=0.006), higher intrinsic and extrinsic motivation (p<0.001; p=0.007), and better reading habits (p=0.002).

The decreased affective levels of the control groups, shown in negative figures for the mean, indicate that the affective levels of this cohort of first-year students dropped during the first semester of their tertiary education. In contrast, the affective teaching approach that was used in the intervention classes increased students' affective levels. The

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differences between the control and intervention classes, when all other factors have been controlled, indicate that the approach did benefit students in as far as their affective levels, reading habits and strategy use were concerned.

The improvement differences between the control and intervention classes of the *At Risk* group are further represented in Figure 7.1 below.
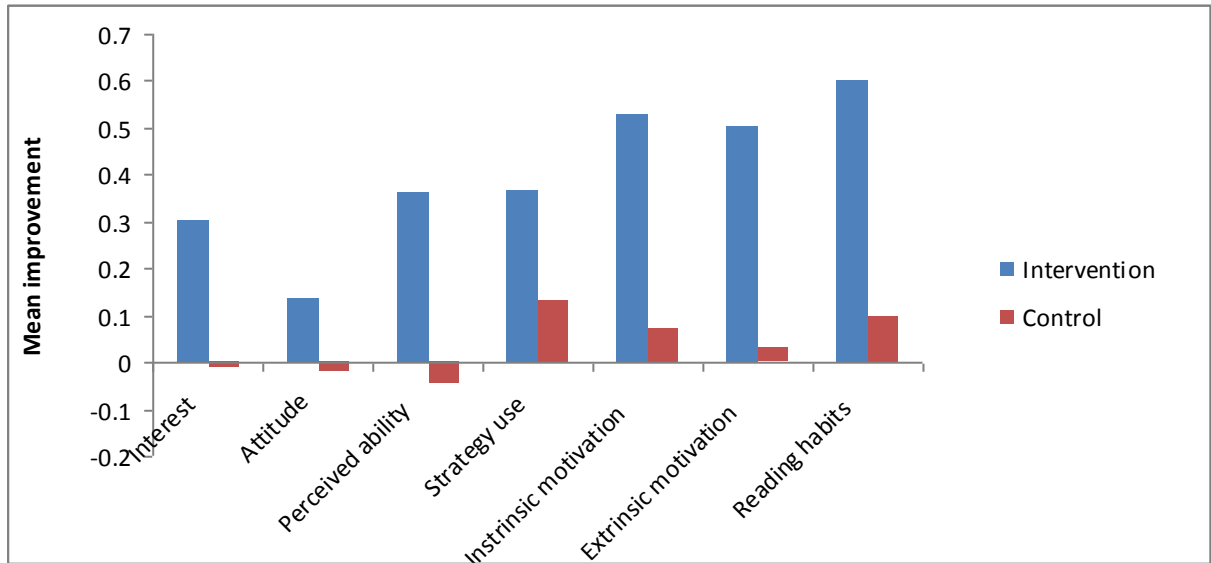
Figure 7.1: Chart showing improvement scores for intervention and control classes in the *At Risk* group

Results of the *Low Risk* group, as shown in Table 7.5, showed significant differences between the intervention and control classes on five of the seven categories. Independent t-test analysis showed statistically significant differences between the control and intervention classes on interest (t(117)=-2.69,p=0.008), intrinsic (t(117)=-2.68,p=0.008) and extrinsic (t(117)=-2.11,p=0.036) motivation, strategy use (t(117)=-2.07,p=0.041) and reading habits (t(117)=-4.49,p<0.001). There were no statistically significant differences between the improvement of the control and intervention classes of the *Low Risk* group on *attitude towards reading* and *self-efficacy*. However, mean scores for the two categories showed differences in improvement for the intervention class. It is interesting to note that for the *At Risk* group, *attitude* was the only category that did not show a significant difference between the control and intervention classes, and was also not significant in the *Low Risk* group, as shown in Table 7.5 above. According to the mean scores given in

Table 7.2 above, students had responded positively to questions on reading attitude in the pre-intervention questionnaire, but this positive attitude did not increase. In general, students in the intervention class had improved significantly in affective levels compared to the control class. The improvement differences between the control and intervention classes of the *Low Risk* group are further represented in Figure 7.2 below.
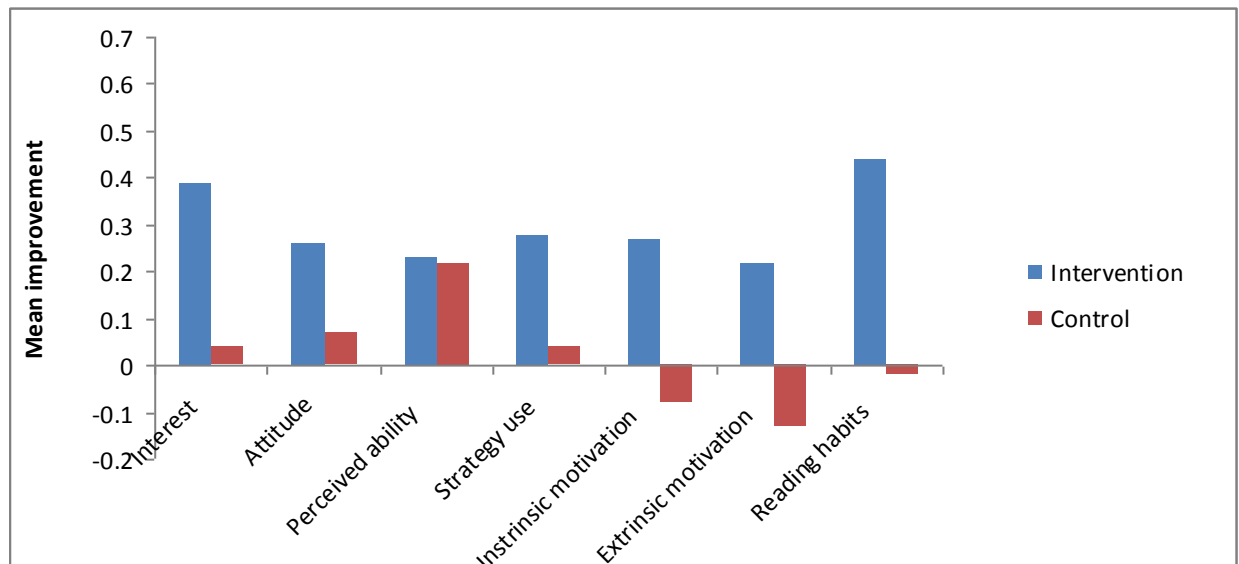
Figure 7.2: Improvement scores for the intervention and control classes of the Low Risk group

Given that five of the seven categories showed statistically significant improvements for the intervention class of the *Low Risk* group, and six out of seven for the *At Risk* group, it can be concluded that the affective teaching approach was effective in improving students' affective levels in reading. A table showing the p-values for both groups is given below.

Table 7.6: Table showing p-values for improvement differences between control and intervention classes in *At Risk* and *Low Risk* groups

	High/At Risk (p-values)	Low/No Risk (p-values)
Interest	0.021*	0.008**
Intrinsic motivation	0.001**	0.008**
Extrinsic motivation	0.007**	0.036*
Reading habits	0.002**	0.001**
Strategy use	0.092	0.041*
Self-efficacy	0.006**	0.983
Attitude	0.239	0.157

* p< .05, **p< .01

7.3.3 Differential performance (effect sizes)

To determine what effect the intervention had on students, an effect size procedure using Cohen's d was applied to each of the seven categories for *At Risk* and *Low Risk* groups. As this procedure is particularly valuable for "quantifying the effectiveness of a particular intervention" (Coe 2002) it was calculated to emphasise the size of the difference between intervention and control classes. In other words as indicated by Coe (2002) it allows the researcher to move from the simplistic idea of whether the intervention had worked or not to a far more sophisticated position of how well the intervention had worked in the context. Coe (2002) reports that Cohen places an effect size of 0.5 as medium and that of 0.8 as grossly perceptible and therefore large. Glass, McGaw and Smith (1981:104) argue that in education, if academic achievement can be raised by an effect size of even as little as 0.1, it could be perceived as a significant improvement. Table 7.7 shows effect sizes on each of the seven socio-affective variables for the intervention class in the *At Risk* and *Low Risk* groups while Table 7.8 shows effect size differences between the intervention and control classes. Considering that affective levels correspond with reading achievement, it could be concluded that the medium and large effect sizes achieved as shown in Tables 7.7 and 7.8 below, infer that a significant improvement had occurred in students' socio-affective levels. The effect sizes are given in the two sets of data presented below: Table 7.7 and the other in Table 7.8. Cohen's d analysis yielded the following:

Table 7.7: Results of paired t-test with effect sizes for intervention classes in the High/At Risk and Low/No Risk groups

Categories	High/At Risk		Low/No Risk	
	Cohen's d	Effect size	Cohen's d	Effect size
Interest				
Intervention	0.499	M	0.622	M-L
Attitude				
Intervention			0.419	S-M
Self-efficacy				
Intervention	0.552	M	0.525	M
Control			0.315	S-M
Strategy use				
Intervention	0.632	M-L	0.585	M
Intrinsic motivation				
Intervention	1.041	L	0.465	M
Extrinsic motivation				
Intervention	0.670	M-L		
Current reading habits				
Intervention	1.013	L	0.720	M-L

M (medium effect); L (large effect); S (small effect)

The figures given in the table above indicate that the effect of the intervention was significant, as the effect sizes in both *At Risk* and *Low Risk* groups were large or medium. While the Low Risk group had two small to medium effect sizes, the At Risk group had medium to large effect sizes in all categories. Given that the *At Risk* group recorded large effect sizes for intrinsic motivation and reading habits, in the paired t-tests, and the *Low Risk* showed medium and medium to large in both categories, it can be concluded that on those two categories the intervention made a difference in affective levels, particularly for the *At Risk* group.

It is interesting that in the *Low Risk* group the control class showed statistically significant difference between the pre- and post-intervention results on *self-efficacy*, and yielded an effect size of small to medium. This could be due to the fact that most of the students from the *Low Risk* group are from former model C schools and private schools where there is good education. As a result, they may have high self-efficacy even without an intervention, though this self-efficacy pertains to study in high school. These self-efficacy levels may begin to decrease as they proceed with tertiary studies, if they are unable to cope academically. Thus, there is a need to support students on affective and academic levels. The next set of data shows the effect sizes of the improvement scores.

Table 7.8: Results of independent t-test (improvement scores) with effect sizes for intervention classes in the High/At Risk and Low/No Risk groups

Categories	High/At Risk		Low/No Risk	
	Cohen's d	**Effect size**	**Cohen's d**	**Effect size**
Interest				
Intervention	0.550	M	-0.505	M
Attitude				
Intervention				
Self-efficacy				
Intervention	0.657	M		
Strategy use				
Intervention			-0.388	S-M
Intrinsic motivation				
Intervention	0.832	L	-0.503	M
Extrinsic motivation				
Intervention	0.641	M	-396	S-M
Current reading habits				
Intervention	0.720	M-L	-843	L

M (medium effect); L (large effect); S (small effect)

Compared to their peers in the control class, the *At Risk* group showed large improvement in *intrinsic motivation* and medium to large improvement for *reading habits*. The *Low Risk* group had large effect size for reading habits as well. Besides strategy use, which was not significant for the *At Risk* group, but showed small to medium effect size for the *Low Risk* group, the other categories showed medium effect sizes in both *At Risk* and *Low Risk* groups. Thus effect sizes show that not only had the affective levels of the intervention students improved more than the control classes, but the improvements displayed medium and large effect sizes.

7.4 Discussion

In general, students in the intervention classes improved significantly in affective levels compared to the control groups. The fact that the intervention classes in both *At Risk* and *Low Risk* groups showed significant improvement on the category of *interest,* indicates that students in these classes developed relatively higher interest in reading after the intervention. A high interest in reading meant higher motivation to read. According to Deci (1992:43) "interest is a powerful motivator" and can lead to enjoyment, involvement and absorption. These payoffs are also features of engagement. It can therefore be assumed that the deep interest that students had developed in reading had also increased their motivation to read and that they read with enjoyment, involvement, absorption and consequently, engagement.

The significant improvement in reports of self-efficacy of the intervention class of the *At Risk* group indicates that students had developed positive perceptions of their capabilities to read texts. Self-efficacy is a strong predictor of reading proficiency and academic success (Grabe & Stoller 2002:56; Guthrie & Wigfield 2000:408; Mills et al. 2007), and therefore one could assume that these students had improved in their reading proficiency, as well as their academic performance. Improvement in self-efficacy for the intervention class of the *Low Risk* group was not statistically significant. However, mean scores showed that the intervention class had improved. Worthy to note is the fact that this *Low Risk* group had started off with relatively higher self-efficacy reports than the *At Risk* group, which was not surprising, as they were supposed to be relatively more academically literate than the *At Risk* group. The minimal improvement in self-efficacy of the intervention class could be that the initial self-efficacy which pertained to their high school

achievement had dropped at the start of tertiary studies and was only beginning to improve at the time of administering the questionnaire.

The fact that attitude did not show significant differences in both *At Risk* and *Low Risk* groups compared to their peers calls for further investigation into the attitude factor. However, it should be noted that all four classes started off with positive attitudes as shown in pre-intervention questionnaires. Of course this self-report on attitude was based on their feelings and perceptions at pre-intervention time at the beginning of the university year, before they had had intensive instruction at tertiary level. Nevertheless, the fact that the improvement was not statistically significant after the intervention could be explained in light of Mathewson's (2004) model, which posits that certain factors mediate the attitude-behavior relationship. Also Yamashita (2004) found that, in relation to Mathewson's tricomponent view of attitude, students had improved on the affective, but not on the evaluative component. It could be that the number of questions on the affective component was inadequate to show statistically, significant results. In addition, the intervention period may have been too short to influence students' reading attitude. McKenna's (2001) model posits that it takes much longer for attitude to manifest in behavior. A similar argument of time constraints could be presented for the non-significant improvement on *self-efficacy* for the *Low Risk* group. Although a significant difference was recorded for strategy use, which should have improved self-efficacy, the improvement in the use of strategies may not yet have been internalised to influence self-efficacy levels due to the short duration of the intervention.

The statistically significant improvement in intrinsic and extrinsic motivation of the intervention classes meant that students in these classes had become more absorbed, interested, involved and engaged readers (Deci 1992; Deci & Ryan 2000 Guthrie & Wigfield 2000). They were also motivated by external influences such as marks, praises and other rewards. According to Deci and Ryan (2000), extrinsic motivation can become internalised and integrated into the self, resulting in intrinsic motivation. From this point of view, it could be assumed that students' improvement in intrinsic and extrinsic motivation had propelled them into becoming engaged readers who read with absorption, involvement and interest.

The fact that students had significantly improved in their strategy use could indicate that they had obtained a higher level of self-efficacy, which could lead to higher motivation and frequency in reading. Frequent reading or increased reading amount leads to engaged reading and improves reading proficiency, and consequently academic success (Guthrie & Wigfield 2000; Wigfield, Guthrie, Perencevich et al. 2008). In addition, the use of appropriate reading strategies could greatly assist students in reading comprehension (Anderson 1991; Anderson 1999) and critical reading (Grabe 2008). Comprehension challenges at tertiary level such as those involving inferencing skills may therefore become less challenging for these students.

The statistically significant improvement in the reading habits of the intervention classes could be attributed to the extensive reading that these students had to undertake. This meant that students had stated developing positive reading habits. In other words, students were reading for pleasure more frequently than they did before the intervention. Pleasure reading and frequent reading increases vocabulary, develops reading speed, provides background knowledge and develops reading efficiencies which are required for comprehension and critical reading (Anderson 1996; Day 2010; Elley 1996; Grabe 2008; Grabe & Stoller 2002; Greaney 1996; Guthrie, Wigfield, Humenick, Perencevich, Taboada, & Barbosa 2006; Stanovich & Cunningham 1993).

In as much as students had improved their affective levels, with substantial effect sizes, and assumed to have achieved the necessary reading development that relates to their affective levels, the intervention instruction, using an affective approach, could be said to have been beneficial and effective. Students' affective levels for reading had improved and it is envisaged that their reading ability had also improved.

The high statistically significant improvement difference between the control and intervention classes recorded for reading habits could have been due to the extensive reading the intervention classes had to undertake. Students in the intervention class were required to read a specified number of pages of non-academic texts (e.g. stories in magazines, novels, anthologies of short stories, etc.) per week and complete an inventory to compile a portfolio, together with other academic tasks (Chapter 8 discusses the qualitative data that includes feedback on the extensive reading project). The fact that students were reading more suggests a positive change in reading habits, which further indicates the efficacy of the teaching

approach used in the study. Extensive reading helps to develop and improves students' reading ability, as has been reiterated by several researchers (Grabe & Stoller 2002; Horst 2005; Nishono 2007; Pulido 2009). Thus, developing students' reading habits to improve their reading ability is an important endeavour in reading instruction.

In addition to using the results of the pre-intervention questionnaires to ascertain the comparability of the control and intervention classes before the start of the intervention, the results also shed light on the affective levels of the students as a whole. From the results given in tables 7.2 and 7.3 above students' affective levels were low initially, except for their attitudes towards reading, which were positive in both *At Risk* and *Low Risk* groups, and their interest in reading, which was positive for the *At Risk* group. Although affective levels were low in both groups, the mean figures show that the affective levels of the *Low Risk* group were better than those of the *At Risk* group, which was not surprising as students in the *Low Risk* group were considered more academically literate and therefore expected to have higher affective reading levels than the *At Risk* group. These results corroborated the 2009 results. Statistical results for the 2009 cohort showed that the *At Risk* group had relatively lower affective levels for reading than the *Low Risk* group. Both groups, however, needed to improve their affective levels for reading, and this indeed seemed to have happened after the intervention.

7.5 Conclusion

It was expected that there would be a measure of improvement in all classes, as the control classes were also receiving the normal instruction in reading and in academic literacy. Also the fact that students had been through a term/semester of instruction in other subjects, general academic improvement is expected to have occurred, which could enhance their affective levels. However, the question was whether there were differences in the level and amount of improvement between the control and intervention classes. Did the intervention classes improve more than the control classes and were the improvements statistically significant? Tables 7.2 to 7.7 show statistically significant improvements for the intervention classes on five of the seven categories. Where the improvements were not statistically significant, mean scores show that the intervention classes had improved, whereas in some instances the control classes had decreased into negative figures. This shows that first-year students' affective levels could drop after the start of academic work.

Affective support is needed to stabilise and develop students' affect towards reading, especially their self-efficacy, which has been proven to predict reading proficiency (Erlich et al. 1993; Guthrie & Wigfield 2000:408; Mills et al. 2007:436) and academic success (Pretorius 2000; 2007). This prediction is also confirmed with the 2009 cohort of students, as discussed in Chapter 5. Students' self-efficacy levels strongly predicted their reading ability in both the 2009 and 2010 studies. The medium and large effect sizes that were obtained also show the extent to which the intervention was effective in improving students' reading habits, strategy use and affective levels towards reading.

This chapter has presented a quantitative analysis to determine the efficacy of the intervention. The results of paired and independent t-tests show statistically significant improvement in affective levels, reading habits and strategy use for the intervention classes. Effect size procedures emphasised and confirmed these improvements by yielding medium or large effects. Thus not only was the intervention shown to be effective but also highly effective according to the quantitative data presented. The next chapter discusses the efficacy of the intervention using more insightful qualitative data, based on students' responses to interviews.

Chapter 8: Qualitative analysis of the student interviews

8.1 Introduction

The previous chapter provided a quantitative analysis of students' responses to questionnaires. The questionnaires probed students' opinions about the role of one cognitive/metacognitive and eight socio-affective factors in influencing their reading behaviour before and after a reading intervention programme. The main finding of the quantitative analysis was that students in the intervention classes improved in their affective levels and strategy-use in relation to reading, which points to the efficacy of the intervention programme. This chapter adds a qualitative dimension to the largely quantitative study in order to gain an in-depth understanding of trends and patterns and to round out the mixed methods design (Ivankova & Creswell 2009: 145; Leedy & Ormrod 2010; Teddlie & Tashakkori 2003:15). According to Teddlie and Tashakkori (2003:15) a mixed methods design enables the researcher "to simultaneously confirm a quantitatively derived hypothesis and explore in greater depth the processes by which the relationship occurred".

Whereas Chapter 7 elicited and analysed students' responses to questionnaire items focusing on the effectiveness of the intervention in terms of the main dimensions of the construct 'socio-affective factors that influence reading behaviour', Chapter 8 looks specifically at students' appraisal of the motivational teaching techniques used in the intervention classes. These techniques map largely onto the following socio-affective factors*: interest, attitude, habits, self-efficacy* and *motivation* in reading, as well as the cognitive factor of *strategy use*. Semi-structured interviews, following the intervention, were used to elicit students' perceptions and evaluations of the intervention in order to determine how the qualitative data supports and elaborates on the quantitative data.

According to the initial research protocol, as expounded in the research proposal for the study, interviews would be conducted in three phases – at the beginning, during and after the intervention – in the form of case studies. Selected students were to be interviewed on three different occasions to determine their perceptions after each phase of the

intervention. However, due to the fluidity of the classes, this was not feasible, and therefore interviews were conducted only after the intervention at the conclusion of the modules. The advantage of scheduling the interviews at the conclusion of the modules was that students did not feel inhibited to express their views or tried to please the researcher, since their work had already been graded, and therefore their responses would not have any positive or negative effect on their achievement in the modules.

8.2 Methodology

The profile of the sample of students who were interviewed and the instrument (interview questions) are presented below, followed by an explanation of the method of analysis. Thereafter, the teaching techniques are presented, with a summary of students' responses to the perceived effectiveness of each technique. The results are then discussed using pseudonyms to identify respondents.

8.2.1 Respondents

As explained in chapter one, all the students wrote a reading test at the beginning of the module, and another at the end of the module. The average for each test was calculated per group. From these two tests two high achieving students, two students with average marks and two with low marks were to be selected from the intervention groups (*At Risk* and *Low Risk*) for the interviews. Thus, there were supposed to be six students per group. However, due to the fluidity of the classes and the fact that the interviews could only take place at the end of the module this selection method was slightly altered. All the students who obtained the highest, lowest and average marks were identified in both pre- and posttests and from both *At Risk* and *Low Risk* intervention groups. These students were contacted by email and by phone and a date and time that were suitable for them were arranged for the interviews. Students were interviewed individually, and the duration of each interview was approximately 45 minutes. Requests for students' consent to these interviews were included in the consent forms for the tests and questionnaires, and were signed by all students at the beginning of the module. Altogether, 47 students were identified, but only 40 were interviewed. The other students could either not be reached or failed to turn up for the interview. Two students from the *At Risk* group with very low marks for the pretest improved to obtain average marks for the posttest but were interviewed only once. A student, also from the *At Risk* group obtained a very high/highest mark in the pre- and

posttests, but was interviewed once. Another student from the *Low Risk* group obtained the lowest mark in both tests, but was also interviewed once. All four students were interviewed once, even though they were listed under two separate performance levels. This reduced the number of students interviewed by four to a total of 36. The distribution according to number of students per performance level is given in table 8.1 below. The numbers in brackets indicate that a student was interviewed under another performance level.

Table 8.1: Number of students interviewed per performance in pre- and posttests Performance levels

	Pre-test			Post-test			
	High	Average	Low	High	Average	Low	Total
High/At Risk	2	4	2	1 (1)	7 (2)	2	18 (3)
Low/No Risk	2	3	2	2	7	2 (1)	18 (1)
Total	4	7	4	3 (1)	14 (2)	4 (1)	36 (4)

8.2.2 Instrument

Semi-structured interviews that allowed students the freedom to express open-ended views to questions were conducted mainly around the areas of motivational teaching techniques that were used for the intervention: *learning goal, relevant texts, teacher support, competence support/strategy instruction, autonomy, collaboration*, *rewards and praise*. The categories of *classroom learning environment* and *extensive reading,* which were to provide both affective and cognitive enrichment, were also included in the list of interview topics. Students were also asked to comment briefly on any other issues pertaining to the reading intervention programme, and the information is presented under general comments. The operationalisation of these teaching techniques and the main areas of focus in the interviews are presented below.

Table 8.2: Teaching techniques showing areas of focus for interviews

Teaching technique	Areas of focus for interviews	Description /Operationalisation
Learning and knowledge goals	- Explanations - Linking tasks to outcomes - Encouraging more focus on learning	Emphasis on learning instead of grades Clearly stated goals and outcomes.
Relevant and	Use of subject- specific passages from textbooks and discipline-	Use of significant, relevant and interesting texts

interesting texts	related texts for strategy instruction, tasks and assignments	
Teacher support and involvement	• Students received individual attention • Extra tuition given to weak students • Referring to students by name	Care and concern of students by lecturer. Affective and academic support
Competence support Strategy instruction	• Explanations and modelling of strategies such as summarising and notetaking • Practicing of speed reading exercises • Teaching of strategies for efficient reading (e.g. previewing, questioning, reviewing and evaluation) • Modelling and practicing of background knowledge application	Strategy instruction: explaining, modelling, scaffolding and practising
Autonomy and choice	• Texts for extensive reading were chosen by students • Texts for practice exercises and assignments had several options for students to choose from • Students had to work on their own to improve speed and use of strategies	Choice in selection of texts and tasks Responsibility for and ownership in learning
Collaborative, social learning (relatedness support)	• Group discussions of texts (main ideas, supporting details, etc) • Group presentations • Gradual progress from teacher (whole class) to peer (group and pair) to individual – scaffolding	Collaborative discussions in class and groups. Collaboratively produced assignments
Rewards and praise	• Identification of best performing students for tasks, assignments, etc. • Acknowledged openly and praised • Rewards (chocolates, sweets, novels) given for best performance	Rewards and praise
Classroom learning environment	• Semi-formal, non-threatening teaching and learning environment	Humanistic teaching approach
Extensive reading	• Scaffolded reading of non-academic texts with an inventory on cognitive and affective issues	Reading for pleasure

The interview questions below were used as guidelines for the interviews, but were not phrased in exactly the same way for each student.

1. **Learning and knowledge goals:**
   - How did you relate to the explanations given in class?
   - Did the linking of tasks to outcomes influence your understanding and motivation in any way?
   - Comment on the enrichment added to the module (the additional tasks, frequent explanations, discussions and so on).

2. **Relevant and interesting texts:**
   - How did the use of discipline-related texts and texts from textbooks affect or influence your understanding and/or learning?
   - Did the use of the discipline-related and general texts increase your interest in the texts and tasks in any way?

3. **Competence support/Strategy instruction:**
   - Have your reading speed, use of reading strategies, understanding of texts, critical reading skills been influenced by the classes?
   - If yes, how did this affect your attitude, motivation and love for reading?

4. **Teacher support and involvement:**
   - Do you think the lecturer supported you in your learning, for example, assisted you in understanding texts better; assisted in your application of strategies – in making learning easier for you, and in motivating you to learn?
   - If yes, explain the effect the lecturer's support had on your learning. If no, explain how.

5. **Autonomy support:**
   - Did the fact that you were asked to choose your own texts for the reading project influence your level of interest and motivation? Explain.
   - Did the fact that you were given various texts to select from for assignments and tasks influence your level of interest and motivation in any way? Explain.

6. **Collaboration:**
   - How did the frequent group and peer discussions influence you?
   - What effect did the group and peer learning have on your understanding and use of strategies?
   - Do you prefer individual or group and pair work in class and in doing projects? Explain.

7. **Rewards and praise:**
   - Were you motivated by the rewards for high scores and good performance?
   - Comment on the praises and performance rewards given in class.

8. **Learning environment:**
   - How did you perceive the learning environment?
   - What influence did it have on your learning?
   - Did it influence your level of interest and motivation?
   - Did you enjoy the class?
   - Were you motivated in any way by the teaching approach?

9. **Extensive reading:**
   - Did the readings for the portfolios influence your reading ability, and in what way?
   - Do you feel that you have been motivated to read more often?
   - When you read novels, do you identify with characters? (share their pain, joy, and so on)
   - Did you get very involved in the reading?
   - Did you become curious about the unfolding of events in the novels?

10. **General comments:**
    - Comment briefly on any challenges, improvements, and developments, and provide suggestions if necessary.
    - What general comment would you like to add?

8.2.3 Procedure

Interview sessions were recorded as handwritten field notes and also tape-recorded. The electronic versions were transcribed and compared with the manual data. Summaries of the salient ideas were made from the two sources (Appendix 6). Resulting from students' feelings of relatedness towards the lecturer-researcher the interviews were quite informal and it was sometimes difficult to keep students on topic. Furthermore, the open-endedness of some of the questions resulted in responses that pertained to more than one teaching technique, or a technique different from the one that constituted the focus of a particular question. As a result some teaching techniques do not have responses from all the students and therefore the number of students' responses varied for each construct.

The summaries were analysed using qualitative content analysis. Taylor-Powell and Renner's (2003) five steps for applying content analysis to qualitative data were followed. The fist step is to indicate the limitations and level of analysis. The second is to focus the analysis by (a) question or topic; or by (b) case, individual or group; or by both (a) and (b). The third step is to categorise the information by coding into identified themes or patterns, and the fourth step is to identify the patterns and connections within and between categories. The fifth and final step is to bring all the information together for interpretation. Details of the the steps, as they were applied to the data, are given in Chapter 4 (§ 4.6.2) where the general methodology is discussed.

8.3 Presentation and analysis of data

The summaries of the interview responses are presented under the teaching techniques that were used in the intervention: *learning goal, use of relevant and significant texts, praise and rewards, competence support* in the form of strategy instruction, *teacher support, autonomy support*, and *collaboration*; as well as *extensive reading* and *classroom environment*, which can either enhance or dampen students' affect. In a final open-ended question, students were also asked to comment briefly on any issues pertaining to the reading intervention programme.

From the interviews it was observed that while most indigenous African language speakers (within and outside South Africa) prefer to work in groups and were positive about the collaborative exercises, a number of English and Afrikaans first language speakers preferred individual work. It also came to light that whenever exercises were based on texts from textbooks or related to the disciplines, students became very interested and highly motivated. They reported satisfaction in terms of learning that had direct impact on their coursework. This, they believed, could be transferred to their content modules and assist them in obtaining good grades. Others shared that if they were interested in the topic, they enjoyed the reading, even if the texts were not related to their coursework or subject-field. The details of the interviews are presented below, first for the *At Risk* group and then for the *Low Risk* group, using the teaching techniques as headings.

8.3.1 Learning and knowledge goals

The focus on learning goals, in which explanations, aims and purposes of tasks were given to shift students' attention to learning, greatly improved their understanding. In the *At Risk* group, 79% of the students reported better understanding and higher motivation as a result of the explanations. Thirty-six percent (36%) said the explanations made tasks easier to do, and 21% specifically mentioned improvement in academic performance. One student, Nkosi, stated that because the explanations made learning easier, he believed it contributed to his improvement in the Academic Literacy test in May, in comparison to the March test. Fifty-seven percent (57%) reported that the explanations increased their motivation, and 21% made reference to the fact that it raised their interest in doing tasks. They explained that being reminded of the aims and objectives for doing tasks increased their motivation.

In the *Low Risk* group 80% of the students were positive about the focus on learning goals. Sixty percent said that it helped them gain better understanding and consequently raised their motivation and made them more willing to do tasks. Although it is inferred that by being motivated to read, students would read more frequently, and by frequent reading their reading proficiency would improve, two students in this group, Rampedi and Smith, confirmed this by explicitly stating that their reading ability improved as a result of the explanations. One student, Howard, went further to acknowledge the influence of background knowledge on his understanding of texts. His sentiments were echoed by other students who intimated that the explanations provided relevant background to the texts and made tasks easier to do and helped them to gain better focus.

One student, Marx, reported that she liked to know the reason behind whatever she did, and thus the explanations and the link between tasks and outcomes really motivated her. They gave her a better understanding of events in the classroom. Rampedi summarised students' perceptions of the benefits of learning goal orientation by stating:

> Being given explanations and linking purpose of task to the outcomes is motivating; because you know the reason for doing what you are doing. It also gives one better understanding of the task. You think you are out of high school so you have had a reading experience and you think you have a reading ability, but explanations help improve your reading ability. You see the relationship between the task and the outcomes and you are motivated [….]

The responses of students in both *At Risk* and *Low Risk* groups were very similar. As a result of the intervention, students felt they had gained better understanding of texts and strategies, and were consequently more motivated to read and to do assigned tasks. Almost all the students interviewed responded that the explanations helped to make the tasks easier to do. On the whole, students reported better understanding, which led to increased interest and high levels of motivation.

8.3.2 Relevant texts

As reported by Guthrie and Wigfield (2000), the use of relevant and significant texts for reading instruction is highly motivating to students. These texts include generic texts that are interesting to students as well as subject-specific texts that are relevant to their chosen disciplines. Besides the generic texts that were used for exercises and tasks, discipline-related and module-related texts were also used. The Economics textbook, *Economics for South African students,* was mostly used, as Economics was compulsory for first year students in the Economics and Management Sciences (EMS) faculty (about 60-70% of first-year students taking literacy modules are from the EMS faculty).

With the exception of two students, Maringa and Mondiane (both low performers in the *At Risk* group), who felt that the EMS students had an advantage, all the students found the module- and discipline-related texts very relevant and motivating.

In the *At Risk* group, 73% reported cognitive benefits that contributed to higher affective levels. Thirty-three percent of the students reported that the subject-related texts made it easy for them to apply background knowledge, which assisted with understanding of texts, and 40% stated that it made the tasks easier to do. Fifty-four percent reported being more focussed and having more drive because they could relate to the texts. They claimed that the use of subject- and discipline-related texts made the literacy module more 'real' and relevant and motivated them to work hard. Molwantwa for example, reported: " The texts from my subject-field helped. They made the tasks real and relevant. I felt I would learn something that relates to my subject-field, so I was more focussed". A student from the faculty of Theology (Muuoja) felt that Economics was relevant in everyday life, and therefore most of the students could relate to Economics texts. Forty-seven percent of the students in this group reported that the use of module- and discipline-related texts raised their interest, and made learning of strategies more interesting. They said that they were

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able to link and relate the literacy module to other modules in their various disciplines; as Kekana commented, "this link gave us more drive to do tasks and we made the effort to understand".

Similarly, in the *Low Risk* group students reported that the module- and discipline-related texts increased their motivation and raised their interest. They found the texts relevant and significant, hence making learning enjoyable and interesting. According to them, the tasks were easier to do owing to familiarity with the concepts in the texts. The following responses were given by a noteworthy number of the respondents:

27% indicated that working with interesting texts improved their understanding of strategies and concepts.

53% reported an increase in motivation as a result of the relevance and of the texts.

27% said that it made the tasks easier and motivated them.

52% reported that the texts raised their interest and also made learning interesting and enjoyable.

The majority of the students found the subject-related texts very relevant and motivating. The comments of two students are given below:

> Watson: "The texts relating to my subject field were more interesting and highly motivating. I found them more relevant."
> Brown: "I could apply background knowledge to the texts relating to my subject field, so I was more motivated".

Responses of students in the *Low Risk* group were similar to those of the *At Risk* group. Students also reported that the use of texts from their subject field motivated them. They perceived the texts to be significant and relevant, and this according to them made reading classes interesting and enjoyable. Texts from their subject-field also made it easier for students to understand the strategies, as they were familiar with the contents and could apply background knowledge. In addition to the overwhelmingly positive response to the discipline-related texts, 20% of the students pointed out that the generic texts, specifically those on topics they considered to be interesting, were also motivating.

8.3.3 Competence support: strategy instruction

Competence support was given in the form of strategy instruction. Students were introduced to appropriate reading strategies, such as previewing, reviewing, questioning,

summarising and note-taking, through explanations and teacher modelling. Students had to practise by doing a number of tasks that required the use of taught strategies. As various researchers have confirmed, when students are provided with knowledge of strategies and how to use them, a sense of competence is instilled (Anderson 1999; Grabe & Stoller 2002), which elevates self-esteem and self-efficacy (Guthrie & Wigfield 2000:413).

All the students interviewed reported that their understanding and speed increased after applying the strategies taught in class. Of the 18 students in the *At Risk* group, 78% (14) reported either not having used reading strategies or using inappropriate strategies before the start of the module. Only 21% stated that they had knowledge of reading strategies. In relation to the benefits they had gained from the strategy instruction, 47% reported increase in reading speed and 63% said they had experienced improvement in their understanding of texts. Thirty-seven percent cited specific examples of strategies (e.g. the use of mind maps to distinguish main ideas from supporting details, application of background knowledge to aid understanding, making of inferences and evaluating texts) that had helped them gain better understanding of what they read. Matemane, one of the low performers in the *At Risk* group, reported improvement in academic performance:

> I was not using strategies before the classes. After being introduced to strategies in class, I have been trying to use correct strategies. My speed and understanding have improved. The techniques helped me in studying for other modules. My motivation and confidence have also increased. I passed all my modules.

Due to these cognition-related improvements, 26% stated categorically that their motivation had increased. It is encouraging that 32% of the students reported and illustrated how they had transferred reading strategies to the reading of textbooks in other modules, and found them useful and motivating.

In the *Low Risk* group 40% of the students reported being aware of strategies, or having used them subconsciously, whereas 60% reported either not using them or not being aware of them, especially critical reading strategies. However, students reported gains in using appropriate strategies after instruction. Forty-seven percent of the students in this group reported increased reading speed and 67% reported improved understanding. Twenty-seven percent of the students added that using appropriate strategies enabled them to hold more information in memory. Another 27% stated that their motivation and interest had

increased as a result of using appropriate strategies. Matlala, one of the high performers in this group, stated: "When I started to apply them [strategies] I saw improvement in my understanding, which really motivated me".

In addition to increase in motivation, 27% of the students reported improvement in reading ability and academic performance. Thirty-three percent specifically stated that they transferred their use of strategies to reading in other modules, and cited specific examples of the type of strategies they had used, in which subjects, and how these strategies had been of great help to them. Mtshweni explained:

> I was used to most of the strategies except critical reading. I have started applying it in reading Law, Economics and Accounting and I can see improvement in my understanding. My marks have even improved since I started applying critical reading strategies. Accounting questions require critical reading so I have been applying it.

He added that his Accounting marks had mproved by 15% due to his application of critical reading strategies.

Furthermore, 27% enumerated the benefits of using appropriate reading strategies to prepare for exams and to read examination questions. Marx stated that the use of appropriate strategies enabled her to be more focussed when reading. Howard reported that initially he found critical reading challenging but after the classes he could use the different reading strategies with greater ease. Mputla summed up the effects of strategy instruction in this way:

> I used to read academic texts the way I read magazines but after the classes I started to read with purpose, for example, looking for main ideas, topic sentences and so on. I realised that I could hold more information in memory and also understand better.

In summary, the majority of the students reported that after using the strategies introduced in class, their confidence increased and they felt motivated to read. A number of them admitted to not being comfortable with summarising, distinguishing main ideas and supporting details, before the intervention. However, after applying the techniques and strategies taught in class they could engage in these tasks without much difficulty, and their understanding and speed improved. This confirms the view that increased reading speed at acceptable levels contributes to better understanding (Grabe & Stoller 2002).

Although it emerged from the interviews that a number of reading strategies, especially critical reading, were new to many of the students, they reported that applying appropriate strategies to reading their textbooks deepened their understanding of texts, and that the observed gains in the use of strategies were exciting and motivating for them. The majority of students reported that when they begun to read critically and made the necessary inferences, they experienced improvement in understanding of texts. Thus, the teaching of strategies helped to improve students' reading speed and their use of strategies for better comprehension. Furthermore, the observed improvement in comprehension led to increased self-efficacy and higher motivation.

8.3.4 Teacher support

When students perceive that they are being supported by significant adults (such as teachers and family members), and that these adults care about their progress, they are motivated (Bus 2001; Guthrie & Wigfield 2000:416; Wentzel 2009). Support was provided in the classroom by showing concern for individual students' needs. Weak students were identified and tutorials were provided on an individual basis. These students were given additional tasks for practice and provided with opportunities to resubmit tasks after extra tuition. Frequent teacher modelling and the scaffolding of activities also provided support for the students. Referring to students by name and enquiring about personal or academic challenges, especially those experienced by weak students, created a sense of relatedness, which also contributed to the support.

Students were positive about the readily available support from the lecturer. They stated that it reduced the stress of learning, and made learning easier. It was also motivating for them. It gave them a sense of identity and created a bond between the lecturer and the students as well as among the students.

In the *At Risk* group, 78% of the students highlighted the benefits of the support. Sixty-one percent reported being motivated by the support of the lecturer. Twenty-two percent stated that it helped to reduce the stress of learning, and 17% commented on the bonding and the freedom they had. In addition, 28% reported on the encouragement, enjoyment and interest it provided. Thirty-three percent linked the support of the lecturer to the learning environment. In other words they reported that the support given by the lecturer contributed to an enabling learning environment. Muuoja, one of the high performers in

this group, explained that the environment was not restrictive, and therefore he was able to ask for and receive support from the lecturer. He further indicated that the relatedness between the lecturer and the students motivated him. He reported: "You felt as if you belong and you are cared for, which is motivating and encouraging". Segodi, another high performer, also reported that the environment was supportive, as there was two-way communication in the classroom.

Nkosi added that the available support and the non-threatening environment made her "enjoy classes and learn in a fun way". Maringa (low performer), reported that he initially had difficulty with reading for meaning but after receiving further explanation and coaching from the lecturer, he understood the strategies and was able to apply them appropriately. He added that it increased his motivation. Ndlovu, another low performer, also stated that he believed students who found reading challenging, including himself, were motivated by the support given. He reported that the willingness of the lecturer to assist students motivated him to apply himself and to focus on given tasks.

All the students in the *Low Risk* group were positive about the support they received from the lecturer, whether in the form of explanation, clarification, encouragement, consultations, individual attention, extra tuition or the mere show of concern. Forty-six percent of the students reported that the lecturer motivated and encouraged them to work hard. Twenty-seven percent stated that it eased the tension and gave them a sense of freedom. Another 27% also reported that it created a conducive environment for learning, thus relating the lecturer's support to the learning environment. A quarter of the students in this group reported that they gained immensely from the lecturer's illustrations and modelling, and that their confidence increased. Mahlangu, an average performer in this group, alluded to the spirit of 'ubuntu' by stating that, "the support made one not to feel alone". He added that being supported was important to him, and the lecturer's support motivated him. Mtshweni, an average performer, stated that "the lecturer supported students a lot compared to other lecturers".

Students unanimously agreed that there was available support from lecturer and peers, and that the high level of support helped to ease the tension which first-year students experience at the beginning of the year. The fact that the lecturer made an effort to know students by name gave them a sense of significance and belonging, thus increasing their

motivation. The constant encouragement given by the lecturer and concern for their success also increased students' motivation. The majority of the students agreed that because of the frequent teacher modelling and the many illustrations given in class, they found the application of strategies less challenging and the tasks easier to do. Another view that emerged was that the two-way communication in class and the support received from the lecturer, motivated students to work hard and perform well. A number of students (33% of the *At Risk* group and 46% of the *Low Risk* group) stated that the friendly environment and the awareness that support was available motivated them to put in more effort. In sum, students appreciated the readily available support from the lecturer, especially the weaker students. They reported that the support made class interesting and fun and increased their confidence and motivation.

8.3.5 Autonomy support

One of the ways in which autonomy was infused in the learning was by giving students choices. They had to choose their own texts for extensive reading, and were also given several options to select from regarding assignments and tasks. The project work that they had to do also required responsibility on their part. Only six students provided information on this teaching technique: three average performers in the *At Risk* group and three students in the *Low Risk* group: one low performer, one average performer and one high performer. This limitation became evident after the responses had been compiled (cf. § 8.2.3).

The three average performers in the *At Risk* group who commented on autonomy support stated that being given the choice and the responsibility to choose their own texts were highly motivating, and gave them the opportunity to choose texts that interested them and were at their level of competence. They added that it enabled them to enjoy what they read and consequently became involved and engaged in reading. The fact that they were frequently given the option to choose from several assignment topics also motivated them to work hard. Mabitsela commented that they felt they were in control of their learning instead of being controlled by the lecturer, which was very motivating and exciting for them. Molwantwa stated: "You choose your own text so you are motivated to work hard".

Responses from the *Low risk* group were very similar. Responses from the three students (low, average and high performers) pointed to the fact that the choice given for selection of

texts and assignment topics was motivating and made them put in more effort. Botha, an Afrikaans L1 speaker on the low performing level, reported that the freedom to select her own books enabled her to choose texts at her level of competence, and that interested her. As a result, she enjoyed her reading. She stated, "because you are given freedom to choose […] so you choose what interests you, which motivates you to work hard." Students reported on how the freedom to choose reading texts and selecting from the variety of tasks motivated them and contributed to their becoming involved readers. The fact that students were given a voice encouraged them to come out of their shells and willingly participate in class.

8.3.6 Collaboration

Collaborative learning was practised frequently through group and pair work. Texts were discussed in groups frequently to allow for various interpretations and meanings, before students produced their individual versions of summaries, paraphrases, syntheses and other given tasks. Project assignments were also given, and students had to work collaboratively and do presentations in groups.

Besides three students (16%) who did not perceive collaborative learning favourably, the rest of the students (84%) in the *At Risk* group embraced collaborative learning. Some of the reasons given by the three students were that they would prefer individual work, as they were more focused working alone. They stated that engaging in collaborative exercises made one 'aloof and passive'. Of the 84% in this group who were positive about collaborative learning, 42% reported that collaborative learning was of great benefit, due to the fact that various ideas were shared, which culminated in a better quality end product. Sixteen percent explained that collaborative learning assisted them in gaining better understanding of texts. On the social level, 21% reported that it provided opportunities for interaction and involvement. In addition, 26% reported that it enabled them to make friends, which helped when they needed assistance outside class.

Regarding affect 74% made specific positive comments: 32% stated that engaging in collaborative activities made learning interesting, enjoyable, fun and 'nice', and 42% reported that they found the social learning encouraging and motivating. Individual responses included the following: Mabitsela stated that it increased his confidence in his ability to read successfully; Machaba explained that since he was used to a communal way

of doing things, he found it more acceptable; and Matsei, an average performer, reported how through collaborative learning her comprehension of texts and her use of strategies improved dramatically, which she believed contributed to improvement in her performance in the literacy test. She reported that she "initially did not like it because some students feel one is stupid when you are not on the same level with them, but later I was really enjoying it". She explained that she shared her ideas during one group activity, and the group members thought her ideas were brilliant, and applied them. This really made her 'happy' and motivated her because she perceived her group members as very intelligent. Sharing Machaba's sentiments, she added that she found this approach very appealing, as she was used to a communal way of life. Consequently, she formed a study group based on these collaborative activities.

A number of students shared that collaborative learning made problem-solving activities more interesting and fun:

Meyer: "Group work is more fun. It makes learning more interesting".

Segodi: "You see things from different angles".

Aphane: "You don't feel alone. You are able to make friends in class and interact".

Ndlovu summed up the social, cognitive and affective issues by saying that collaboration enabled her to interact and make friends, assisted her in gaining deeper and better understanding of issues, instilled motivation and provided her with opportunities to benefit from ideas shared by other students.

Students in the *Low Risk* group gave similar responses. They responded that collaborative activities that fostered interaction were helpful to students. However, 24% reported that they would prefer working on their own. Students who preferred to work on their own cited the challenges of collaborative learning (e.g. time frames, personality clashes, and so on) as reasons. The rest (76%) either had a high preference for collaborative activities or preferred a balanced combination of the two. Of the 76% of students in this group who embraced collaborative learning, 88% reported on the benefits of collaborative learning and how it provided opportunities for different perspectives to be presented. Twenty-four percent reported that it helped improve their understanding, and added that it enabled them to obtain higher grades than when working on their own. Fifty-three percent stated that it was motivating, encouraging and exciting, and generated enjoyment.

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Unlike the students in the *At Risk* group, of which 21% mentioned interaction as a benefit of collaborative learning, only one student in the *Low Risk* group made reference to interaction. Whereas a number of *At Risk* students seemed to cherish interaction, it did not seem to be an important issue for the *Low Risk* group. The *Low Risk* group emphasised cognitive gains, whereas the *At Risk* group focused more on the affective and social gains.

Rampedi explained that scaffolding activities (i.e. starting with collaborative discussions and then following with individual work) was helpful and motivating. She stated,: "You get ideas from others. When you are given a group task, others come up with ideas that you have not thought of, so you learn a lot from others, and you are motivated". Mogomotsi, an average performer, explained that "various ideas and opinions are shared which help improve your understanding. You are also encouraged to work harder in these group activities. It increases your motivation". Watson explained how he used strategies learnt from other students in the group and found them useful. Segodi, a high performer, defended his support for collaborative projects by stating that "[t]he end product is a reflection of different views".

Although some of the students preferred to work on their own, the majority (84% *At Risk* and 76% *Low Risk*) reported on the gains they received through collaborative learning. A number of these students (44% *At Risk* and 57% *Low Risk*) reported better understanding and increase in self-efficacy due to the sharing of ideas, discussing of problems and undertaking of group projects. Students were also very positive about the different views that emerged during collaborative learning.

Another insight that was revealed in the interviews was the importance of social interaction, specifically making friends during the collaborative activities. A number of *At Risk* students reported that they had felt very lonely, but could not make friends in other classes due to the large numbers and the non-interactive approach. The interactive approach used in the intervention class made it possible for them to make friends. Despite giving students the opportunity to make friends, which was not an intended aim, the approach also afforded students the platform to participate in both social and academic activities together. According to Gardner (2011), when students do two or more activities together they achieve success.

Students who did not embrace collaborative learning cited several reasons. Mlowantwa (*At Risk,* average performer) and Howard (*Low Risk,* high performer) reported that they were more focused when solving problems by themselves, and that they thought through issues better when working on their own. Others also reported that they found collaborative learning less challenging, as the problems were tackled by a group of students. Naidoo *(At Risk,* average performer) and Mahlangu (*Low Risk,* average performer) explained that some students do not contribute, and others insist on their own views. The greatest concern of these students was the fact that group work takes longer to complete as there are many views to integrate. They cited length of time, personality clashes and contradictory ideas as problematic in collaborative work.

Although the majority of students interviewed reported benefits of collaborative learning, it was clear that some students preferred to work on their own for various reasons. The majority, who found this social learning approach beneficial, reported that it allowed them to see different perspectives on an issue and be introduced to various views and solutions to a problem, which they found exciting and motivating.

8.3.7 Rewards and praise

Besides awarding marks to students' work, they were also praised for good performance. Sometimes packets of sweets or bars of chocolates were given to best performing students or groups. At other times, novels were awarded to best performing students. The type of reward depended on the difficulty of the task. For all these rewards, students were either asked to raise their hands or stand up in class and were applauded by classmates.

Whereas 22% of the students interviewed from the *At Risk* group reported not being motivated by the rewards for best performance, 78% admitted to being motivated, especially as a result of the acknowledgement and recognition that accompanied the rewards. Thirty-three percent added that the praises they received from the lecturer motivated them to work hard. Seventeen percent reported that they became more involved in their work in order to excel and receive rewards, recognition and the accompanying praises. Phalane reported that he was motivated to work harder to obtain a reward and the recognition that accompanied it. He stated, "You want your mates to know of your good performance. You want others to see that you are also good". Muuojo reported that

"knowing that your efforts are recognised is highly motivating". Molwantwa said she was motivated to work hard and receive a reward, and that "It feels nice when you do well and receive recognition". Masanabo added that "geting a reward provided a pleasant feeling".

In the *Low Risk* group, 27% reported not being motivated by the rewards. However, 73% reported that they felt motivated to work hard to receive rewards. It is interesting to note that one of the students, Nkhondo, who reported not being interested or motivated by rewards, obtained the lowest mark in both pre- and posttests. Thirteen percent stated categorically that praise and rewards made the classes interesting and that their motivation was more in the enjoyment and interest that the giving of rewards brought to the classes. Mogomotsi, who received a reward for best performance in a task, stated that she felt highly motivated to work harder and receive more rewards. Others also said that they were motivated to take tasks seriously and to perform well because of the incentives. Matlala commented on the issue of interest and said that"…it also made the class interesting". Marx, one of the students who received a reward for best performance in one of the class tasks, stated that "[i]t is motivating. It gives you something to look forward to and makes you put in time and effort".

The majority of the students were motivated by the rewards and also the recognition. They reported being motivated to attend classes and do their best in order to receive a reward, with the associated recognition. More than three quarters of the students interviewed hailed the incentives approach and stated that it made them work hard. Others reported that it made the classes interesting.

In the *At Risk* group, a number of students reported that though the incentives motivated them, they were particularly motivated by the recognition they received for good performance – the identification, the acknowledgement, the praise and the applause. They reported that they strived to do better in order to be recognised. The *Low Risk* group differed from the *At Risk* group in the sense that they appreciated the rewards, but did not attach as much value to the recognition, acknowledgement and the praises that accompanied the rewards, although these issues seemed important to the *At Risk* group.

8.3.8 Learning environment

A non-threatening, free environment was created to provide students with the opportunity to interact freely and to feel safe to participate in the process of learning. Usually, the lecturer provided explanations and modelled the strategies before students were required to participate in problem-solving activities, first collaboratively, then either in pairs or individually. Students were given the freedom to consult with peers or the lecturer for further explanations. The lecturer moved around assisting students and providing academic and affective support (encouragement and motivation) to students. The challenging part to this free learning environment was being able to control the class and also create a free learning environment.

Apart from two students who felt that the environment made them too relaxed, the rest of the students (16) in the *At Risk* group had only praises for the learning environment. Fifty-three percent of these students reported that they enjoyed the classes. Thirty-five percent of the students said they felt free in class, and 65% reported that the environment enabled them to think more clearly and creatively, confirming the assumptions of the Universal Learning Theory (Burton 2011). Twenty-nine percent of the students reported that it fostered interaction and provided them with opportunity to form friendships. Eighteen percent of the students said the learning environment made classes interesting and made them interested in attending classes. Forty-seven percent reported that they were highly motivated due to the learning environment. Fifty-three percent reported that it made learning less stressful and 35% added that it made them feel comfortable and relaxed, which made learning easier. Fifty-two percent (9 of the 17 students) reported on the easy manner in which ideas were shared in class, and added that students did not feel hesitant or inhibited. Kekana (average performer) stated succinctly that it helped to make adjustment to university easy, which was what first-year students needed. Matemane (low performer) expressed the belief that the less stressful the environment is, the better he could apply himself and the more productive he became. He stated that "the interaction was motivating", and further explained that:

> [T]he environment was conducive to learning, and we were able to make friends and learn. I always looked forward to attending classes [….] The freedom to share ideas and apply our social and educational background in solving problems was interesting, and motivating.

Meyer, an average performer, reported that the environment made her feel comfortable and relaxed in class, which she believed contributed to her increased motivation and high level of interest in the module. She added that she did not miss any of the classes. Muuojo (high performer in both pre- and posttests) explained that the bond that existed between the lecturer and the students and among students, owing to the free environment, was motivating. He added that the bonding made classes enjoyable and learning fun. Nkosi (average performer) reported that the environment and the approach increased his motivation, and gave him a reason to attend classes. Students in this group consistently reported making friends, sharing ideas and enjoying the classes due to the environment and the teaching approach.

The overall response of the students in the *Low Risk* group was also very positive. Thirty-one percent reported that there was a good balance between formal and semi-formal and that the environment was appropriate for a literacy support module. They explained that they would have resented a restrictive learning environment in a literacy module. Thirty-eight percent reported that the environment was motivating and enjoyable. Forty-four percent explained that the environment promoted clear thinking and made learning easier. Almost half of the students in this group (44%) reported that the freedom provided by the environment enabled them to learn with less stress, which made classes interesting and exciting. One student, Mtshweni, commented on the opportunity it provided for interaction. Although four of the eighteen students in the group would have preferred a more restrictive environment, three stated that it was an appropriate environment for a first-year module offered in the first term, as many of them arrived at the beginning of the year being timid, and feeling insecure, apprehensive and uncertain. Thus, according to the students, an affective, supportive teaching environment that provided students with ample opportunity to interact and overcome their insecurities enabled them to learn better.

Maluleka added that the freedom to be able to ask for assistance, and the interest the lecturer showed in their performance, created a friendly atmosphere that was motivating and made him interested in attending classes.

Matlala, a high performer, reported that class discussions were free-flowing and spontaneous. They attributed their enjoyment and interest in the classes to the environment, and reported that it gave them a break from the strict, formal, and usually

tense environment of lectures in their subject-fields. They felt the approach was very appropriate in a support module. Rampedi (average performer) said that the environment promoted learning and that "it was not hectic". Webb reported that at the beginning of the year most first-year students feel insecure and would benefit from such an environment. Howard commented that:

> The environment was motivating. It was a break from the formal and tense environment of the lectures. I prefer a support module not to be stressful. The environment made learning exciting, which made me always look forward to attending classes.

The non-threatening environment was appreciated by the majority of the students. Students reported that the level of freedom they had in class enabled them to think freely and creatively without being stressed. They reported that the environment promoted interaction and enhanced learning by making it enjoyable and less stressful. The non-threatening, free environment also allowed them to form relationships with other students, which many of the students from the *At Risk* group claimed was particularly helpful when one needed further explanations or assistance.

The majority of the students considered the environment conducive to clear thinking. They reported that because the classes were interesting and exciting, and hence motivating, they never felt bored.The challenge for the lecturer was to be able to maintain the free, friendly and non-threatening environment while maintaining an academic focus. This was difficult, as there were times when some students exploited opportunities for collaboration, such as group discussions, to become noisy. As indicated by Bernhardt (1991) the approach where the lecturer/teacher is in and out of class control is challenging and would need skilful teachers to administer successfully.

8.3.9 Extensive reading

Students were required to read for pleasure on a weekly basis and to record their affective and cognitive experiences in an inventory (see Chapter 6). They chose their own reading texts, for example, short stories in magazines or anthologies and novels. Furthermore, students timed and monitored their reading and recorded great improvements in speed and comprehension.

Fifty-six percent of the students interviewed in the *At Risk* group did not participate, as the extensive reading project was voluntary. The main reasons cited for non-participation were poor time management and inability to cope with academic work. It is interesting to note that three of the four students who obtained the lowest marks in this group did not participate, while, through extensive reading, the fourth student improved to obtain an average mark in the posttest. Those who participated in the extensive reading reported as follows:

43% : improvement in reading habits and reading proficiency.

86% : improvement in comprehension.

56% : deeply involved in the texts.

100% : improvement in reading speed and vocabulary.

They reported that the improvement in reading speed made them more interested and motivated to read.

Ndlovu reported that she started the readings simply as a stress reliever at the end of her lecture day, intended merely to meet the requirements set by the lecturer. However, she realised at the end of the activities that she had benefited immensely. First of all she could focus for longer while reading, while initially her mind used to wander when she studied. She reported that she previously lacked concentration and focus in reading, but obtained these while reading for pleasure. She was surprised to find that this ability had transferred to her other modules as well, and her mind no longer wandered when studying. Secondly, her reading speed increased, which motivated her and increased her willingness to read more, as indicated in the following self-report:

> I felt like I could read more and more. I became so involved in a
> motivational book I was reading that I started practising the suggestions.

Phalane, who had not been reading before the project, remarked, "I could not wait to finish and find out the end of the story".

The awareness of progress also promoted self-confidence and self-esteem. Aphane confessed that she found the reading difficult initially, but as she continued, she began to enjoy the reading and became very interested in the novels. She reported that her understanding improved and her imagination was very active as she became involved in the story. She added that she felt good because she was aware of her progress. Her newly

developed interest and involvement in reading for pleasure influenced her reading of academic texts. She admitted during the interview session that she used to dislike her Marketing module because it required too much reading, but now enjoyed reading and also had better understanding of what she reads.

Half of the students in the *Low Risk* group did not participate in the extensive reading. Reasons given were similar to those of the *At Risk* students, namely being overburdened by academic work. However, one student, Webb, explained that he was just not interested in reading. This student was one of the low performers. Another student, Maluleka (high performer), explained that he did not participate because he did not think he needed it. For the other 50% who participated, the benefits were considerable. They reported as follows:

75%: increase in reading speed and understanding

50%: transfer of reading improvements to reading of textbooks in other subjects

25%: increase in vocabulary and improvement in the use of reading strategies motivated them to read more

38%: involvement in the stories and enjoyment in reading

25%: confidence in reading

50%: development of interest and motivation, which instilled willingness to read

50%: desire to read frequently especially during the holidays

The majority of the students reported that they had to make the time to read, but once they did, they enjoyed it and became involved. Botha stated succinctly:

> I had to force myself to start reading but once I started I found I became involved and enjoyed it. Then I had to force myself to stop. It's like I am in the story.

She added that her reading speed and comprehension improved. She also admitted that as an Afrikaans L1 speaker she had read only Afrikaans non-academic texts, and therefore found the vocabulary in the novels challenging. However, as she searched on Google, and used the dictionary for finding the meaning of words, she realised that her vocabulary was improving and the unfamiliar words were becoming fewer and fewer as she read. She reported that her motivation to read increased as she became involved in the story and enjoyed the reading, and added that she would be reading more English books during the June holidays. When asked to comment on the intervention programme, she reported that her vocabulary and her ability to read English texts had improved, which had resulted in

boosting her confidence in reading English novels, and that for her LLB programme she intended to switch from Afrikaans instruction to English instruction the following year.

Mogomotsi reported that she "was not much of a reader", but after the intervention, she had been reading a lot since she got into the habit owing to the reading project. She added that the reading project had helped to improve her reading speed and comprehension ability.

The majority of the students (86% *At Risk*; 75% *Low Risk*) reported that they observed great improvement in speed and comprehension as they progressed with the reading. Another general perception was that the reading project had helped to improve their use of reading strategies and had increased their understanding of texts, which they transferred to the reading of their textbooks. They reported that the freedom to select their own texts was motivating. Another general comment was that students found reading to become addictive once they begun the activity and immersed themselves in it. Increase in reading speed was also motivating for them, and encouraged them to read more. As their reading speed increased they reported an increase in comprehension, which instilled higher motivation in them. In turn, students' motivation and willingness to read increased, they read frequently, and as they read, they became involved and engaged. In addition their reading ability improved. These responses confirm Guthrie and Wigfield's (2000:404) claim: "[A]s students become engaged readers, they provide themselves with self-generated learning opportunities that are equivalent to several years of education".

8.3.10 General comments

At the end of the interviews students were asked to add any comments they wished to include. The comments were very diverse, yet interesting and insightful, and related to various issues, but students mostly commented on affective and performance issues.

The issues that were raised by the *At Risk* and *Low Risk* groups are summarised in Table 8.3 below. The issues related to social factors (interaction, forming friendships and bonding), affective factors (enjoyment, motivation, willingness, attitude, self-efficacy, praise and rewards, and interest), cognitive/performance factors (speed, comprehension, transfer of skills, relevant texts, reading ability and academic performance), and reading habits.

Table 8.3: Pertinent issues raised under general comments and percentage of students

	High/At Risk	Low/No Risk
Affective issues	80%	71%
Social issues	67%	64%
Cognitive and performance	60%	93%
Reading habits	40%	29%
Learning environment	25%	27%
Academic workload	25%	-
Self-efficacy and strategy use	-	33%
Transfer of skills	-	27%
Rewards	-	30%

Other issues that emerged were the timing of the tests, and the suggestion to devise more challenging tasks for students who, according to their performance in TALL, had no or negligible risk (literacy level 5). The pertinent issues raised are also presented in Figure 8.1 below.
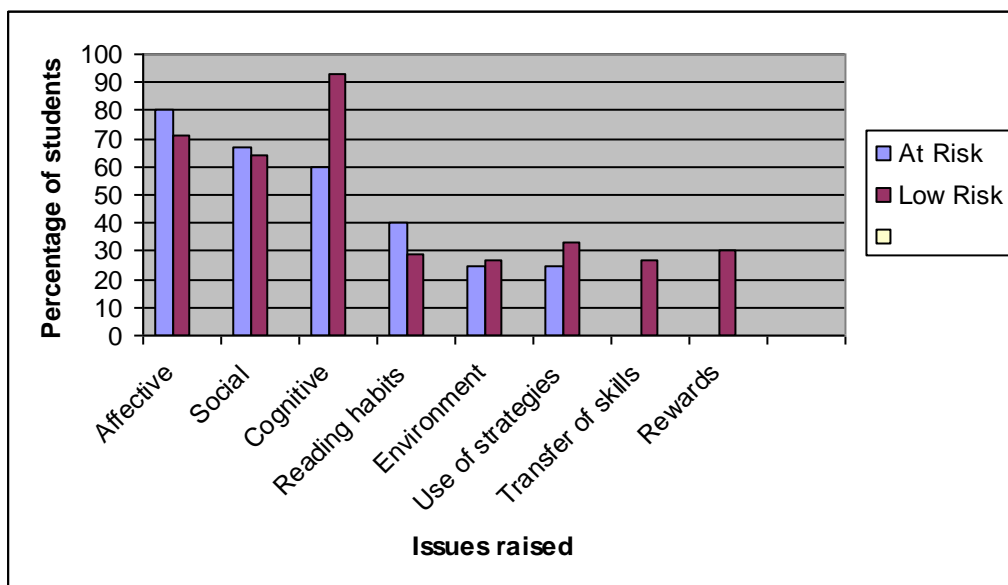

Figure 8.1: Percentage of students in relation to the issues they raised under general comments

A brief summary of the various issues raised is presented in Appendix 6. A more detailed summary is included as Appendix 7 (A, B).

8.4 Discussion

Students in both the *At Risk* and *Low Risk* groups gave similar responses to questions on the teaching techniques, except for the categories of *collaboration* and *rewards and praise,* where there were different emphases. Whereas students in the *At Risk* group emphasised interaction and forming of friendships in response to questions on *collaboration*, the *Low Risk* students did not. A probable reason for the difference in response to *collaboration*, could be that the majority of the students in the *At Risk* group are ISAL speakers from low SES homes where community interaction is highly valued, whereas the *Low Risk* group comprises mainly Afrikaans and English L1 speakers plus a few ISAL speakers from middle and high income families where Western individualism is the dominant lifestyle. Another possible reason could be that *At Risk* students are mainly from township schools, and feel lost at the beginning of the year in a large institution such as UP, whereas *Low Risk* students are mainly from private and former model C schools (these schools are in the towns and cities) and less intimidated by the size and complexity of the institution. Thus collaborative activities that enabled the *At Risk* students to form friendships and interact with their peers in learning help reduce their intimidation of tertiary education in such a large institution, and were therefore important to them.

In relation to the difference in emphasis of the rewards and praises, the *At Risk* students dwelt on the recognition. In other words, whereas recognition, acknowledgement and praises were important motivating factors (in addition to the rewards) for the *At Risk* group, these factors were not mentioned by the *Low Risk* group. For the *Low Risk* group the main motivating factor in the rewards and praise was the excitement they added to the classes, and not the actual recognition and praise. The emphasis on praises by the *At Risk* students could be attributed to a lack of academic confidence and low self-efficacy, which may have been reinforced by a low score on TALL. Therefore, to be recognised and acknowledged as competent, and complimented for academic work, was important to them. In contrast, *Low Risk* students, who, having been identified by the TALL as having relatively higher literacy levels, and the majority having attended better schools, may have more confidence and higher self-efficacy. These findings are corroborated by comparison

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between the two groups in the 2009 study (reported on in Chapter 5), which showed that they differ significantly in self-efficacy.

Thus, whereas the *At Risk* students revealed a need for recognition, the *Low Risk* students did not, and whereas the *At Risk* students needed to interact and make friends in collaborative activities in order to overcome their timidity and apprehension, the *Low Risk* students did not have a great need for social learning activities.

Besides the differences in emphasis, in response to the two teaching techniques (i.e. collaboration and rewards and praise) mentioned above, the responses by both *At Risk* and *Low Risk* students were similar, and gave insight into students' perceptions and views on the intervention. Whereas the *At Risk* students expressed overt appreciation for techniques associated with collaboration and rewards and praise, the *Low Risk* group were positive but did not express a strong preference for them. In general, students from both groups responded positively on all the teaching techniques, which imply cognitive, affective and social gains. From their comments it can be inferred that the affective approach had improved their reading ability, which had influenced their self-efficacy and further increased their motivational levels. Thus, students' responses showed they had developed positive affect for reading and had improved in their reading ability.

In answer to the fourth research question, as to the efficacy of the intervention, the qualitative data from the interviews indicate that students had gained from the intervention. According to them, the non-threatening environment in which their affective and social needs were met, made them work harder to improve in reading proficiency and academic performance.

Students' responses can be grouped into three main categories: academic/cognitive, social, and affective. They were motivated because they felt that they were gaining **cognitively** and academically through relevant texts, comprehension, background knowledge, and enhanced learning, among others. They were also motivated because their **social** needs were being met through collaboration, interaction, friendships and sharing of various ideas. Lastly, students were motivated because their **affective** needs were considered and learning took place in a non-threatening environment, which gave them the freedom to make their voices heard. Teacher support, interesting texts, autonomy, and choice, were

among the teaching strategies that facilitated socio-affective learning. These cognitive academic, social and affective gains increased students' motivation and the high motivation encouraged them to read, thus developing their reading proficiency and consequently also their academic performance.

When students' motivational levels increased, as a result of the affective teaching approach, they became engaged readers and their reading proficiency/ability improved, which led to even higher motivational levels, and which further influenced their reading ability. Thus in a socio-affective reading intervention, the resulting processes would appear to be both reciprocal and cyclical, as illustrated in Figure 8.2 below:

Motivation ⟷ Engagement

Teaching techniques
Affective approach

Improved reading
proficiency/ability
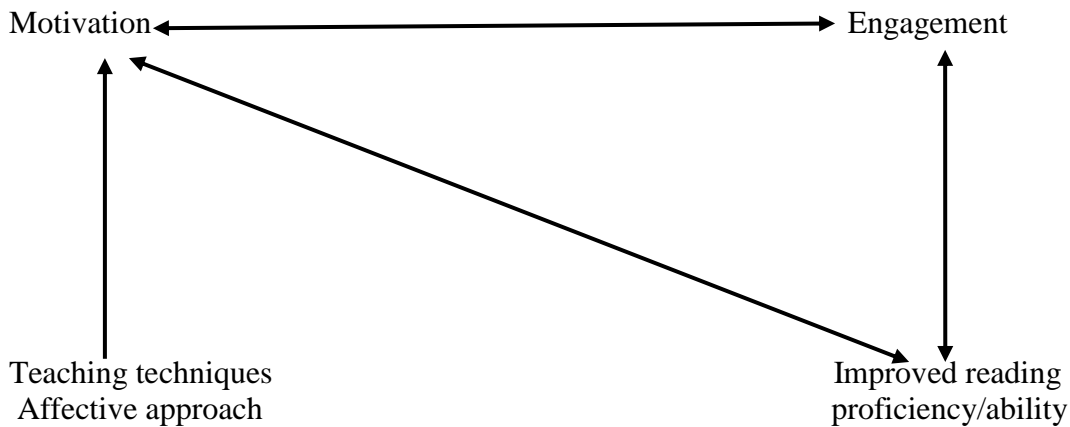
Figure 8.2: Cyclical and reciprocal processes resulting from a socio-affective teaching approach

The aim of the intervention was to cultivate independent engaged readers who would improve their reading proficiency/ability, and consequently reap cognitive gains and improved academic performance. To achieve this, affective factors were targeted and reading instruction that sought to develop cognitive skills was undertaken in an affective manner, within an affective approach. The results confirm the hypothesis that reading instruction that incorporates an affective approach will lead to improved affective levels and consequently improved reading ability.

8.5 Conclusion

This chapter provided further insight into the quantitative results; in particular, it added an in-depth understanding of how students experienced the intervention. The qualitative data from the interviews showed that students felt that they were highly motivated to read and

strove to improve their reading proficiency as a result of the teaching approach. The data also show that the students believed that they had developed positive attitudes and increased interest in reading and reading classes as a result of the affective approach. In addition, students reported being involved (engaged) in both their extensive and academic reading. Furthermore, they linked these affective developments to the positive developments of their reading ability, such as increased reading speed and comprehension, and appropriate use of strategies. It can therefore be concluded from the data that the intervention increased students' affective levels in reading, and the increase in affect contributed to improving their reading ability.

The next chapter integrates the quantitative data presented in Chapter 7 with the qualitative data presented here, and presents a holistic discussion in relation to the fourth research question.

Chapter 9: Integrating the quantitative and qualitative results

9.1. Introduction

Issues relating to academic reading comprehension, the development of such ability and the importance of socio-affective factors in developing students' reading comprehension ability were highlighted in chapters 2 and 3 (the theoretical framework) and these informed the development of a socio-affective model for improving tertiary students' reading comprehension ability (conceptual framework). The overarching element of the proposed model was a needs analysis, which was undertaken and reported on in chapter 5, leading to the framework for the intervention presented in Chapter 6. Chapters 7 and 8 discussed the quantitative phase (pre- and post-intervention questionnaires) and qualitative phase (responses from interviews), respectively. This chapter integrates the quantitative and qualitative data and discusses how the findings from the qualitative analysis corroborate the findings from the quantitative analysis.

9.2 Integrating quantitative and qualitative findings

The quantitative data were analysed using descriptive and inferential statistics, with the inclusion of effect sizes. Findings showed that whereas the responses to the questionnaires before the intervention were similar in control and intervention classes for each group (*At Risk, Low Risk*), the responses after the intervention differed. The intervention classes had improved considerably in their socio-affective levels to reading whereas the control groups had improved minimally and, for some factors even decreased. This finding points to the fact that a socio-affective approach to reading development did improve the intervention students' socio-affective levels in reading.

The qualitative data were analysed by identifying themes and patterns for each teaching technique. Students' responses to interview questions gave valuable insights into how the teaching techniques used in the intervention impacted or influenced their affective levels for reading. Thus, findings from the qualitative data revealed a positive effect of the intervention, from the perspective of the participants, and gave deeper understanding into the findings from the quantitative research. The two data sets (quantitative and qualitative) are discussed in relation to each other below to show how the socio-affective factors that

manifested in the quantitative data are linked to the teaching techniques probed by the qualitative data.

9.2.1 Learning and knowledge goals

The predominant socio-affective factors linked to the teaching technique of learning goal by the students were *intrinsic motivation, interest, self-efficacy* and *attitude*. This teaching technique was aimed at increasing students' motivation, in the sense that when tasks, and the purposes of the tasks and activities are explained to students, their motivation for doing the tasks and for learning increases. As Guthrie and Wigfield (2000:410) point out, a focus on learning goals motivates students to put in more effort. Students reported in the interviews that the explanations made the tasks easier, and also made the purpose of the tasks transparent, which motivated them to work harder. Seventy-nine percent of the *At Risk* students and 60% of the *Low Risk* students reported better understanding after explanations, which gave them confidence in their ability to perform tasks, contributing to increase in self-efficacy. This link between the teaching technique of learning goal and self-efficacy confirms Guthrie and Wigfield's (2000:409) assertion that teachers who emphasise learning goals contribute to students' self-efficacy. The effects of the explanations are further evident in the findings that 78% of the students in the *At Risk* group said the explanations increased their motivation and interest, and in the *Low Risk* group 60% attributed their increased motivation, positive attitude and willingness to do tasks following the explanations.

The findings of the qualitative research confirmed the quantitative results. The quantitative results showed increase in *motivation, interest, self-efficacy* and *attitude* in both *At Risk* and *Low Risk* intervention classes in comparison to the control classes where there was little or no emphasis on learning goals. Quantitative data from t-tests showed statistically significant results for *motivation, interest* and *self-efficacy* in the intervention classes of the two groups (*At Risk*: $p<0.001$ for *motivation,* $p=0.001$ for *interest* and $p<0.001$ for *self-efficacy*; *Low Risk*: $p=0.001$ for *motivation*, $p<0.001$ for *interest* and $p<0.001$ for *self-efficacy*). There were also medium to large effect sizes. However, *attitude* did not show significant results for both groups on independent t-tests but paired t-tests showed significant difference for the *Low Risk* intervention class. It is worth noting that it was in the *Low Risk* group that students specifically mentioned a change in attitude during interview sessions.

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9.2.2 Relevant and interesting texts

The predominant socio-affective factors mentioned during interview sessions were *interest, intrinsic motivation* and *attitude*. To make texts relevant for students, discipline-related texts and generic texts on interesting topics that students could relate to were used in class. Texts were also selected in relation to students' level of competence. This teaching technique was to develop students' interest in texts and in the reading of texts. It was also aimed at enabling them to see the relevance and significance of the texts, and thereby develop a positive attitude, as well as willingness to read and to learn. It was expected that when students are interested they would be motivated to work harder and achieve results. When texts are highly above students' level of competence and very challenging for them, they read at frustration levels (Grabe & Stoller 2002; Pretorius 2000) and easily become bored and disinterested. However, texts which are significant to students and are at their level of competence (or slightly above) raise their level of interest.

Students reported that they were interested in the texts, and this made them put in more effort. In relation to the module- and discipline-related texts, an *At Risk* student stated, "we felt we were learning something relevant to our subject fields". This insight strengthens Schiefele's (1992:152) report that interest has a positive relationship with reading comprehension, and Anderson's (1992:218) suggestion that text-based interest should be promoted to develop students' interest in reading. Seventy-three percent of the *At Risk* group said the cognitive benefits of the relevant texts increased their motivation, made them focus on texts and tasks, and gave them more drive to work. In the *Low Risk* group, 80% reported of increase in motivation owing to the relevance of the texts to their disciplines, which made tasks less challenging. More than half of the students specifically stated that their interests were raised by the relevant texts, as well as the topics of the generic texts, which contributed to their enjoying the classes. Students also shared that the relevance of the texts gave them a positive attitude towards tasks and activities.

These results support the quantitative finding that students' level of interest in the classes and in reading had improved significantly, compared to the control classes (*At Risk*: $p=0.001$; *Low Risk*: $p<0.001$). In addition, significant improvements were also shown for *motivation* ($p<0.001$), but for *attitude* statistical significance was only recorded for the *Low Risk* group ($p=0.005$).

9.2.3 Teacher support

Socio-affective factors linked to this teaching technique were *intrinsic* and *extrinsic motivation*, *self-efficacy,* and *attitude*. Thang (2005) contrasts teacher support and students' freedom in a way that makes the two seem exclusive to each other. He explains that students' answers to questionnaires in his study pointed to the fact that they prefer freedom. However, interviews indicated a preference for support. These seemingly contrasting preferences can and should actually co-exist (Bernhardt 1991a; Guthrie and Wigfield 2000; Kumaravadivelu 2003). Students can appreciate support and still experience a sense of freedom in learning. This balance is important, as on the one hand students want to be supported by the lecturer, and on the other hand they need the freedom to express themselves academically. Integrating the two in a well-balanced way increases students' motivation and enables them to feel free to explore and strive to achieve success. Students were given the freedom and also the support through encouragement, extra tuition, individual attention and an open door system.

During the interviews, students reported on the positive effects of the support as well as the freedom in learning; as one student stated: "knowing that support was available and feeling supported was motivating". In the *At Risk* group, 61% reported being motivated by the support of the lecturer, 39% stated that it helped reduce stress and created a bond between the students and the lecturer, and 28% reported on the encouragement, enjoyment and interest it provided, confirming Dörnyei's (2001b) assertion that the teacher's encouragement and support increases students' motivation (cf § 3.4.4.4). Seventy-three percent of the *Low Risk* students listed motivation, encouragement, confidence (leading to self-efficacy), positive attitude and a sense of freedom, as a result of the lecturer's support. In other words teacher support (e.g scaffolding and encouragement) is extremely important for both *Low Risk* and *At Risk* students, particularly in a non-coercive and non-controlling environment.

The quantitative results show significantly improved motivation, self-efficacy and attitude in the intervention classes. This finding seems to relate positively to the qualitative findings on *motivation, self-efficacy* and *attitude.* Statistical results for motivation showed significant p values of $p<0.001$ for the *At Risk* group and $p=0.008$ for the *Low Risk* group. Students' self-efficacy also improved significantly at $p<0.001$ in both groups. Mean figures show improvement in *attitude* and was also statistically significant for the *Low*

Risk group on paired t-tests. Figures 9.1 and 9.2 below show improvement in motivation and Figures 9.3 and 9.4 show improvement in attitudes of the intervention classes in terms of means.
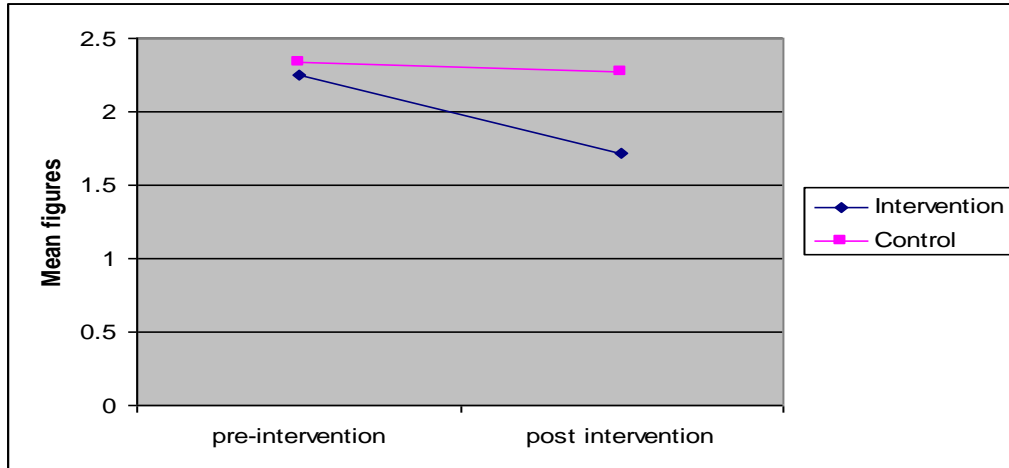
Figure 9.1: Chart showing mean figures for motivational levels of *At Risk* students
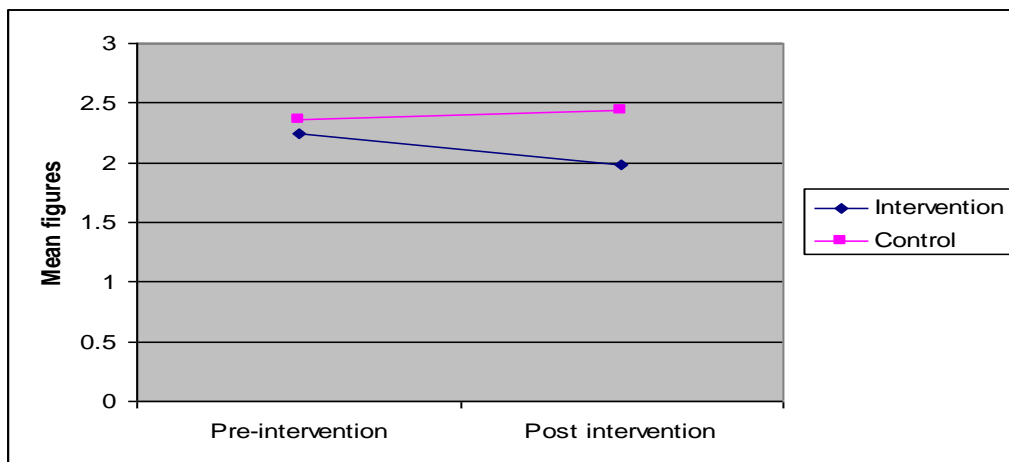
Figure 9.2: Chart showing mean figures for motivational levels of *Low Risk* students
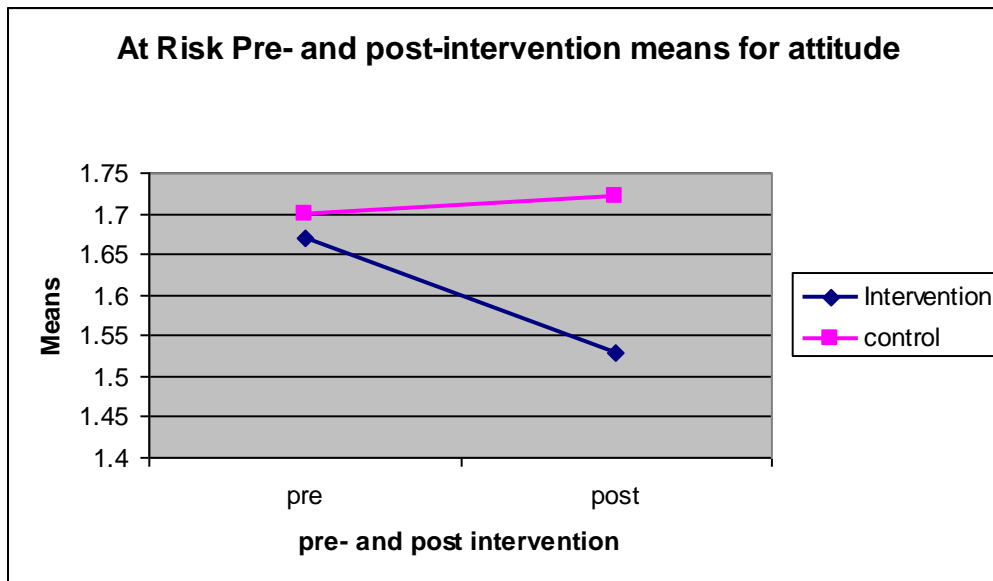
Figure 9.3: Chart showing mean figures for attitudinal levels for *At Risk* students
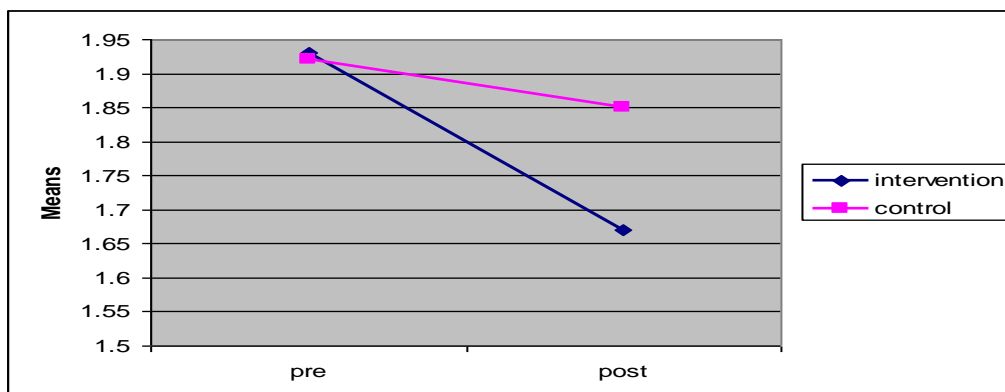
Figure 9.4: Chart showing mean figures for attitudinal levels for *Low Risk* students

The graphs presented above show that the intervention and control classes started off at comparable motivational and attitudinal levels, but differed considerably after the intervention with intervention classes recording more positive attitudes, which corroborate students' interview responses. These results confirm McKenna's (2001:145) claim that instructional intervention is a way of promoting positive attitudes in students (cf. § 3.3.4).

9.2.4 Competence support (strategy instruction)

Students predominantly referred to improvement in *strategy use, motivation, self-efficacy* and confidence in their ability to read efficiently and to do tasks. This confirms various studies that show that strategy instruction promotes appropriate strategy use, and increases

intrinsic motivation and self-efficacy (cf. § 3.4.2.5). The explicit teaching of strategies increases students' competence (cf. Anderson 1991; Anderson 1999), which in turn increases their self-efficacy and perceptions of their ability to be successful readers, and consequently increase their motivation. The development of intrinsic motivation is strongly dependent on students' feelings of competence (Deci & Ryan 2000; Dörnyei 2001). As Guthrie and Wigfield (2000:404) point out, engaged readers use appropriate strategies to comprehend and engaged readers are successful readers. Teaching students the use of appropriate strategies is a crucial means of providing competence support. This teaching technique was to increase their competence, self-efficacy and motivation, and enable them to become engaged readers.

Qualitative findings revealed that a number of students from both *At Risk* and *Low Risk* groups (78% and 60% respectively) were using inappropriate strategies before the intervention; as one student stated, "I used to read my textbooks like the way I read magazines". Thus they highlighted improvement in strategy use in particular. The instruction in strategy use coupled with the scaffolding and guided practice enabled the students to read more strategically and meaningfully, increasing their comprehension abilities, self-efficacy, and consequently their motivation to read. Forty-seven percent in each group (*At Risk and Low Risk*) reported increase in reading speed, and 63% of the *At Risk* as well as 67% of the *Low Risk* students said they had experienced improvement in their understanding of texts owing to use of strategies, which had increased their confidence and self-efficacy. Thirty-seven percent of the *At Risk* students and 33% of the *Low Risk* students cited specific examples of strategies they had used to improve their understanding. Although it could be inferred from the cognitive improvements that students' motivation would increase, 58% of the *At Risk* group and 27% of the *Low Risk* group stated categorically that their motivation had increased.

These findings were echoed by the quantitative results, which showed that students in the intervention classes had improved considerably in their use of strategies and in their self-efficacy, in comparison to the control classes. Paired t-tests showed statistically significant results for self-efficacy in both groups (*At Risk* $p<0.001$; *Low Risk* $p<0.001$) and for strategy-use (*At Risk* $p=0.001$; *Low Risk* $p<0.001$). However, independent t-tests did not show statistically significant results for self-efficacy in the *Low Risk* group and for strategy use in the *At Risk* group. A probable explanation for this finding has been given in Chapter

7 (cf. § 7.4). Nevertheless, mean figures and paired t-test results showed that the intervention group had improved. In the control classes students had either shown minimal improvement in strategy-use (*Low Risk* group) or had failed to improve, or even decreased in their self-efficacy (*At Risk* group).

9.2.5 Collaboration

This social learning technique was aimed at providing students with relatedness support to enhance learning, and to increase students' *interest, motivation* and *self-efficacy*. Students mentioned social (interaction and friendships) and affective (motivation, interest and self-efficacy) gains. A combination of social and affective support improves learning, as well as develops engagement in reading (Guthrie 2008:5). Engaged readers interact socially with peers to construct meaning (Guthrie and Wigfield 2000:409). References provided by Guthrie and Wigfield (2000:414) and Guthrie (2008:5) show that collaborative learning maintains active learning over an extended period of time and instils a disposition in students to read more independently in the future. Also, they argue that intrinsic motivation for reading and learning is closely connected to students' feelings of social support and sense of belonging (Ibid). Qualitative findings from the interviews showed that 84% of the students in the *At Risk* group cited one or more of the social factors (e.g. interaction, friendships, bonding, and sharing ideas) as positively influencing their motivation, interest and learning. In the *Low Risk* group, 76% reported on the benefits of collaborative activities: 24% cited deeper understanding of issues and concepts, and enhanced learning and 53% said it was motivating, (e.g. encouraging, and exciting).

The benefits of collaborative learning, as revealed by students in the interviews corresponded with the quantitative results. Quantitative results showed that students in the intervention classes (*At Risk* and *Low Risk*) had increased interest, higher levels of motivation and self-efficacy. Independent t-tests showed statistically significant improvement for the intervention classes, and paired t-tests also showed statistically significant differences between pre- and post-intervention results (cf. Tables 7.4, 7.5).

Thus, both the qualitative and quantitative findings indicate that social interaction in learning increases affective levels and enhances cognitive gains.

9.2.6 Rewards and praise

The socio-affective factors that may be influenced by giving praise and rewards are *extrinsic motivation, intrinsic motivation, self-efficacy* and *interest* (Brophy 2004, Dörnyei 2001b). Although extrinsic motivation is said to produce temporary effects, it is also argued that it generates success for specific tasks, promoting self-efficacy, and can lead to intrinsic motivation if used appropriately (cf. § 3.2.1). Interview responses indicated that intervention students were highly motivated to work hard in order to excel in tasks and receive rewards. It also generated interest. A quarter of the students indicated that it made the classes interesting. Seventy-eight percent of the *At Risk* students and 73% of the *Low Risk* students intimated being highly extrinsically and intrinsically motivated by the rewards and praises. The acknowledgement and recognition that were accorded to high performers in tasks were also motivating factors, increasing confidence and self-efficacy, as explained by the students in the *At Risk* group. The researcher is of the opinion that this teaching technique promoted hard work on the part of the students. Students had not only been extrinsically motivated, but internalisation and intrinsic motivation had also been developed. I observed that they exerted more effort and applied strategies in order to comprehend. Thus involvement (intrinsic motivation) and comprehension abilities were developed through this teaching technique.

This is evident in the high levels of intrinsic and extrinsic motivation that were shown in the quantitative data, especially in the *At Risk* group where this technique was used intensively. Findings from the questionnaire show that students' extrinsic motivation had increased in both intervention classes. Quantitative results showed significant differences between the control and intervention classes of the *At Risk* group, and on independent t-test significant differences were shown for the *Low Risk* group. The fact that paired t-tests did not show statistically significant results for the *Low Risk* group, may be attributed to the high self-efficacy of most of these students at the beginning of the year, as explained in Chapter 7. Nevertheless, the fact that there was a statistically significant improvement of the intervention group compared to the control group, indicate agreement with the qualitative findings, which show improvement in intrinsic motivation, self-efficacy and interest.

9.2.7 Autonomy

Students' independence, choices and responsibility in learning are cultivated within this teaching technique. The main socio-affective factor associated with autonomy is *intrinsic motivation*. Others are *competence support, interest* and *enjoyment*. Research points to the benefits of autonomy support to instil intrinsic motivation and facilitate reading comprehension (Deci & Ryan 2000; Lepola 2004; Reeve & Jang 2006). Although many researchers see autonomous learning as a tool to increase students' motivation, the relationship between the two is bidirectional. Spratt et al. (2002:245) argue that motivation is a key factor that influences the extent to which students gain from autonomous learning, and that teachers should endeavour to instil motivation before involving students in autonomous learning. In other words they claim that autonomous learning alone, without ensuring motivation, may not be ideal. To adopt a balanced stance between the two views, the intervention dealt with both motivation and autonomy simultaneously to enable students to gain in motivation and autonomous learning. Autonomy, in the form of taking responsibility for learning and making choices, increased students' motivation. Choice is motivating (Deci et al. 1991), and when students were given the responsibility to select their own extensive reading texts and to choose assignment texts from a variety of options, they reported that they were motivated. In particular, students revealed that the choices they were given motivated them to "put in more effort" and achieve results. All the students (*At Risk* and *Low Risk*) who made reference to this teaching technique reported being highly motivated by the responsibility given to them to make choices, and consequently became interested in the activities and tasks. The spin-offs were that they put in more effort and benefited cognitively by improving their reading abilities.

The qualitative findings supported the quantitative findings. High levels of motivation, shown in the statistically significant results (p<0.001), were recorded. Quantitative results for interest (p<0.001) and strategy use (p<0.001) were equally high, corresponding with students responses that the choices and responsibility they were given motivated them to work hard and enabled them to select topics of interest.

9.2.8 Learning environment

A non-restrictive learning environment was created for the intervention. This included giving students the freedom to explore in order to generate interest, increasing motivation and enhancing learning. Predominant socio-affective factors that were linked to this

teaching approach were *interest* and *motivation*. Various researchers have intimated that a conducive, non-threatening environment promotes better conceptualisation and enhances learning (Brown 2000; Burton 2011; Cook 2001). Students gain more from the support given, if it is given in a non-threatening, stimulating environment. The combination of a non-threatening environment and adequate teacher support contributes to successful learning (cf. Bernhardt 1991a; Burton 2011; Kumaravadivelu 2003). Students reported that the environment made learning easier. They explained that because the environment was not restrictive, they were able to interact freely and seek assistance without hesitation. Twenty-nine percent of the *At Risk* students referred to the social benefits of the environment that enabled them to interact and make friends. Eighty-eight percent of the *At Risk* students and 82% of the *Low Risk* students mentioned the freedom and the enjoyment they experienced in learning during class time. Sixty-five percent (*At Risk)* and 44% (*Low Risk)* reported that the free environment enabled them to think clearly and conceptualise better. They also reported that the environment made the classes interesting, and this motivated them (44% *Low Risk*; 55% *At Risk*). One of them succinctly stated that "it was fun". This 'fun' way of developing students' reading comprehension provided the interest and motivation for learning.

These findings corroborate the quantitative results. Quantitative results show a high level of interest (*At Risk* $p=0.001$; *Low Risk* $p<0.001$) and motivation (*At Risk* $p<0.001$; *Low Risk* $p=0.001$) in the intervention classes, in comparison to the control classes. It can therefore be concluded that the non-restrictive environment contributed to the high levels of interest and motivation that were indicated in the questionnaires, and the interview responses shed light on how this was achieved – by making the classes enjoyable, exciting and 'fun' for the students.

9.2.9 Extensive reading

Students were required to read for pleasure as one of the means to developing engaged readers (Grabe & Stoller 2002; Guthrie & Wigfield 2000). This activity was introduced to get students to enjoy reading and to be motivated to read frequently in order to develop positive reading habits that will span over time, and produce successful reading. As reading researchers explain, reading efficiencies and proficiency levels develop through reading or frequent exposure to print (Day 2010; Grabe & Stoller 2002; Guthrie &

Wigfield 2000; Horst 2005; Nishono 2007; Pretorius 2000). For students who have had poor reading backgrounds introducing extensive reading to help develop reading proficiency is essential. Students who opted to engage in more reading reported improved reading habits, appropriate use of strategies, higher levels of interest, motivation and self-efficacy. The qualitative data revealed that prior to the intervention a number of students easily became bored when reading, had wandering minds, and found reading burdensome. However, students reported that after the intervention the ability to focus and read meaningfully had transferred to the reading of academic texts, and they could read their textbooks more easily and could comprehend better. Eighty-six percent of the *At Risk* group and 75% of the *Low Risk* group reported increases in reading speed and improvement in comprehension.

In addition, all the students who were interviewed (*At Risk* and *Low Risk*) reported higher levels of interest, motivation and involvement, with 50% of the *Low Risk* students referring to higher levels of self-efficacy. Forty-three percent of the *At Risk* and 50% of the *Low Risk* students referred to improved reading proficiency and reading habit, and 25% *of the Low Risk* students specifically mentioned improved vocabulary and strategy-use. Students in both A*t Risk* and *Low Risk* groups were very positive about their reading habits (100% *At Risk* and 100% *Low Risk*). Some of the students actually told the researcher that they were looking forward to reading more novels during holidays, which for a number of them was a new experience; as one student put it, "something I have never done before". The aim was to develop independent, engaged readers. In as much as students reported to have developed positive reading habits and were willing and excited to read, it can be assumed that the intervention had helped to improve students' reading habits.

This improvement was shown in the quantitative results. Quantitative results corroborated the qualitative findings discussed above. T-test results show that students' reading habits improved considerably, as indicated by the p values *(At Risk* p=0.002, p<0.001; *Low Risk* p<0.001, p<0.001). In addition, *strategy use* (p=0.001; p<0.001) *self-efficacy, interest* and *motivation* show statistically significant improvement for *At Risk* and *Low Risk* intervention groups.

9.3 Summary

In sum, the qualitative data elucidated the quantitative findings, and shed light on how the improvement in socio-affective levels, which is shown by the quantitative data, was achieved. However, there were some seemingly contradictory results. Students' responses to interview questions did not entirely corroborate their responses to the questionnaires on *attitude*. Students' positive responses on affective factors pointed to positive attitudes. In addition *attitude* was specifically mentioned by 25% of the students in the *Low Risk* group in relation to Learning goal and by 15% of the *At Risk* group in relation to the use of relevant and interesting texts. However, quantitative analysis using independent t-tests did not show statistically, significant improvement for both the *At Risk* and *Low Risk* intervention groups in comparison to the control classes. Nevertheless, paired t-tests show significant improvement for the *Low Risk* group (p=0.005) and mean figures show improvement for both *At Risk* and *Low Risk* groups (Figures 9.3 and 9.4). Thus on the basis of paired t-tests for the *Low Risk* group and mean figures for both *At Risk* and *Low Risk* groups the qualitative results support the quantitative findings.

Other quantitative findings that were not entirely confirmed by the qualitative data were *extrinsic motivation* and *self-efficacy* for the *Low Risk* group and *strategy use* for the *At Risk* group. On *extrinsic motivation*, qualitative findings show that 73% of the *Low Risk* students were motivated by the externally (extrinsic) motivating rewards and praises. However, results of independent t-tests for *extrinsic motivation* were not statistically significant for this group. On the other hand, paired t-tests were statistically significant (p=0.036) showing improvement in *extrinsic motivation*, which is in line with the positive qualitative findings from the interviews. On *self-efficacy,* qualitative findings show increase in self-efficacy levels, which were explicitly mentioned by 40% of the *Low Risk* students in relation to *teacher support* and *extensive reading*. However, quantitative results were not significant on independent t-tests. Nevertheless, paired t-test results showed a significant improvement.

The non-significant results of independent t-tests on *extrinsic motivation* for the *Low Risk* group may not be entirely contradictory to the qualitative results, in the sense that even though students were positive about the rewards and praise given in class, they did not dwell as much on them as the *At Risk* students did, especially the acknowledgement and

recognition aspect. As explained in Chapter 7, this group of students had relatively higher self-efficacy at the beginning of the intervention and were not particularly influenced by external factors.

Quantitative results on *strategy use* were not entirely confirmed by the qualitative findings for the *At Risk* group. Students in this group consistently referred to better understanding, and improved reading ability, with 31% specifically reporting improvement in strategy use in relation to the use of relevant and interesting texts, and 50% reporting the use of appropriate strategies in relation to competence support or strategy instruction. However, this was not reflected by the t-test results. Independent t-test results were not statistically significant for *strategy use* for this group. This is probably because the standard programme had to be followed and there was therefore limited time for intensive practice of reading strategies. Nevertheless, paired t-tests showed a significant improvement (p=0.001). Despite the fact that the qualitative findings on *extrinsic motivation, self-efficacy* and *strategy use* do not entirely support the quantitative on specific t-tests, on the whole, the qualitative data corroborated and confirmed the quantitative findings.

The correspondence of the quantitative and qualitative results is further strengthened by the general comments given by the students. Qualitative findings in the general comment section show 53% of the *At Risk* students commented on increase in motivation, enjoyment and interest; 27% commented on appropriate use of strategy that improved self-efficacy and 40% commented on improved reading habits. Similarly, 57% of the *Low Risk* students commented on increase in motivation, interest and attitude; 43% commented on use of appropriate strategies and self-efficacy, and 29% commented on reading habits. The quantitative results show high levels of motivation, interest, self-efficacy, strategy use and reading habits.

The quantitative findings from the interviews show that the approach had a positive effect on students' affective levels (cf. Chapter 8). Students found that learning was easier and more interesting, classes were enjoyable, and comprehension increased. The cognitive, affective and performance gains increased their motivation. These gains in cognitive and affective levels also enabled them to develop more positive attitudes towards the literacy modules. These results support the high affective levels recorded in the quantitative findings (cf. Chapter 7), and indicate that to achieve effective and successful reading

instruction, students should be able to enjoy classes and also experience academic and cognitive gains. Pretorius (2000:295) points out that the long-term effects of reading instruction are intimately tied to attitudinal and motivational factors.

However, students' actual reading abilities were not compared to their socio-affective improvement as explained in Chapters 1, 4 and 10.

9.4 Conclusion

This chapter has attempted to support and further understand the quantitative findings by invoking qualitative evidence. It has been shown that the statistically significant improvement in the affective levels, reading habits and strategy use of students in the intervention classes were linked or related to students' views on the effectiveness of affective teaching techniques, a non-threatening environment and extensive reading. Students' responses shed more light on how the affective teaching techniques (e.g. learning goal, collaboration, interesting texts, etc.), non-threatening environment and extensive reading increased their motivation, interest, attitude, self-efficacy, willingness to read and ability to use appropriate strategies.

The final chapter concludes the thesis by summarising the main issues of the investigation, condensing the answers to the research questions posed in chapter 1, discussing the limitations of the research, and making a number of recommendations.

Chapter 10: Conclusion

10.1 Introduction

The aim of this research study was to explore a socio-affective approach to improving students' reading proficiency. More specifically, the purpose of the research was to investigate the socio-affective factors that impact on the academic reading abilities of first-year undergraduate students, and to devise pedagogical strategies for manipulating these factors to their advantage. The main objectives were to (1) explore the relationship between socio-affective factors and academic reading ability of the target group; (2) identify the socio-affective factors that strongly predict these students' academic reading ability; (3) design and implement an intervention that would improve the reading skills of students by focusing on socio-affective factors in particular; and (4) evaluate the effectiveness/efficacy of the intervention. In relation to the aims and objectives, the following research questions were formulated.

1. What is the relationship between socio-affective factors and students' academic reading ability?
2. Which socio-affective factors strongly predict tertiary students' academic reading ability?
3. How can knowledge of socio-affective factors be used to design or contribute towards designing more effective reading interventions?
4. How effective is a reading intervention programme that incorporates socio-affective factors?

Figure 10.1 below shows the processes that were utilized in answering the research questions and how they culminated in the evaluation of the intervention.

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│                      │   Efficacy of intervention │                        │
│                      └───────────────────────────┘                        │
│         ┌──────────────────────────┐    ┌──────────────────────────┐      │
│         │  Quantitative analysis   │    │   Qualitative analysis    │      │
│         │  Questionnaires, t-tests │    │  interviews, content      │      │
│         │                          │    │  analysis                 │      │
│         └──────────────────────────┘    └──────────────────────────┘      │
│                      ┌───────────────────────────┐                        │
│                      │  evaluation of intervention │                       │
│                      └───────────────────────────┘                        │
│                      ┌───────────────────────────┐                        │
│                      │   conducting intervention   │                       │
│                      └───────────────────────────┘                        │
│                      ┌───────────────────────────┐                        │
│                      │     Intervention lay out     │                      │
│                      └───────────────────────────┘                        │
│         ┌───────────────────────────────────────────────────────┐        │
│         │ Exploring students' needs; Questionnaires, ANOVA,       │        │
│         │ Regression analysis                                     │        │
│         └───────────────────────────────────────────────────────┘        │
│              ┌───────────────────────────────────────────┐               │
│              │                   Model                    │               │
│              └───────────────────────────────────────────┘               │
│    ┌──────────────────────┐          ┌──────────────────────────────┐    │
│    │ Theoretical framework │          │ Conceptual/instructional      │    │
│    │                      │          │ framework                     │    │
│    └──────────────────────┘          └──────────────────────────────┘    │
│    ┌───────────────────────────────────────────────────────────────┐     │
│    │ Research questions:                                            │     │
│    │   1. What is the relationship between socio-affective factors  │     │
│    │      and students' academic reading abilities?                 │     │
│    │   2. Which socio-affective factors predict tertiary students'  │     │
│    │      academic reading abilities?                               │     │
│    │   3. How can knowledge of socio-affective factors be used to   │     │
│    │      design a more effective reading intervention?             │     │
│    │   4. How effective is a reading intervention programme that    │     │
│    │      incorporates socio-affective factors?                     │     │
│    └───────────────────────────────────────────────────────────────┘     │
│    ┌───────────────────────────────────────────────────────────────┐     │
│    │ Problem: Academic under-preparedness and low reading           │     │
│    │ proficiency of first-year university students                  │     │
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Figure 10.1: Summary of the research strategy to address the aims of the study

Reading the diagram from the bottom-up, the problem (students' academic under-preparedness and poor reading ability) is stated and the discussion grounded in a theoretical framework (based mainly on Grabe and Stoller 2002) and on a conceptual and instructional framework, which is an adapted and contextualised version of Guthrie and Wigfield's (2000) model. Emanating from the discussion, an appropriate model for UP students in the South African context was designed and students' socio-affective profiles that pointed to their socio-affective needs in reading were explored. Based on this information, an academic reading programme was designed and conducted with intervention and control groups sampled from *High/At Risk* and *Low Risk* students. The efficacy of the intervention was evaluated through a mixed methods approach that used

mainly quantitative analyses of questionnaire surveys, supported by qualitative analyses of interview responses. The results of both analyses were integrated and discussed to determine the efficacy of the intervention.

Based on Figure 10.1, this chapter attempts to indicate to what extent the research questions have been answered in order to draw empirically based conclusions from the findings. First, the research problem is restated, after which the theoretical and conceptual framework of the research study is summarised. Thereafter the main threads of the study are drawn together by summarising the answers to the four main research questions that informed the study. Finally, the limitations of the study and the implications of the research findings are discussed and recommendations made.

10.2 Research problem, theoretical and conceptual framework

Given that students' under-preparedness is a concern for most South African higher education institutions, various attempts have been made to address this educational challenge. At tertiary level, students are required to read for comprehension and to learn, as well as read critically by drawing inferences, evaluating and synthesising information. In sum, students are expected to engage in higher order reading skills. Unfortunately, for a number of students who enter tertiary education the ability to use these skills is lacking, especially those deemed to be at risk academically. The causes for this poor reading ability, and frustration level reading of many students, are related to poor social and cultural reading environment, a poor primary and high school education system that does not promote reading and that leaves them with low affective levels for reading, and concomitant low reading proficiency. In finding solutions to these challenges, a number of tertiary institutions have devised ways to improve students' academic reading and writing. However, most of these programmes are solely cognitive-oriented. As much as these cognitive approaches have merit, they do not obtain optimal results.

Although affect has been acknowledged as important in reading development, its practical incorporation into instruction and research is lacking. This study integrated affective and cognitive aspects into the development of students' reading proficiency. In other words, cognitive reading instruction was embedded in an affective framework. Taking the various forms of reading required at tertiary level (reading to learn, critical reading, use of

metacognition) into consideration, and including motivational instructional techniques (Guthrie & Wigfield 2000), issues pertaining to L2 reading instruction (Bernhardt 1991a; 1991b; 2005; Grabe and Stoller 2002) and L2 motivational strategies (Dörnyei 1994, 2001b; Dörnyei & Ushioda 2011), a model was designed for tertiary level reading development that uses an affective approach (Figure 3.4). The position of the model is that L2 reading instruction needs to be undertaken within an affective framework that includes collaboration, autonomy, teacher involvement as well as extrinsic and intrinsic motivational support among others. In line with the model, students' profiles were explored to determine the relationship between socio-affective factors and students' reading ability or proficiency. An ANOVA test showed a robust relationship between students' motivation, attitude, interest, self-efficacy, strategy use and reading habits on one hand, and their reading ability on the other. A regression analysis further showed self-efficacy as the strongest predictor of students' reading proficiency out of all the variables fed into the analysis. Based on the results of the needs analysis and the theoretical justification (Bernhardt 1991a; Grabe & Stoller 2002, Guthrie & Wigfield 2000, Kumaravadivelu 2003), an intervention programme was designed and conducted. This programme served as enrichment to the current Academic Reading programme at the University of Pretoria.

The efficacy of the intervention was evaluated by using t-tests to analyse pre- and post-intervention questionnaire survey results, as well as Cohen's d to determine effect sizes, and content analysis to integrate interview responses. The qualitative data corroborated the quantitative data, and both showed that students gained on three levels – affective, social and cognitive – through the affective approach, social interaction and cognitive instruction.

10.3 Summary of results

In relation to research Question 1, the quantitative analysis from the ANOVA test showed that there is a robust relationship between socio-affective factors and students' academic reading ability, which justified integrating a socio-affective component into the existing cognitive academic reading programme. The analyses showed that the poorer a student's reading background is, the lower are his/her affective levels, and consequently, also his/her reading proficiency, indicating a relationship between socio-affective factors and reading ability. Thus, poor reading background may influence students' affective levels for

reading, and ultimately, their reading proficiency levels and reading ability. With regard to research question 2, a Cumulative Logit analysis conducted on socio-affective factors showed that of the factors that strongly predicted the sampled students' reading ability, self-efficacy and motivation were the strongest predictors, with self-efficacy being the best predictor. These aspects were therefore given prominence in the intervention programme.

In relation to research question 3, a reading intervention programme that pivoted on social and affective factors was designed, based on the findings of the questionnaire data, which are: (1) a relationship between socio-affective factors and students' reading ability, and (2) the strong predictors of this relationship (i.e. self-efficacy, intrinsic motivation and strategy use).

The fourth and final objective, relating to research Question 4, was to evaluate the effectiveness/efficacy of the intervention. This objective was addressed using mainly quantitative, but also qualitative analyses. Quantitative data were analysed using t-tests. The results showed that the intervention classes had improved significantly in affective reading levels on most of the categories. Effect sizes using Cohen's d showed medium to large improvements on all categories, with the exception of attitude in the *High/At Risk* group and extrinsic motivation in the *Low Risk* group. The control classes showed minimal improvement or decreased affective levels. This shows that without affective intervention, students' affective levels in reading improved minimally or decreased for this cohort of students. This could affect their reading habits and negatively influence the development of their reading ability. As shown by Guthrie and Wigfield (2000), Guthrie, Wigfield, Barbosa et al. (2004), Pretorius (2000, 2007), and indicated by Alderson (2000), Burton (2011), and Grabe and Stoller (2002), students' affect influences their reading ability. This relationship between affect and reading ability was further confirmed by the results of the exploratory study that was used to answer research question one. As a result of this obvious relationship, affective strategies should be employed in improving students' academic reading ability. Thus an affective approach is more desirable in improving students' reading ability than solely cognitive instruction.

10.4 Limitations and further research

Although new knowledge has been constructed through the research reported on in this study (this is the first study in South Africa that looks in detail at socio-affective factors in reading at tertiary level), there are some limitations, including the use of a non-standardised test, the inability to administer the Test of Academic Literacy Levels (TALL) after the intervention, the duration of intervention, and the fluidity of classes.

Use of a non-standardised test

One of the limitations of this study is the fact that a standardised test was not used to assess the reading improvement of the students. Although pre- and post-tests were written, these results were not used for comparison in the study, as they were not standardised tests, and were compiled for reasons other than the research. The pre- and post-tests were compiled from different previous examination papers for the Academic Reading module, and served as an end of quarter test for students taking the module. For the *Low Risk* group, the pre-test served as a consistency measure to obtain a baseline profile, whereas the posttest served as a summative assessment for grading purposes. For the *At Risk* group the only purpose of the pre- and post-tests were to measure the effectiveness of the intervention. The tests therefore, in addition to being non-standardised, did not serve the same purpose for the *At Risk* and the *Low Risk* groups. For these reasons, the test results were not used for comparison but for selection of the sample group for the qualitative data (i.e. interviews).

Despite these limitations it is worth mentioning that the pretest means of the non-standardised reading test showed differences in performance between *At Risk* students and *Low Risk* students, and the postest means showed differences between the control and intervention classes. In other words, pretest results, in terms of means, showed that the *Low Risk* students performed better than the *At Risk* students, and posttest means showed that in each group (*At Risk* and *Low Risk*) the intervention classes performed better than the control classes. These results are stated with caution as no statistical analysis was done due to the reasons given above. Future research should administer standardised tests as pre- and post-intervention tests.

Pre- and post-test of academic or reading literacy.

Ideally, in a study like this pre- and post-tests in academic or reading literacy should be administered and the results compared to determine the effectiveness of the socio-affective intervention on literacy levels. However, although it was initially planned to administer TALL at the end of the intervention, this was not possible due to logistical problems. It was difficult to track down all the students after the module had ended, especially the students in the *Low Risk* group who had completed the module and were no longer affiliated to the Unit. It is suggested that for future research, a pre- posttest design for the independent and dependent variables would be desirable. That is, a socio-affective questionnaire and an academic or reading literacy test such as TALL should be administered at the beginning and end of a semester or year's intervention in order to determine changes in the socio-affective levels as well as the academic literacy levels of the students.

Time constraints

As mentioned earlier, the duration of the intervention for this study was rather limited. In addition, the standard programme of the modules had to be followed, which limited the number of tasks and exercises that were done, especially by the *At Risk* students. The length of time for such an intervention should preferably be a year. As emphasised by Pretorius (2000:324) comprehension effects only emerge after extensive training, and new strategies are not learned overnight. The long-term benefits of developing skilled readers, and hence independent (engaged) readers, are worth the time, effort and expense. Such investigation should be undertaken after a semester or preferably a year's intervention, focussing on reading development.

Fluidity of classes (Mobility of students)

The fact that some students moved between class groups and some students did not attend all classes created a number of problems. Some students answered pre-intervention questionnaires and not post-intervention questionnaires, or vice versa, and therefore data could not be matched. In addition, data were lost due to students not providing student numbers. Future research should guard against this unnecessary loss of data by preventing students from changing groups, if possible, and by checking student numbers upon submission of questionnaires.

10.5 Significance of study

The thesis contributes to the debate on academic reading, especially on issues relating to the relationship between socio-affective factors and reading proficiency; self-efficacy as a strong predictor of reading ability; and the influence of social and cultural factors on affective levels, especially for *At Risk* students.

The finding that there is a robust relationship between socio-affective factors and students' reading proficiency or literacy levels (Chapter 5), confirms the growing body of literature that documents the association between socio-affective factors and reading proficiency (Grabe & Stoller 2002; Guthrie & Wigfield 2000; Pretorius 2000; 2007; 2008).

Another finding of the study, that self-efficacy is the strongest or best predictor of students' reading ability (Chapter 5), confirms previous studies that show self-efficacy best predicting reading proficiency (Erlich et al. 1993; Huang 2003; Mills et al. 2007).

Furthermore, the finding that social and cultural factors aligned with students' affective levels in reading (cf. § 5.) confirms the literature that these factors influence affective levels in reading (Alderson 2000; Grabe & Stoller 2002; Guthrie & Wigfield 2000; Taylor & Yu 2009).

Moreover, the research replicates and extends previous work by Guthrie and his colleagues. First, it replicates their work in that their successful implementation of motivational processes and cognitive strategies in reading instruction produced higher reading comprehension, reading strategy use and reading engagement (Wigfield et al. 2008). Second, their work is extended in the sense that, whereas it was undertaken with L1 students at elementary and middle school levels, the current study (which also integrates motivation and cognitive strategies) is undertaken in an L2 tertiary context.

On the pedagogical level, the finding that TALL reliably distinguishes between students with poor reading background, and therefore low reading ability, and those with rich reading background and higher reading ability (Chapter 5) further confirms its reliability as a diagnostic test for differentiating *High/At Risk* students who need intensive academic

literacy support and *Low/No Risk* students who merely need to enhance their academic literacy.

Finally, the thesis contributes to the field, pedagogically, through the main finding of the study, which is that reading instruction which integrates cognitive and motivational strategies yields higher affective levels for reading, leading to higher reading proficiency than a purely cognitive approach to reading instruction.

10.6 Recommendations

On the basis of the research, a number of recommendations are made: first, at the classroom level, in relation to teaching strategies, syllabus, and teaching materials; and second at the institutional level.

10.6.1 Classroom level

In relation to teaching strategies, this study has shown that merely teaching students cognitive strategies is not adequate, as their affective levels decrease with the progress of tertiary workload. Krashen's model for L2 learning, as explained by Brown (2000), posits that when the affective filter is high, language learning is low. Likewise, Burton (2011) in relation to Universal Design for Learning, explains that a strain on the affective decreases cognitive function. Students are more creative and conceptualise better if their affective levels are high. Thus, at tertiary level, a focus mainly on cognitive strategies for students who have not been involved in reading, and do not have the basic reading strategies and skills, as well as a love for reading (due to low SES or poor educational background (cf. § 1.2) is inadequate. First-year students need to be introduced and taught reading strategies in a fun, interesting and enjoyable manner in a non-stressful environment (affective approach) that will instil joy and love for reading, which will motivate them to want to read, enjoy reading and read frequently with understanding. In relation to the findings of the study a number of recommendations are made in relation to the South African context, where many students fall into the *High/At Risk* group and have low socio-affective levels in reading.

Commencement of literacy support

Students at tertiary level should be provided with literacy support from the start of their university studies. Since they face reading challenges at the beginning of their first year, it is suggested that the reading section of the Academic Literacy module for High/*At Risk* students should be included in the first study unit of the curriculum. This will equip them with appropriate strategies that they can apply to the reading of their textbooks. Failure to instil this competence in students at the beginning of their undergraduate year causes a number of them to struggle with tertiary level reading demands. They find the level and amount of reading required of them to be challenging and daunting, and might begin to read at frustration levels, thus lowering their affective levels (motivation, interest, attitude and self-efficacy). This, in turn, might leave them with a sense of hopelessness and failure that could result in some students leaving the university or even dropping out of the educational system.

Affective and cognitive development

In addition, instruction should be two-pronged and be aimed at improving reading ability and affective levels. TALL results show that the students' reading ability at tertiary level is low. As reading threshold depends on the level of texts and tasks (Grabe and Stoller 2002), it became evident that at the time that the research was done, the threshold for tertiary reading had not yet been reached by this cohort of students. The minimal improvement indicates that a number of students were reading at frustration levels at the beginning of their first-year. Frustration level reading lowers motivation and since research has shown that reading ability is linked to the affect; instruction needs to be aimed at increasing affective levels as well, in order to prevent motivation from decreasing. Improvement in the affective levels of students in the intervention classes shows that the affective approach does increase motivation to read, which confirms studies by Guthrie and his colleagues.

Furthermore, competence support develops self-efficacy, which was found to be the strongest predictor of reading ability. Students should therefore be given adequate competence support early in the year to increase self-efficacy and to prevent motivation from decreasing, as a result of frustration level reading.

Rewards and praise

Praise and rewards seem to be important to students, especially *High/At Risk* students. The researcher was pleasantly surprised at the positive responses that students provided for the praises and rewards. It turned out to have been one of the greatest motivating factors, according to the students' reports. Praise and rewards, with recognition should form part of literacy teaching programmes for *High/At Risk* students to instil motivation and promote effort.

Building of self-confidence, self-esteem and self-efficacy

A number of students reported feelings of insecurity and intimidation at the beginning of the year, especially in cases where lecturers were perceived to be unfriendly and unapproachable. Lecturers, especially of literacy modules, should therefore be approachable and strive to create a friendly atmosphere in class. Students should be given the necessary (teacher) support to build their self-confidence and self-esteem in order to develop appropriate self-efficacy levels. Students who have high self-efficacy tend to be high achievers (Guthrie et al. 1999; Huang & Chang 1998; Mills et al. 2007).

Teacher support and the learning environment

Students seem to link the learning environment with the level of support from the lecturer. For these students, effort and motivation were driven by the teacher's support and the kind of environment created in the classroom. They perceive a lecturer who provides adequate support in class as creating a conducive environment that makes learning easier and interesting. Little or no support in their view may create an environment that makes learning boring and more challenging. This is in line with the view that the teacher creates an environment, which can either suppress or enhance learning (Brown 2000; Cook 2001; Dörnyei 2001b; Dörnyei & Ushioda 2011; Wentzel 2005). Relating this specifically to L2 learners, Cook (2001:230) suggests that the teacher should free the L2 learner from inhibiting factors and that L2 learning successfully takes place if the learner's inner self is set free by providing the right circumstances for learning. This is confirmed by Burton (2011) in her advance for the Universal Design for Learning (UDL). She explains that UDL theory propounds that when the affective networks are relaxed, cognitive or strategic networks have a higher level of performance. Lecturers should endeavour to promote a non-threatening environment that provides affective and academic support in order to enhance learning,

When the students realised that they were being treated as individuals (sense of identity) and recognised (bonding) they were motivated to learn. When students realise that significant adults (e.g. teachers/lecturers and parents) believe in them (encouragement) and provide them with freedom in learning, they are motivated (Deci et al. 1991; Guthrie & Wigfield 2000). As Gardner and Barefoot (2011) explain, students' success may depend on the relationship that the lecturers build with them, or the support they give them. Huang and Chang (1998) found that teacher support improved students' confidence, made them put in more effort, and believe in their ability to succeed. They concluded from their study that the teacher played an important role in influencing the students' self-efficacy in reading, which was confirmed by the current study.

Socio-affective teaching approach

Students in the intervention groups were very positive about the socio-affective approach, citing its interactive nature among others. They reported that it enabled them to form friendships, which enhanced and promoted their learning. They also reported that the environment enabled them to interact and learn from their peers. The teaching approach for academic literacy modules should therefore be undertaken in an environment that enables students to interact freely and possibly form friendships. Gardner and Barefoot (2011) suggest that one of the ways to ensure first-year students' success is to help students to establish connections.

Other recommendations on teaching strategies in the classroom include:

- a pedagogical shift to learning and learner-centredness in the teaching of literacy modules;
- instruction of reading strategies, including inferencing, distinguishing between main and supporting ideas, summarising of texts, to mention a few;
- creating an interesting and motivating environment for students to learn,
- capitalising on students' background to enhance learning,
- using a socio-affective orientation to literacy instruction to allow for interaction, increase affective levels, and to promote learning.

In relation to the syllabus, extensive reading should be made part of a tertiary level reading programme to develop positive reading habits in students and to provide them with an

avenue to practise engaged reading. Students reported being involved, focused and interested while reading for pleasure. These abilities were transferred to their academic reading, which promoted better understanding, increased reading speed, and in turn enhanced their reading ability. Students should be given frequent exposure to print through extensive reading, as it is mainly through involvement and engagement that students' reading ability is developed and the use of strategies become automatic. Students develop their reading literacy skills and abilities through reading, especially reading for pleasure. However, a number of them could not participate in the extensive reading project due to unsatisfactory time management. Students explained that they were overwhelmed by their studies and did not have the time to participate. Students who could not participate in this exercise lost this valuable experience and opportunity to develop their reading ability through a more fun, exciting and effective approach. The 'Matthew effect' in reading (the poor get poorer) could be referred to in this context. Students who were finding it difficult to cope with workload due to their low reading proficiency, and therefore needed the practice to improve their reading proficiency, were the ones who lost the opportunity.

Regarding teaching materials, interesting and level-appropriate texts for extensive reading and relevant texts from students' disciplines or subject-fields for academic reading, should be utilised for the development of reading proficiency. The use of Blackboard learning to supplement teaching and promote interest and motivation is also strongly recommended.

Texts for teaching academic reading should be significant or relevant to students and should be at their level of competence. Extracts from textbooks, texts on discipline-related topics, and interesting generic texts on current issues should be used for teaching academic reading. Students reported finding the discipline-related texts relevant and therefore motivating. Whereas they found texts at their level of competence interesting, they reported finding very difficult texts boring, uninteresting, and demotivating.

10.6.2 Institutional level

Recommendations at the institutional level centre around the duration and level of Academic Literacy (AL) modules, the number of modules students should take in their first-year, timing of tests and assignment, and exemption of high performing students from AL modules.

First, an intervention or support module for first-year students should ideally span an entire academic year, and should be available to those who need it even at second and third year levels. Affective improvement highly influences cognitive outcomes in reading development, when an intervention is sustained. A seven-week or even a fourteen-week intervention may be inadequate in changing affective levels to significantly impact on cognitive reading levels (though this study did show improvement).

Second, the number of first semester modules should be reduced for first-year students (at least for *High/At Risk* students) to allow for greater attention to be given to the development of academic reading ability. The early development of reading literacy will assist them to achieve success in their academic subjects. In addition, time management support should be provided from the beginning of the year and continued throughout the year. This recommendation is based on the premise that students develop their reading literacy skills and ability through reading, especially reading for pleasure. However, a number of them could not participate in the extensive reading project due to inadequate time management.

Third, the timing of module and semester tests should be considered. Some students reported performing below their ability in tests written in the evenings due to fatigue and lack of concentration and focus. It is recommended that the timing of module and semester tests should be considered and if possible scheduled during the day.

Finally, it is recommended that students who achieve the top end of the TALL (i.e level 5) could be exempted from taking literacy support modules, so that those who need it can benefit. Alternatively, a more advanced discipline-specific academic literacy module should be made available to these students.

10.7 Conclusion

This thesis has confirmed findings of earlier studies that socio-affective factors in addition to cognitive factors have a significant effect on reading ability. The study also filled important gaps in the research literature by focusing on higher education instead of basic education, and on L2 speakers rather than L1 speakers. In particular, it addressed the institutional needs of the University of Pretoria during a time of complete restructuring of

the offerings of the Unit for Academic Literacy. The findings suggest that that reading instruction grounded in a socio-affective approach can be a more successful way of improving students' affective levels for reading than a purely cognitive approach. Thus in seeking to improve students' reading ability, not only should the cognitive be targeted, but also social and affective redress need to be pursued vigorously.

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Appendix 1: Ethical clearance

14 May 2009

Dear Prof Carstens

Project:	**A socio-affective approach to improving students' reading comprehension abilities**
Researcher:	**N Boakye**
Supervisor:	**Prof A Carstens**
Department:	**Unit for Academic Literacy**
Reference:	**28607288**

I have pleasure in informing you that the Registrar and Student Dean have formally given **approval** for the above study to be conducted at the University of Pretoria. The approval is subject to the candidate abiding by the principles and parameters set out in her application and research proposal in the actual execution of the research.

The Committee requests you to convey this approval to Ms Boakye.

We wish you well in the completion of this research project.

Sincerely

Prof. Brenda Louw
Chair: Research Proposal and Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: brenda.louw@up.ac.za

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Appendix 2A: Informed consent (questionnaires phase 1)

Faculty of Humanities
Unit for Academic Literacy

June 2009

Dear Student

INFORMED CONSENT: EXPLORATORY RESEARCH ON THE RELATIONSHIP BETWEEN SOCIO-AFFECTIVE FACTORS AND READING ABILITY

You are kindly requested to take part in an exploratory research project by responding to the questionnaire on reading background and strategy use. The research results will contribute towards a DPhil degree in Linguistics. Parts of the DPhil thesis may be converted to conference presentations or research articles.

Your responses will remain anonymous. Even though you are required to supply your student numbers, they will only be used for tallying responses to test performance and not for any other identification purposes. There are no disadvantages for responding to this questionnaire.

If you would like further information on the research project or the intervention programme, you are welcome to contact me on the address below.

Yours Sincerely

------------------------------------   ----------------------------------
Naomi Boakye (Researcher)   Prof. A. Carstens (Supervisor)

Unit for Academic Literacy   Unit for Academic Literacy
HSB 17-22
University of Pretoria
Tel: 012 420 5905

STATEMENT OF INFORMED CONSENT

I have read the information included in the above letter, and I am willing to participate in the research programme. I agree that the following data may be used for the purposes outlined in the letter:

(a) my responses to questionnaires on my reading background, motivation, attitudes, interest and use of reading strategies

(b) my performance in the Academic Literacy tests.

-------------------------------   ----------------------------

Signature of respondent   Date

Appendix 2B: Informed consent (questionnaires, participation and interviews)

Faculty of Humanities
Unit for Academic Literacy

June 2008/ January 2010

Dear Student

INFORMED CONSENT: RESEARCH ON THE EFFECTIVENESS OF AN INTERVENTION PROGRAMME TO IMPROVE READING COMPREHENSION ABILITIES

You are kindly requested to take part in a research project aimed at improving students' reading comprehension abilities. The research results will contribute towards a DPhil degree in Linguistics. Parts of the DPhil thesis may be converted to conference presentations or research articles.

The research project will involve an intervention programme which will entail reading instruction using approaches that enhance motivation, such as, autonomy, collaboration, competence support, emphasis on learning goals, etc. The intervention will last for seven weeks for students on the EOT 161 course and fourteen weeks for students on the EOT 110 course. Students will either belong to a control group that will receive normal tuition or an intervention group that will receive instruction in reading through the affective approaches outlined above.

You will be requested to take reading tests before and after the intervention programme, and also be requested to provide responses to questionnaires on reading background and strategy use before and after the intervention.

In addition to the questionnaires and the pretests and posttests, interviews will be conducted to assess the effectiveness of the programme. The interviews will be conducted in three sessions – at the beginning, midway and at the end of the intervention programme.

You may be selected to participate in the interview sessions. The interviews will be semi-structured and will involve answers to questions pertaining to your perceptions, challenges, interest, etc. of the programme. You will also have the opportunity to speak freely on your views, gains and challenges of the programme.

Apart from requiring a few hours of your time for the interview sessions, and the reflection you will have to do, your participation in the research will not disadvantage you in anyway. Instead, if your class is selected, you will have the benefit of receiving tuition that is geared towards improving motivation and enhancing academic reading abilities, and if selected for the interviews, you will have the benefit of being given the opportunity to reflect on the gains and challenges of the programme.

Confidentiality will be ensured. Only the researcher will have access to the raw data. Should any information you give be presented verbally in the research report, anonymity would be maintained. The information you give will not be used against you in anyway, and will be purely for research purposes. The raw data will be stored for fifteen years and may be used for further research. You are free to withdraw from the programme at anytime, and any information supplied will be destroyed.

If you would like further information on the research project or the intervention programme, you are welcome to contact me on the address below.

Yours Sincerely

----------------------------------   ---------------------------------
Naomi Boakye (Researcher)   Prof. A. Carstens (Supervisor)

Unit for Academic Literacy   Unit for Academic Literacy
HSB 17-22
University of Pretoria
Tel: 012 420 5905

STATEMENT OF INFORMED CONSENT

I have read the information included in the above letter, and I am willing to participate in the research programme outlined. I agree that the following data may be used for the purposes outlined in the letter:

(a) my responses to questionnaires on my reading background, motivation, attitudes, interest and use of reading strategies

(b) my performance in the Academic Literacy tests and other reading tests.

(c) my answers to interview questions pertaining to the teaching programme and my general impression of the programme.

------------------------------   ----------------------------

Signature of respondent   Date

Faculty of Humanities
Unit for Academic Literacy

Questionnaire: Socio-affective factors and strategy use in academic reading

Dear student

Thank you for your willingness to contribute data on factors affecting reading that will help to improve the Academic Reading module.

Please note that there are no incorrect or false answers since the answers reflect your personal opinion. Your responses will remain anonymous. Even though you are required to supply your student numbers, they will only be used for tallying responses to test performance and not for any other identification purposes. There are no disadvantages for responding to this questionnaire.

For office use

Respondent number

Please tick (using a X) the number that best reflects your opinion accurately

Past experiences with reading	Dimension of construct	Strongly agree	Agree	Uncertain	disagree	Strongly disagree	
1. When I was a child I was often taken to the library		1	2	3	4	5	V1
2. Members of my family used to read to me		1	2	3	4	5	V2
3. There have always been books in my family's home		1	2	3	4	5	V3
4. Attention was given to developing reading skills in my high school		1	2	3	4	5	V4
5. There was a library in my primary		1	2	3	4	5	V5

school						
6. There are 20 or more books in my home		1	2	3	4	5	V6

Reading and social environment						
7. My siblings read a lot		1	2	3	4	5	V7
8. My parents read a lot		1	2	3	4	5	V8
9. My friends like reading so they read a lot		1	2	3	4	5	V9
10. My friends and I discuss books that we read		1	2	3	4	5	V10
11. I know people who read all kinds of texts		1	2	3	4	5	V11
Interest in reading						
12. I like to read about topics of interest		1	2	3	4	5	V12
13. I like to read about new things		1	2	3	4	5	V13
14. I read for pleasure		1	2	3	4	5	V14
15. I find reading an interesting activity		1	2	3	4	5	V14
16. If I had more time I would read more		1	2	3	4	5	V16
Attitude towards reading						
17. I have always believed that reading was a good thing to do		1	2	3	4	5	V17
18. I have favourite subjects that I read about		1	2	3	4	5	V18
19. 1 enjoy reading		1	2	3	4	5	V19
20. I find it easy to settle down and concentrate on my reading tasks		1	2	3	4	5	V20
21. Reading well will help me with my studies		1	2	3	4	5	V21
22. I can learn a lot from reading		1	2	3	4	5	V22
Perceptions about own abilities/self-efficacy						
23. I think I read well and with understanding		1	2	3	4	5	V23
24. I read slowly so I have problems withunderstanding		1	2	3	4	5	V24
25. I have difficulty in completing the readingassignments given to me		1	2	3	4	5	V25
26. I read slowly so it makes me tired and bored		1	2	3	4	5	V26
27. I have difficulty in understanding		1	2	3	4	5	V27

words (50% or more) in my reading assignments						
28. I have to translate what I read into my home language before I really understand	1	2	3	4	5	V28
29. I have difficulty in understanding idiomaticlanguage	1	2	3	4	5	V29
30. I have difficulty in understanding thetexts I have to readat university	1	2	3	4	5	V30
31. I have difficulty in extracting the main points in what I read.	1	2	3	4	5	V31
32. I find it difficult to summarise a text in my own words	1	2	3	4	5	V32
Reading strategies						
33. When I read a novel, I read it in a different way from when I read a textbook	1	2	3	4	5	V33
34. Before I read a book, I look at its contents page and skim through it looking at headings and illustrations	1	2	3	4	5	V34
35. The first thing I do when I come across an unknown word is to look it up in the dictionary	1	2	3	4	5	V35
36. I record new words and try to memorise them with their meanings	1	2	3	4	5	V36
37. Iignore diagrams, maps, graphs, charts, which I come across in the course of my reading	1	2	3	4	5	V37
38. I try to relate what I read with my own ideas and previous knowledge	1	2	3	4	5	V38
39. I use questions like why, what and how to help me understand my reading better	1	2	3	4	5	V39
40. I form visual images when I read.	1	2	3	4	5	V40
Int. motivation-curiosity, involvement, Challenge						
41. I read to learn new information about topics that interest me	1	2	3	4	5	V41
42. If I am reading about an interesting topic, I sometimes lose track of time	1	2	3	4	5	V42
43. I enjoy reading books on various topics	1	2	3	4	5	V43
44. If my teacher/lecturer discusses something interesting, I might read more about it	1	2	3	4	5	V44
45. I feel I connect with characters in good books	1	2	3	4	5	V45

46. I enjoy reading fictional stories		1	2	3	4	5	V46
47. I enjoy a long involved story		1	2	3	4	5	V47
48. I read a lot of adventure and mystery books		1	2	3	4	5	V48
49. I like hard challenging books		1	2	3	4	5	V49
50. Reading helps me understand difficultconcepts		1	2	3	4	5	V50
51. If the assignment project is interesting, I can read difficult material		1	2	3	4	5	V51
52. If the book is interesting, I don't care how hard it is to read		1	2	3	4	5	V52
53. I like to read books that make me think		1	2	3	4	5	V53
Extrinsic motivation- recognition, competition							
54. I like to get compliments for my reading		1	2	3	4	5	V54
55. It is important for me that my teacherand/or my parents recognise my reading		1	2	3	4	5	V55
56. I like being the only one who knows theanswer to a question from a text we have read		1	2	3	4	5	V56
57. It is important for me to be among the goodreaders in my class		1	2	3	4		V57
58. I try to get more answers right than my friends' in reading tasks		1	2	3	4	5	V58
59. I like to finish my reading and tasks before other students		1	2	3	4	5	V59
60. I am willing to work hard in order to read better than my friends		1	2	3	4	5	V60
Reading habits							
61. I read one novel each week/month during holidays		1	2	3	4	5	V61
62. I read one novel each week/month duringschool term		1	2	3	4	5	V62
63. I often read							
i. newspapers		1	2	3	4	5	V63i
ii. magazines		1	2	3	4	5	V63 ii
iii. novels		1	2	3	4	5	V63 iii
iv. academic books		1	2	3	4	5	V63 iv
v. any other (e.g. motivational, plays, etc)		1	2	3	4	5	V63v
64. I read books/magazines/newspapers in my mother-tongue		1	2	3	4	5	V64

65. Newspapers are bought daily/weekly in my home		1	2	3	4	5		V65

Personal information

66. Faculty						V66
67. Gender	F		M			V67
68. Code for literacy test	1	2	3	4	5	V68
69. Mother tongue	Eng	Afr	SA African	Other African	Other	V69
Student number						

Thank you for filling in the questionnaire

Appendix 3B: Post-intervention questionnaire (Phase 3)

Faculty of Humanities
Unit for Academic Literacy

Questionnaire: Socio-affective factors and strategy use in academic reading

Dear student

Thank you for your willingness to contribute data on factors affecting reading that will help to improve the Academic Reading module.

Please note that there are no incorrect or false answers since the answers reflect your personal opinion. Your responses will remain anonymous. Even though you are required to supply your student numbers, they will only be used for tallying responses to test performance and not for any other identification purposes. There are no disadvantages for responding to this questionnaire.

For office use

Respondent number

Please tick (using a X) the number that best reflects your opinion accurately

	Strongly agree	Agree	Uncertain	disagree	Strongly disagree		
Interest in reading							
1. I like to read about topics of interest	1	2	3	4	5	V1	
2. I like to read about new things	1	2	3	4	5	V2	
3. I read for pleasure	1	2	3	4	5	V3	
4. I find reading an interesting activity	1	2	3	4	5	V4	
5. If I had more time I would read more	1	2	3	4	5	V5	
Attitude towards reading							
6. I have always believed that reading was a good thing to do	1	2	3	4	5	V6	

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7. I have favourite subjects that I read about	1	2	3	4	5	V7	
8. 1 enjoy reading	1	2	3	4	5	V8	
9. I find it easy to settle down and concentrate on my reading tasks	1	2	3	4	5	V9	
10. Reading well will help me with my studies	1	2	3	4	5	V10	
11. I can learn a lot from reading	1	2	3	4	5	V11	
Perceptions about own abilities/self-efficacy							
12. I think I read well and with understanding	1	2	3	4	5	V12	
13. I read slowly so I have problems with understanding	1	2	3	4	5	V13	
14. I have difficulty in completing the reading assignments given to me	1	2	3	4	5	V14	
15. I read slowly so it makes me tired and bored	1	2	3	4	5	V15	
16. I have difficulty in understanding words (50% or more) in my reading assignments	1	2	3	4	5	V16	
17. I have to translate what I read into my home language before I really understand	1	2	3	4	5	V17	
18. I have difficulty in understanding idiomatic Language	1	2	3	4	5	V18	
19. I have difficulty in understanding the texts I have to read at university	1	2	3	4	5	V19	
20. I have difficulty in extracting the main points in what I read.	1	2	3	4	5	V20	
21. I find it difficult to summarise a text in my own words	1	2	3	4	5	V21	
Reading strategies							
22. When I read a novel, I read it in a different way from when I read a textbook	1	2	3	4	5	V22	
23. Before I read a book, I look at its contents page and skim through it looking at headings and illustrations	1	2	3	4	5	V23	
24. The first thing I do when I come across an unknown word is to look it up in the dictionary	1	2	3	4	5	V24	
25. I record new words and try to memorise them with their meanings	1	2	3	4	5	V25	
26. I ignore diagrams, maps, graphs, charts, which I come across in the course of my reading	1	2	3	4	5	V26	
27. I try to relate what I read with my own ideas and previous knowledge	1	2	3	4	5	V27	
28. I use questions like why, what and how to help me understand my reading better	1	2	3	4	5	V28	
29. I form visual images when I read.	1	2	3	4	5	V29	
Int. motivation-curiosity, involvement, Challenge							
30. I read to learn new information about topics that interest me	1	2	3	4	5	V30	
31. If I am reading about an interesting topic, I sometimes lose track of time	1	2	3	4	5	V31	

32. I enjoy reading books on various topics	1	2	3	4	5	V32	
33. If my teacher/lecturer discusses something interesting, I might read more about it	1	2	3	4	5	V33	
34. I feel I connect with characters in good Books	1	2	3	4	5	V34	
35. I enjoy reading fictional stories	1	2	3	4	5	V35	
36. I enjoy a long involved story	1	2	3	4	5	V36	
37. I read a lot of adventure and mystery books	1	2	3	4	5	V37	
38. I like hard challenging books	1	2	3	4	5	V38	
39. Reading helps me understand difficult concepts	1	2	3	4	5	V39	
40. If the assignment project is interesting, I can read difficult material	1	2	3	4	5	V40	
41. If the book is interesting, I don't care how hard it is to read	1	2	3	4	5	V41	
42. I like to read books that make me think	1	2	3	4	5	V42	
Extrinsic motivation- recognition, competition							
43. I like to get compliments for my reading	1	2	3	4	5	V43	
44. It is important for me that my teacher and/or my parents recognise my reading	1	2	3	4	5	V44	
45. I like being the only one who knows the answer to a question from a text we have read	1	2	3	4	5	V45	
46. It is important for me to be among the good readers in my class	1	2	3	4		V46	
47. I try to get more answers right than my friends' in reading tasks	1	2	3	4	5	V47	
48. I like to finish my reading and tasks before other students	1	2	3	4	5	V48	
49. I am willing to work hard in order to read better than my friends	1	2	3	4	5	V49	
Reading habits							
50. I read one novel each week/month during holidays	1	2	3	4	5	V50	
51. I read one novel each week/month during school term	1	2	3	4	5	V51	
52. I often read							
ii. magazines	1	2	3	4	5	V52 i	
iii. novels (fiction)	1	2	3	4	5	V52 ii	
i. newspapers	1	2	3	4	5	V52 iii	
iv. academic books	1	2	3	4	5	V52 iv	
v. any other (e.g. motivational, plays, etc)	1	2	3	4	5	V52v	
53. I read books/magazines/newspapers in my mother-tongue	1	2	3	4	5	V53	
54. Newspapers are bought daily/weekly in my home	1	2	3	4	5	V54	

Personal information

55. Faculty						V55	
56. Gender	F		M			V56	
57. Code for literacy test	1	2	3	4	5	V57	
58. Mother tongue	Eng	Afr	SA African	Other African	Other	V58	
Student number							

Thank you for filling in the questionnaire

Appendix 4A: Intervention programme (Low Risk)

Academic Reading module (Low / No Risk group) 7 Weeks of 3 classes per week

Week	Section/Unit	Topic	Linguistic/cognitive	Affective
1	Administration issues Pretest Pre-questionnaire Introductory lecture	Theories of reading: Bottom up Top down Interactive	Students given notes on theories of reading Class activities on the topic.	Competence support Self-efficacy Learning goals
2	Section One	Reading speed Application of background knowledge	Practical application (training on eye movement using generic texts) Exercises to increase reading speed; prediction in reading application of background knowledge	Competence support Self-efficacy Learning goal: discipline-related texts and extracts from textbooks (Economics, Law); relevant texts Collaboration: Group and peer discussion for community of literacy Choice/autonomy: extracts from textbooks chosen by students; students choose discipline-related texts from options given Extrinsic motivation: best performing group rewarded with marks, book prizes or packets of sweets Intrinsic motivation realised through immediate feedback and progress in speed reading exercises
	Section Two	Reading strategies	Students given guidelines on the appropriate use of successful reading strategies (cognitive and metacognition) Students practice appropriate use of strategies using generic texts, extracts from textbooks and from relevant field of study applying Anderson's six steps. Students use think aloud protocols, sharing their use of strategies with class.	Self-efficacy: students becoming aware of and gaining knowledge of cognitive and metacognitive strategies Competence support for self-efficacy through a number of practical exercises Learning goals through extracts from textbooks; discipline-related texts Collaboration – Think aloud protocols discussed in groups and in class Motivation, self-confidence and self-esteem- immediate feedback Self confidence raised through

			Instructor models strategy use Students use inventory to discuss strategies Scaffolding of texts and instructional approach: from group to individual work and from shorter generic texts to longer discipline-related texts.	low anxiety environment and scaffolding Intrinsic motivation developed through community of literacy (collaboration)
4	Section Three	Academic Vocabulary	Students choose texts and topics for academic exercises Academic vocabulary exercises on Clickup Scaffolding words and sentences increase in in difficulty (AWL from list 1 to 10)	Autonomy/choice – student choose texts and topic. Intrinsic motivation through Click-up and Online vocabulary exercises Intrinsic motivation and interest developed scaffolding of tasks
5	Section Four	Critical reading (Inference generation)	Explanation and notes on inferencing given. Exercises with Discipline-related Texts	Self-efficacy awareness/ metacognition Collaboration – collaborative problem solving Real life/practical application: students work with newspaper articles Choice/autonomy – students select own newspaper text to work with
6	Section Four	Critical reading (authors stance, tone, attitude, fact/opinion)	Notes/ discussion on the topics Exercises with generic / discipline-related texts	Collaboration- Group discussions in a non-threatening environment Autonomy – students compile portfolios Competence support Self-efficacy Learning goal
7	Section Four Posttest Post-questionnaire Interviews (continued after end of module March-May)	Critical reading (evaluating arguments)	Notes/discussion on topic Exercises with texts	Collaboration – sharing ideas (community of literacy) Autonomy – students choose texts Competence support through exercises and explanations Learning goal Intrinsic/extrinsic motivation through interest, rewards, challenge and recognition

Appendix 4B: Intervention programme (High/At Risk)

Academic Literacy module (At Risk and High Risk groups) 14 Weeks of two classes per week

Week	Section/Unit	Topic	Linguistic/cognitive	Affective
1	Administration issues Pretest Pre- questionnaire			
2	Introductory lecture	Theories of reading	Students given notes on theories of reading. Class activities on the Topic.	Competence support Self-efficacy Learning goals
3	Section One	Reading speed Application of background knowledge	Notes – practical application Exercises to increase reading speed; prediction in reading; application of background knowledge	Competence support Self-efficacy Collaboration: discipline-related texts and texts from subject textbooks (Economics, Law); relevant texts; learning goals; Group and peer discussion for community of literacy Choice/autonomy - specific texts from textbooks chosen by students Extrinsic motivation - best Performing group reward with marks, book prizes or sweets Motivation - immediate feedback and progress through speed reading exercises show immediate progress/immediate feed back
4	Section One continued	Section One continued	Section One Continued	Section One Continued
5	Section Two	Reading strategies	Students are given guidelines on the appropriate use of successful reading strategies (cognitive and metacognitive) Students practice appropriate use of strategies using generic and subject-related texts from relevant field of study. Students use think aloud	Self-efficacy – awareness/ metacognition/ knowledge Competence support (practice); self efficacy Learning goals - textbooks Collaboration - Think aloud protocols discussed in groups and in class Motivation and self confidence/self esteem in immediate feedback Self-confidence/low anxiety in scaffolding

			protocols, sharing their use of strategies with class. Teacher models strategies Students use inventory to discuss strategies Scaffolding of texts and instructional approach	Intrinsic motivation from community of literacy
6	Section Two continued	Section Two continued	Section Two Continued	Section Two Continued
7	Section Three	Academic vocabulary	Student choose texts and topics for vocabulary exercises Academic vocabulary exercises on Clickup	Autonomy/choice – student choose texts and topic. Motivation – Click up vocabulary exercises
8	Section Three continued	Section Three continued	Section Three Continued	Section Three Continued
9	Section Four (1)	Critical reading (Inference generation)	Explanation and notes on inferencing given. Exercises with dscipline-related texts	Self-efficacy awareness/ metacognition Collaboration – collaborative problem solving Real-life, practical application: students work with texts culled from newspaper. Choice/autonomy – students select own newspaper text to work with
10	Section Four (1) continued	Section Four (1) continued	Section Four (1) continued	Section Four (1) continued
11	Section Four (2)	Critical reading (authors stance, tone, attitude, fact/opinion)	Notes/ discussion on the topics Exercises with generic / discipline related texts	Collaboration Autonomy – portfolio Competence support Self-efficacy
12	Section Four (2) continued	Section Four (2) continued	Section Four (2) continued	Section Four (2) continued
13	Section Four (3) Posttest Post-questionnaires	Critical reading (evaluating arguments)	Notes/discussion on topic Exercises with texts	Collaboration Autonomy Competence support Intrinsic/extrinsic motivation
14	Section four (3) continued Posttest Post-questionnaires Interviews (continued after end of module-June	Section Four (3) continued	Section Four (3) continued	Section Four (3) continued

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Appendix 5: Sample of Gerry's vocabulary exercises

AWL Sublist 5 - Exercise 6e

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AWL Sublist 5 - Exercise 6e

Matching exercise

Match the items on the right to the items on the left.

Check

1. You shouldn't remove your _____ drive from your computer while the data is still being read. ???

2. Following _____ with the European settlers, many native people in North America died of diseases that were new to them. ???

3. He was a doctor in Uganda but he isn't yet _____ to practise medicine in this country. ???

4. Cameras installed in the streets of many major cities around the world now constantly _____ the behaviour of people in public. ???

5. Our company is doing extremely well and we expect to see an increase of about 35% in _____ and clients in the coming year. ???

6. The terrorists were killed in their homes by extremely _____ air strikes that left neighbouring houses untouched. ???

7. Urban centres are generally growing in size, _____ rural areas are seeing their populations decrease. ???

8. Scientists are becoming increasingly aware that our planet's _____ are limited. ???

9. If the government ever actually _____ its environmental laws, we would have a lot fewer pollution problems. ???

10. Protesters in Egypt _____ government buildings, parliament and the prime minister's offices for their demonstrations. ???

Check

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Appendix 6: Brief summary of interview responses

A brief summary of students' responses in both At Risk and Low Risk groups.

Teaching technique	At Risk	Low Risk
Learning goal At risk 17 students Low risk 13 students	Students reported that explanations helped with understanding, made tasks easier to do, which increased motivation and interest. Led to improved reading proficiency. Three students reported improvement in performance due to above factors. The main issues raised and the number of students are distributed thus: Understanding (11) made tasks easier (5) increased motivation and interest(11) improved performance (3)	Students reported that focus on learning goals, explanations, purpose of tasks, etc., gave them better understanding and increased their motivation. The main issues raised and the number of students are distributed thus: Positive results of explanations (12) Increased motivation (10) Better understanding (9) Improvement in reading (2) exciting and relevance (2) tasks easy to do (2) positive attitude and more focussed (3)
Relevant texts At risk 16 Low risk 13	Besides two students all the students found the texts from economics and law very relevant. They reported that it made tasks easier to do as they could apply background knowledge. The texts also enabled them to understand strategies better, and increased their interest and motivation. The main issues raised and the number of students were distributed thus: Application of background knowledge 5 Easy tasks 6 Increased interest and motivation 11 Attitude change 2 better understanding of strategies 5 Transfer 2 Literacy module relevant and real 4	Students admitted to relevant texts increasing their motivation and raising their interest. They also referred to the relevant texts as making the tasks easier and enabling them to have better understanding due to application of background knowledge. The main issues raised and the number of students were distributed thus: Students found discipline-related texts relevant and significant 8 Better understanding of strategies and concepts 4 Reading and tasks easier 4 Raised interest 6 Enjoyable and interesting 3 Increased motivation 8 Application of Background knowledge 4 More focussed 3

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	More drive and more focussed 4	
Competence support/ strategy instruction At risk 18 Low risk 16	Most of the students were either not using reading strategies or using inappropriate strategies. Students found strategies very helpful in improving their reading speed and comprehension. The main issues raised and the number of students were distributed thus: 15 Students not using appropriate strategies. Use of appropriate strategies taught resulted in: Increased speed 9 Improved understanding 12 Improved academic performance 2 increased motivation 3 transfer of skills 6 Increase in self-efficacy and self -esteem 4	Students reported gains in reading proficiency after using strategies taught. Most of them reported increase in reading speed and improved understanding. The two were always mentioned together, indicating that reading speed influences comprehension. The main issues raised and the number of students were distributed thus: 7 students were not using strategies Strategy instruction resulted in: Increased speed 7 Improved understanding 10 Holding more information in memory 4 Motivation and interest 4 Improved reading ability and academic performance 4 Transfer of skills 5 Helped with reading for and during exams 4 Specific examples of positive effect of strategy instruction given 5
Teacher support At risk 17 Low risk 11	Positive about readily available support from lecturer: learning easier, motivating, reduced stress of learning, sense of identity. Bonding and freedom. All contribute to increase in motivation The main issues raised and the number of students were distributed thus: Acknowledgement of support 14 Easier learning 2 Motivating 11 Reduction of stress 4 Sense of identity 2 Bonding and motivation 2 Freedom 2 Encouragement 2 Enjoyment and fun 2 Linking support to environment 6 Raised interest and made classes interesting 2	Students were very positive about support from lecturer in the form of clarification, explanations, assistance, extra tuition via consultations, etc and reported that the lecturer's willingness to assist was encouraging and motivating. Although some students linked the lecturer's support to the environment, the number of students were fewer than those from the at risk group. The main issues raised and the number of students were distributed thus: Students who admitted that support was available 11 Motivating and encouraging 5 easing tension and ensuring freedom 4 Increasing confidence and self-efficacy 2 illustrations and modelling 3 Support linked to environment 3
Autonomy and choice	Students reported that they were motivated by choice and	All three students stated that being given choice in learning was motivating.

At risk 3 Low risk 3	autonomy. motivated by choice 2 increased interest 2 enjoyment and involvement 1	Motivated by choice 3
Collabora-tion At risk 17 Low risk 17	Students embraced this social learning technique. They reported that it was of great benefit, as they shared ideas, made friends and interacted in learning which made learning, interesting, enjoyable and fun. The main issues raised and the number of students were distributed thus: Sharing, interaction and involvement 7 Making friends 4 Interest, enjoyment, fun and nice 6 Understanding and learning 2 Self- efficacy 3 Encouraging and motivating 4 easier tasks and better quality work 5 challenges 2	Fostered interaction , improved understanding, and provided opportunity to share ideas, making learning easier and classes enjoyable and motivating. The main issues raised and the number of students were distributed thus: Positive about collaborative learning 6 Motivating and encouraging 5 Exciting and enjoyable 4 Sharing of ideas 8 Improved understanding 3 higher grades and performance 3 advantages of collaborative learning 7 interaction 2 challenges of collaborative learning 6
Rewards and praise At risk 17 Low risk 15	Four students out of the eighteen in this group indicated not being motivated by the incentives. Two of them said they have personal or self-motivation. The rest found the rewards motivating, especially the praise and the recognition that accompanied it. The motivation to receive rewards made the students to become more involved in their work. The main issues raised and the number of students were distributed thus: Motivated by incentives to work hard 13 Recognition and acknowledgement 6 Praise 4 Involvement 3	Students were motivated by the incentives. They reported of striving to work hard in order to receive a reward. They also stated enjoying and being interested in the classes as a result of the rewards. The main issues raised and the number of students were distributed thus: Motivated to work hard 10 Self or personal motivation 3 Interest and enjoyment 5 Not motivated 3 One student who reported not being motivated by rewards obtained the lowest mark in both the pre and post test.
Teaching environment	Besides two students who felt that the environment was too	Although three students felt the environment was too relaxing, the rest of

At risk 17 Low risk 13	relaxing, the rest of the students felt the environment was enabling. They reported that it made them feel free in class, enabled them to think creatively, and made learning fun. They also emphasise on the interactive context it created, as well as providing them with opportunity to make friends, which was quite important to them as first year students. The main issues raised and the number of students were distributed thus: Freedom in class 6 Interesting and motivating 10 Fun and enjoyment 9 Interactive context 5 Less pressure/less stress 3 Opportunity to share ideas 3 Allowed easy adjustment to first year 4 Opportunity to make friends, bonding 5 Comfortable and relaxing 6 Allowed for free flowing discussions 3	the students were positive about it and felt it was a good balance and fostered learning. Students reported that it was encouraging and motivating, enabled them to think clearly and afforded them the freedom to learn in a less stressful environment. Some students also reported on the challenges of a semiformal teaching environment. The main issues raised and the number of students were distributed thus: Right environment for literacy support module 6 Encouraging and motivating 7 Enjoyable 6 Clear thinking 6 Freedom; less stress in learning; less pressure 9 Interesting and exciting 6 interaction 2 Good environment for first year students usually apprehensive and uncertain 2 Too relaxing 3 Challenges 4
Extensive reading At risk 15 Low risk 15	Four of the ten students with average marks did not participate in the project. Three of the four students who obtained lowest marks did not participate. The fourth student participated and improved to obtain average mark in the posttest. Two students with highest marks did not participate. All in all 56% of the students (9 out of 16) did not participate. They all cited pressure of work as the reason for their non-participation. The 44% that participated reported improvement in speed, understanding, vocabulary, and reading habits.	Some of the students did not participate in the project. Many of them reported being overwhelmed with studies, others felt they did not need it or were not interested. Of the 15 students 7 did not participate. The 8 who participated reported observing increase in speed and understanding, as well as involvement, enjoyment and positive reading habits. The main issues raised and the number of students were distributed thus: Reading habits 4 Improved vocabulary 3 Increased speed 6 Improved understanding 6 Improved use of strategies 3 Transfer 4 Involvement 3 Enjoyment 3 Increased confidence in reading 3

		Overwhelmed 2
	The main issues raised and the number of students were distributed thus: Reading habits 3 Cognitive benefits 3 Speed 7 Comprehension 6 Motivation 3 Involvement 4 Interest and enjoyment 4 Overwhelmed 6	
General comments At risk 15 Low risk 14	Comments varied and touched on various aspects. Students reported on positive reading habits, increased motivation, improved speed, understanding and general performance The main issues raised and the number of students were distributed thus: **Affective issues** enjoyment, motivation and interest 8 **Cognitive benefits** Easier learning, understanding, 5 Appropriate strategies/self-efficacy 4 **Social issues** interaction, friendship, bonding 6 Freedom in class 4 **Positive reading habits 6**	Comments varied. Students reported on positive reading habits, increased motivation, enjoyment, conducive environment, increased reading speed, improved understanding, transfer of skills and improved academic performance. The main issues raised and the number of students were distributed thus: **Affective issues** Enjoyment and motivation, interesting classes 7 Attitude change 1 **Cognitive and performance issues** Transfer of skills 5 Improved speed, understanding, reading ability 5 Improved academic performance 5 Appropriate strategies/self-efficacy 6 Relevant texts and easier learning 5 **Social issues** interaction 5 conducive environment 4 classes not boring 3 **Positive reading habits 4** **Timing of the test 3** More challenging module and one lecture period per week for students who obtain level 5 in TALL.

Appendix 7A: Detailed summary of interview responses

Low/No Risk group

Construct	Low performers	Average performers	High performers	All respondents
Learning goal 13 students	**Botha** Explanations helped with understanding and provided a positive attitude towards tasks. Increase motivation. **Moodley** Explanations helped her understand and made her motivated. Extra tasks did not make any difference	**Smith** Explanation increased motivation and made him more focussed. **Mogomotsi** Teaching of strategies with discipline specific texts was motivating and helped her understand strategies. Had a better understanding of what was doing in class due to explanations. **Erasmus** The teaching approach (different) motivated her to work hard. **Mtshweni** Explaining the task, aim of task, the specific outcome and linking them with general outcomes provided better understanding and increased his motivation. **Mahlangu** Explanations, lecturer's illustrations (modelling) and linking task with outcome assisted inhis understanding and increased his motivation. **Marx** Always likes to know reason behind what she does so explaining tasks and linking them to general outcomes motivated her.	**Matlala** Explanations of why tasks are being done made classes more exciting, and relevant. **Watson** Explanations of purpose of tasks and linking them with general outcomes helped in understanding. Explanation of task provided relevant background and made tasks easier to do. **Brown** Explanations helped with understanding of tasks and increased his motivation for doing tasks. **Mayaba** Although used the workbook, explanations in class, lecturer's illustrations(modelling) and extra exercises helped with understanding.	Students reported that focus on learning goals, explanations, purpose of tasks, etc gave them better understanding and increased their motivation. The main issues raised and the number of students were distributed thus: Positive results of explanations 12 Increased motivation 10 Better understanding 9 Improvement in reading 2 exciting and relevant 2 tasks easy to do 2 positive attitude and more focussed 3

		Howard Extra tasks, lecturer's illustrations (modelling), and explanations assisted in his understanding and increased motivation **Rampedi** Being given explanations and linking purpose of task to overall outcomes is motivating cos you know the reason for doing what you are doing. It also gives one better insight into task. "You think you are out of high school so you have had a reading experience and you think you have a reading ability, but explanations help you to see the relationship of task and the out comes and assists in improving reading ability".		
Relevant texts **(Practical real life issues and activities)** **13 students**	**Webb** Motivated by the use of Economics texts Found them relevant. **Mkhondo** pretest (average posttest) Admitted to relevant texts being motivating,	**Mogomotsi** Was very motivated, as most of the texts were from subject field (EMS-economics). The texts from Economics made understanding of strategies easier and raised interest as well. **Smith** Found texts from subject field very significant. Improved on strategies, eg summarising texts no more a challenge. **Erasmus**The use of a variety of texts made classes interesting and enjoyable. Post test written in the evening – fatigue and lack of focus and concentration **Mtshweni** Texts were easier to understand as understood most concepts due to familiarity with subject field. Being an EMS student. The	**Maluleka**Using texts from economics textbook made it more interesting, easier to understand concepts and could relate to texts as they from subject field. **Watson** Texts from subject field raised interest. Found it relevant to his field of study. Texts of personal interest will also be motivating, but texts related to subject field more interest ing and highly motivating. **Brown** Could apply	Students admitted to relevant texts increasing their motivation and raising their interest. They also referred to the relevant texts as making the tasks easier and enabling them to have better understanding due to application of background knowledge. The main issues raised and the number of students were distributed thus: Students found discipline-related texts relevant and significant 8 Better understanding of strategies and concepts 4 Reading and tasks easier 4

		relevant text related to field of study raised interest and increased motivation. Would not have been that interested and motivated if texts were not related to field of study. **Mahlangu** Was interested and motivated by texts relating to field of study. **Marx** Would have been more focused and texts would have been more meaningful if taken from her subject field. **Rampedi** From reading perspective text on subject field were easier. Also easier to understand due to familiarity of topic. Was motivated because believe it will help in understanding of topic and writing of assignments less challenging. **Mputla** Use of texts from subject field made her more focused. Paid more attention to explanations and tasks as texts were from her subject field	background knowledge to subject related texts, so was more motivated.	Raised interest 6 Enjoyable and interesting 3 Increased motivation 8 Application of Background knowledge 4 More focussed 3
Competence support/ Strategy instruction 16 students	**Mkhondo** Was not using most of the strategies introduced in class. Has started using them in reading other subjects. Assisting with understanding. **Botha** Found it helpful	**Smith** Applied strategies – speed increased. Was motivated and interested in applying strategies to reading. **Mputla** Used to read academic texts like reading a magazine but after strategy instruction read with purpose – looking for main ideas, topic sentences, etc Able to hold more information in memory, and also had better understanding of	**Matlala** Some of the strategies introduced in class were new to him. When started applying them, saw improvement in understanding, which was motivating **Maluleka** Most strategies	A number of students were either not using reading strategies or using inappropriate strategies. They reported gains in reading proficiency after using strategies taught. Most of them reported increase in reading speed and improved

	to apply strategies to reading even reading in preparation for exams, and during writing of exams. Found comprehension better and speed improved as a result of applying strategies **Moodley** Was not aware of reading strategies. Applied them after being introduced to them in class. Found it helped increase her reading speed and her understanding of texts.	texts read. **Mogomotsi** Used to read passively, but after instruction, now applies herself and reads actively to obtain meaning. Used a few strategies before starting module. Not used to critical reading. Now apples it in exam and preparation for exam. Observed increase in reading speed with frequent practice and timing as directed in class. Realised now able to read faster and cover more ground. Also, her understanding has improved. Appling reading strategies in reading economics textbook and finding great improvement in using reading strategies. Motivation to read increased with the use of strategies. **Erasmus** Speed reading strategies and exercises helped with comprehension. **Mtshweni** Was used to most of the reading strategies introduced in class except critical reading. The class exposed him to critical reading. Have started using it in reading law, economics and accounting and can see improvement in understanding. Marks have improved since have been using critical reading. Eg. Accounting questions required critical reading so applied it in reading and also answering past questions – 15% improvement in marks in Accounting.	were familiar. Was using critical reading unconsciously. When started using some of the strategies introduced in class, observed increase in reading speed. Practicedspeed reading exercises taught in class andobserved great improvements. **Watson** Realised that reading strategies taught in high school different from that of tertiary so important that strategies are explained and clarified at first year. The awareness of reading strategies important. Was applying critical reading, but classes brought more awareness and clarification. Strategy instruction helped improve reading ability though not by a big margin. Explanations of strategies helped. Was able to adapt to own style as various options were given with illustrations and modelling.	understanding. The two were always mentioned together, indicating that reading speed influences understanding. The main issues raised and the number of students were distributed thus: Students not using strategies before 7 Increased speed 7 Improved understanding 10 Holding more information in memory 4 Motivation and interest 4 Improved reading ability and academic performance 4 Transfer 5 Helped students with reading for and during exams 4 Specific examples of positive effect of strategy instruction 5

		Mahlangu Was already using most of the strategies unconsciously. Became aware of them as they were introduced in class. Believe was indirectly engaged in some form of critical reading in analysing literary texts. Examples and extra tasks helped in his understanding of strategies **Marx** Was using some of the strategies to an extent. Classes provided awareness. Became more focussed when reading as became more aware of strategies through instruction. Speed and understanding improved. Realised that read fast during exams and also understanding of questions had improved. **Howard** Was using strategies for summarising and note-taking. However, struggled with critical reading. Had been introduced to it in high school but instruction in class gave new explanations which made it easier to understand and use. Now he is comfortable with critical reading, as a result of the approach taken in class. Achieved 71% in critical reading exam. **Rampedi** Was using some of the strategies, like reading differently for different purposes. Applied strategies taught in class e.g asking questions while reading. Strategy instruction helped with summarising and synthesising. Applied strategies taught to synthesise Law texts and accounting texts, which helped in studying	**Brown** Had been using some of the strategies. Instruction has shed more light on them and provided more information. Reading instruction has helped with reading challenges. Has been using strategies in other subjects. Has helped with understanding, speed has increased and memory retention better. Has reaped enormous benefits in studying other subjects. E.g distinguishing main ideas from supporting details.	

		and writing of assignments.		
Teacher support 11 students	**Mkhondo** Because of the lecturer's willingness to assist student, she felt very supported which increased her motivation to work hard **Botha** Availability of support was encouraging and motivating. The use of the transparencies to provide examples and the teacher modelling were very helpful.	**Mogomotsi** Felt support readily available. Whenever, not sure would ask lecturer for further explanation and clarification. **Mtshweni** lecturer supported students a lot compared to other lecturers. Received encouragement and support from lecturer and from peers during collaborative learning **Mahlangu** Support important to him. Received support from lecturer and peers – explaining difficult concepts. Felt free to ask questions. "support makes one not to feel alone" When he is demotivated, support from lecturer provides motivation. **Marx** Enjoyed the support of peers and lecturer, which was motivating. **Howard** Felt very supported in class especially form lecturer. Could freely ask for and receive clarification and further explanation from lecturer. **Rampedi** Support was available. Supported by lecturer as she was available to answer questions and willing to assist at all times, with further explanations and extra tasks.	**Matlala** Available support helped eased the tension of classes and of learning. **Maluleka** Assistance from lecturer and peers helped a lot, especially from lecturer. **Brown** Support from lecturer and peers available if needed. Increased confidence knowing assistance is easily and readily available	Students were very positive about support from lecturer in the form of clarification, explanations, assistance, extra tuition via consultations, etc and reported that the lecturer's willingness to assist was encouraging and motivating. Although some students linked the lecturer's support to the environment, the number of students were fewer than those from the at risk group. The main issues raised and the number of students were distributed thus: Students who admitted that support was available 11 Motivating and encouraging 5 easing tension and ensuring freedom 4 Increasing confidence 2 illustrations and modelling 3 Support linked to environment 3
Autonomy and Choice	**Botha** Choice was motivating, "because	**Mogomotsi** The choice given in the selection of texts for reading project was motivating	**Matlala** Choice was motivating because it	Question on this category not directly asked. Three

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3 students	you are given freedom to choose, so you choose what interests you which motivates you to work hard".		allowed them to choose according to their interest and what is relevant to them.	students alluded to this factor. All three stated that being given choice in learning was motivating.
Collaboration 17 students	**Mkhondo** Prefers to work alone as he becomes lazy when she has to work in a group. **Botha** Could work individually but sometimes group work helps. Worked with a friend who was more intelligent and found it helpful and beneficial because received assistance when do not understand. Pair work better because bigger groups can cause distractions. **Moodley** If students in group are hard working, group work is very beneficial and motivating. Prefers to work in group more – you get more ideas and	**Smith** Because was in group with friends, would sometimes have conversations instead of discussing solutions to problem given. **Mputla** Prefer group work. Interaction as well as having other students come with different solutions to a problem was exciting and motivating. **Mogomotsi** Found it very beneficial. Obtained 6.5 out of 10 working alone but 9.5 out of 10 working in a group. Prefers working and discussing in groups. Various ideas and opinions are shared, which help improve understanding. **Mtshweni** Have difficulty working in group because not good at interacting. Also sometimes group work takes longer. However, if he does not understand work then benefit from others. If understands then would prefer to work on his own due to his personality – introvert. In all would prefer a balance between group work and individual work. **Erasmus** Learnt a lot from peers in group work – unclear concepts were explained.	**Matlala** Enjoyedgroupwork, because various ideas are shared. Encouraging and motivating **Maluleka** Prefer individual work most of the time. Would rather seek for help and work on his own. Group work sometimes problematic – others simply enforce their views. **Watson** Benefited from group discussions. Prefer group work End product is a reflection of different views. You get ideas from other students, their interpretations and how they study, which you can apply. **Brown** Would like to have both in class, but first preference is individual work. However, enjoyed and benefited from group work.	Fostered interaction , improved understanding, and provided opportunity to share ideas, making learning easier and classes enjoyable and motivation. The main issues raised and the number of students were distributed thus: Positive about collaborative learning 6 Motivating and encouraging 5 Exciting and enjoyable 4 Sharing of ideas 8 Improved understanding 3 higher grades and performance 3advantages of collaborative learning 7 interaction 2 challenges of collaborative 6

	different perspectives on the issue. **Webb** Analytical personality so preferred to work on his own. Feel other students are wasting his time. Prefers to do his work and get over with.	**Mahlangu** Prefer to work on his/her own if understands task and its not very difficult. If task is challenging then would prefer group work. Finds group work a bit problematic as others do not participate or contribute. **Marx** Prefer group work. It helped her a lot. Discussions helped improved her understanding of assignments. Sharing ideas was exciting. Prefer groups to be smaller as one gets lost in bigger groups. **Howard** Prefers individual work. Finds it easier to work on his own. Produces better work on his own. Takes advantage of it when he needs help. **Rampedi** Feels it has a lot of advantages. You get ideas from others. "When you are given a group task, others come up with ideas that you have not thought of, so you learn a lot from others". Found it very helpful. Obtained 45 % on individual work, but 65% when task undertaken in a group. Sharing different interpretations of a text quite exciting. However, has challenges – different ideas may clash or be contradictory, personality clashes, time consuming in getting people together. Liked the approach of stating with group work before individual. It raises motivation. Clarity and understanding is obtained from group discussions so that individual work becomes easier, which is motivating. Received a lot of support especially	Work is shared so work load is less as compared to individual work. Also various views and ideas are shared.	

		during group tasks.		
Praise and Rewards 15 students	**Mkhondo** Was not motivated by incentives. Was using the class to socialise. Was not interested in applying himself to do better or get reward.(Reflected in lowest mark in pre and post test) **Botha** Was motivated by incentives. Always working hard in order to receive a reward **Moodley** Was motivated to work hard to receive a reward. **Webb** Not motivated by rewards. He is already a focussed student. If he needs to learn something in order to pass then he is motivated to learn.	**Smith** Motivated by enjoyment and interest not the incentives **Mogomotsi** Motivated by incentives. "Incentives were motivating". Received a reward for best performance in a task and was motivated to work harder to get more rewards. **Mtshweni** Not motivated by rewards in books and edibles only in marks. **Mahlangu** Rewards sometimes motivated him to work harder. However, his motivation does not depend on rewards. No matter what the rewards are, he has his 'own drive', which are"standards and self motivation to go by". Getting good marks increases his motivation to work harder. **Marx** Received a reward for best performance in a task. Motivated by rewards. "It gives you something to look forward to and makes you put in time and effort" **Howard** Felt motivated to perform better/work hard to receive incentive. **Rampedi** Motivated by extra marks and book rewards	**Matlala** Was motivated to work hard to get a reward. It also made the class interesting. **Maluleka** Motivated by rewards in books and marks. **Watson** Was motivated by incentives to work hard. **Brown** Not really motivated by incentives. More focussed on getting work done.	Students were motivated by the incentives. They reported of striving to work hard in order to receive a reward. They also stated enjoying and being interested in the classes as a result of the rewards. The main issues raised and the number of students were distributed thus: Motivated to work hard 10 Self or personal motivation 3 Interest and enjoyment 5 Not motivated 3 One student who reported not being motivated by rewards obtained the lowest mark in both the pre and post test.
Environment	**Mkhondo** Felt the	**Smith** Since she was a first year student, first	**Matlala** lthough felt	Although three students felt

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13 students	environment was too relaxed. Instead of working would be chatting with friends. However, if had not been in group with friends, would have been more focussed and done better because the environment was relaxing and not restrictive. **Botha** Semi formal environment felt good. Was afraid at the beginning when classes started but environment made her feel free and relaxed to think freely without pressure. **Moodley** Though felt free and relaxed to think clearly felt it was too relaxed and sometimes some students took advantage to make noise. **Webb** Semi formal. Good balance between	term was very stressful. Felt very tensed in class but semiformal environment enabled her to relax. Relaxed environment helped with thinking. **Mputla**Good balance between formal and informal. Relaxed environment made learning easier. Performance better when relaxed **Mogomotsi** Good balance between formal and informal. Semi formal more relaxing so learning easier. Very positive about the relaxed semi formal environment. Felt free to contribute in class. **Erasmus** Relaxed environment was enjoyable and relaxing. Semi formal environment was motivating. Liked the balance: formal environment to explain concepts and do exercises; Informal environment for collaborative group work. **Mtsweni** Felt it was over relaxed. However, prefer the semi-formalenvironment. He was able to interact freely with others in class. The semi-formal relaxed environment helped her to become more involved. Felt free and relaxed to think through problems. **Mahlangu**Feels semi- formal environment makes student not to take class seriously. Prefers semiformal environment if students can be made	environment was too relaxing, it was easy to work in such an environment. One could easily ask for explanations and guidance from peers or lecturer. "Class discussions were free flowing and not tense which made tasks easy to understand and tackle." Was motivated to work hard all the time. T o put in more effort. **Maluleka** Prefers the semiformal relaxed environment. The freedom that ensued from the relaxed environment enhanced interest and motivation. He could apply himself better without stress. **Watson** Relaxed semiformal environment is good but was disadvantageous for him because was familiar with most of the strategies taught so was easily distracted and bored. If a student is not familiar with strategies or not	the environment was too relaxing, the rest of the students were positive about it and felt it was a good balance and fostered learning. Students reported that it was encouraging and motivating, enabled them to think clearly and afforded them the freedom to learn in a less stressful environment. Some students also reported on the challenges of a semiformal teaching environment. The main issues raised and the number of students were distributed thus: Right environment for literacy support module 6 Encouraging and motivating 7 Enjoyable 6 Clear thinking 6 Freedom; learning with less pressure and less stress 9 Interesting and exciting 6 interaction 2 Good environment for first year students usually apprehensive and uncertain 2 Too relaxing 3 Challenges 4

	strict, formal and relaxed informal. Helped students to settle in. Atmosphere was right. Relaxed atmosphere helped for clear thinking. Feels students who are timid and insecure will benefit from relaxed environment. He also benefited from relaxed environment, as a first year student who was uncertain and apprehensive about academic issues.	to attach seriousness to class. **Marx** Enjoyed the relaxed semiformal atmosphere. Made class more interesting and less stressful. **Howard** Relaxed semi- formal environment was appealing and motivating. Served as a break from very formal lectures in other modules. Would not want a support module to be stressful. Would not have attended classes regularly if classes were very formal. The environment created for this module made it enjoyable and always looking forward to attending classes. **Rampedi** Relaxed atmosphere made classes enjoyable. "It was not hectic. The environment was friendly, relaxing and enjoyable". This is important for her since doesnt want to be stressed in class. The environment was encouraging and motivating and increased her motivation in doing assigned tasks	a reader then semiformal, relaxed environment is best. **Brown** Relaxed semi- formal atmosphere with group work, discussions illustrations/modelling and individual work contributedin making class interesting and exciting. Good balance between formal and relaxed environment. Environment helped to alleviate stress and promote clear thinking. Less boredom.	

Extensive reading 15 students	**Mkhondo** Did not participate. **Botha** Had to force herself to start reading but once started,found became involved and enjoyed it. "I had to force myself to read then I have to force myself to stop. Its like I am in the story.". Her enjoyment in reading increased as she became involved in the story. Because previous pleasure reading was in Afrikaans found vocabulary challenging. Used Google or dictionary to find meaning of words. This improved her vocabulary, speed and comprehension. Want to read more during holidays. Reading for pleasure has helped to improve her reading in other modules.Now feels confident about	**Mputla** The reading project helped her use of strategies and understanding of texts to improve and this was transferred to reading of textbooks **Mogomotsi** Observed improved changes in speed for weekly reading tasks. Was not much of a reader, but now reads a lot. Consistent reading and use of strategies have greatly helped to improve her speed and understanding. **Erasmus** Enjoyed extensive reading, just did not have time to complete the readings. **Mtsweni** Found it time consuming as had academic work to attend to. But enjoyed the readings. Found reading speed improved as reading progressed. **Mahlangu** Did not do required reading. **Marx** The fact that they were given option to choose own books which were of interest to them and at their level of competence was motivating. Speed and comprehension ability improved while reading non-academic texts. **Howard** Did not participate **Rampedi** Did not participate. Could not find the time due to pressure of work from other subjects.	**Matlala** Monitored his reading and saw great improvement in speed and understanding, as he continued reading. iDid not participate. Did not think needed it . **Watson** Did not participate.	Some of the students did not participate in the project many of them reported being overwhelmed with studies, others felt they did not need it or were not interested. Of the 15 students 7 did not participate. The 8 who participated reported observing increase in speed and understanding, as well as involvement, enjoyment and positive reading habits. The main issues raised and the number of students were distributed thus: Involvement 3 Enjoyment 3 Improved vocabulary 3 Increased speed 6 Improved understanding 6 Improved use of strategies 3 Transfer 4 Reading habits 4 Increased confidence 3 Overwhelmed 2

	reading in English. Will be doing LLB programme through English instruction next year instead of current Afrikaans instruction. **Moodley** Did not participate **Webb** He believes reading is interest related. His interest is not in reading but because he applies himself in everything he does, he was able to focus on reading his textbooks. Not interested in reading, would rather play sports than read. Reflected in pretest mark– lowest in the class.			
Comment 14 students	**Moodley** Found the classes very helpful. After applying strategies, his understanding improved and his marks also improved. Saw	**Smith** Performed better in pre test because pre test mainly comprehension, but post testmore of critical reading. Also whereas pre test was written during the morning lecture slot, the post test was written during an evening time slot when they had been at lectures all day and were	**Matlala** Enjoyed classes. They were interesting and interactive and not boring. Tasks done in an interactive context. **Maluleka** iBenefited greatly	Comments varied and touched on various aspects. Students reported on positive reading habits, increased motivation, enjoyment, conducive environment, increased reading speed, improved

improvement in speed and understanding, "though not overnight, but gradual improvement". Does not have to read many times to understand as he was doing before. Now understands a text after reading once or twice. **Botha** Greatly benefited from reading classes. due to the approach used, learning was made easier. **Moodley** Believes gained more from classes due to environment. Was able to study better and found it easier to extract information. Performed better in pre test than post test because post test written at end of day so had fatigue and little focus.	exhausted. **Mputla** Felt motivated to work hard to receive incentives. **Mogomotsi** Pre test 11.5 out of 20. Post test 11 out of 20. Pre test was written during the day. Post test was written in the evening when she had written many tests that day – fatigue. Found classes of great value, as strategies helped with reading in other modules. Used strategies to improve reading for assignments. Reading behaviour changed. Became interested and motivated to read. Traditional/conventional approach would not have been very motivating. [Affective] approach used in class was motivating and increased interest and willingness to learn. Really enjoyed module. Due to environment and approach. Felt learnt a lot. Improved in .exams. Believes its due to frequent reading. Obtained 5 distinctions (75% and above). In two modules had low module mark, needed 95% in exam to obtain a distinction. Believes instruction greatly contributed to high performance in exams **Mtsweni** Felt literacy module was geared towards certain students so they can get more attention. Believes such students will definitely benefit. Would prefer a more advanced "stuff" for students from private schools.	from relaxed teaching atmosphere. Also texts from economics textbook made it easier to apply reading strategies taught, as could use background knowledge which made it easier and interesting. Enjoyed class and learnt a lot. **Watson** That students who obtain higher marks in TALL be exempted from language support modules or be given more challenging content. Increasing reading speed should be given more attention. Enjoyed the reading speed practices. Felt needed that. Observed increase in reading speed due to practice exercises. Applied speed reading to reading texts in other modules. Greatly assisted with understanding and speed. Would prefer more attention to summarising, synthesising, distinguishing main ideas, etc. Would suggest that	understanding, transfer of skills and improved academic Performance. The main issues raised and the number of students were distributed thus: Enjoyment 6 Motivation 4 Motivated by rewards 3 Transfer of skills 5 Improved understanding 4 Increased speed 5 Improved academic performance 5 Use of strategies 6 Attitude change 1 Classes interesting and interaction 5 relevant texts 2 conducive environment 4 improved reading ability 4 positive reading habits 4 learning made easier 3 classes not being boring 3 timing of the test 3 suggesting more challenging curriculum and one contact period per week for students who obtain code 5 in TALL.

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| | | **Manlangu** Enjoyed the class. To an extent, his/her approach to reading has changed for the better. Positive attitude, increased motivation, increased speed, etc.

Marx Reading ability improved as a result of reading instruction – distinguishing between main ideas and supporting details, distinguishing between irrelevant and important relevant facts, summarising, and paraphrasing .This improvement in reading ability was also effective in other modules.

Howard Very positive about relaxed semiformal environment created in class. "We were like one happy family" This made learning easier.

Rampedi Endeavoured to practise strategies everyday. Thought was doing module merely for credits but realise enormous benefits especially when reading strategies applied to other modules. | students who obtain code 5 have one contact lecture and a computer assisted programme to self monitor progress.

Brown Understanding improved., so improved in post test even though it was more challenging. Enjoyed classes. Received more details and clarification on some of the reading strategies that he already knew. | |

Appendix 7B: Detailed summary of interview responses

High/At Risk group

Construct	Low performers	Average performers	High performers	All respondents
Learning goal 17students	**Ndlovu** (pretest lowest; average post test) Explaining task, aim of task, outcomes, and linking with general outcomes provided better understanding and increased motivation to do task **Maringa** (pretest lowest; average post test) Explanation assisted in better understanding. Bored when did not understand initially, but became more interested as understanding improved with explanation **Mondlane** Explanations assisted with understanding and motivation.	**Phalane** Learning became easier and motivation increased, as reminded of aims and objectives for doing tasks **Mabitsela** Explanations of outcomes, aims, goals, etc increased interest and motivation in doing tasks. Understanding improved. **Aphane** Explanations helped and made tasks easier to do. **Matsei** Explanations helped him to understand tasks better and increased interest in tasks **Kekana** Explanations made understanding easier , which was motivating. **Masanabo** Explanations increased motivation to do tasks **Machaba** Explanations helped to improve his understanding. **Meyer** Explanations helped with	**Muuoja** (pre and post test highest) Explanations helped him to understand better, which motivatedhim to apply himself more. Explanations of objectives of tasksincreased motivation. Appreciates approaches that encourage learning. **Segodi** Explanations helped him but still found reading and tasks challenging **Gumbie** Explanation helped to gain better understanding	Explanations helped with understanding. Explanations led to understanding, made tasks easier to do, which increased motivation and interest. Three students reported improvement in performance due to the above factors. Understanding (11) made tasks easier(5) increased motivation (8) Increased interest (3) Improved performance (3)

	Matemane Scaffolding and explanations made tasks easier to work through. Improved understanding.	understanding and tasks and therefore increased motivation. Initially did not know what to do but now understands and performance has improved. Explanation and modelling of mindmapfor summarising helped a lot **Molwantwa** Explanations gave directions and made tasks clearer, easier and increased motivation. **Nkosi** Scaffolding helped. Explanation and modelling made understanding easier. ManiExtra exercises and notes on Clickup helped. Improvement in literacy test in May compared to March.		
Teacher support 17 students	**Maringa**Initially experienced problems with reading for meaning, and with tasks. Received assistance from lecturer and peers. Feel it's a very supportive class so motivation and interest were high **Mondlane** Knowing	**Phalane** Felt supported as was free to seek assistance from lecturer or peers. **Mabitsleha** Support was always available which made classes and learning less stressful **Aphane** Available support even if not utilised made learning easier and less stressful	**Gumbi** The teacher modelling of strategies helped her to understand better. **Muuojo** Found lecturer approachable.Motivated by thelecture's effort to assist students in every way. The bonding between lecturer and students was also motivating. "You felt as if you belong and are cared about, which is motivating and encouraging"	Positive about readily available support from lecturer: learning easier, motivating, reduced stress of learning, sense of identity. Bonding and freedom. All contribute to increase in motivation The main issues raised

support was readily available motivated him to apply himself **Matemane** Knowing support was available was motivating **Ndlovu** Due to the teacher modelling and the many illustrations, work was simplified. He believes many students with reading problems, including himself, were motivated.	**Matsei** Felt very supported. Initially afraid to ask questions but later due to semi formal environment could seek for clarification and whatever assistance needed. **Kekana** Felt supported. It made him apply himself. The ready support of lecturer made him change his negative mindset and motivated him to focus on the work. **Naidoo** Could always get support from lecturer, which motivated him to apply himself **Machaba** Available support from lecturer and peers in group was motivating. Received further explanations when struggling with project. **Meyer** Available support was motivating. Received support from peers as environment enabled her to make friends in class and so could ask them for help. They helped each other by texting information. Studying was interesting **Molwantwa** Knowing that support was available was motivating.	.Environment not restrictive therefore freedom to seek for and receive support. **Segodi** Environment was supportive as there was a two way communication in the classroom. Needed extra assistance. Received it from lecturer through consultations, which motivated him to perform well.	and the number of students were distributed thus: Acknowledgement of support 14 Easier learning 2 Motivating 11 Reduction of stress 4 Sense of identity 2 Bonding and motivation 2 Freedom 2 Encouragement 2 Enjoyment and fun 2 Linking support to environment 6 Raised interest and made classes interesting 2 Six students related the teacher support to a conducive learning environment.

		Tertiary studies different from high school so support very necessary. **Nkosi** Felt support was available and given the environment was able to enjoy classes and learn in a fun way. Never felt suppressed or stressed.. The environment made learning skills easier. Environment and approach suited to a support module.	
Praise and Reward 17 students	**Maringa** Motivated by incentives. Looked forward to attending classes because of challenge to perform well at tasks and receive a reward. Became very involved in tasks in order to outperform and receive reward, as incentives were given for best performance. **Mondlanei** Not motivated by incentives **Matemane** Not motivated by incentives or recognition. Has personal motivation.	**Phalane** Was motivated to work harder inorder to obtain a reward and the recognition that comes with it. Would want peers to know of his good performance. "You want others to see that you are also good" **Mabitsela** Was motivated by incentives. Wanted to outperform, so was motivated to work hard, to perform the best and receive a reward. Incentives really motivated him. **Aphane** Motivated to perform well and receive a reward **Matsei** Was not motivated by the incentives. Concerned with marks only.	**Gumbie** Not motivated by incentives. Has self motivation to achieve the highest. Motivated by challenge. **Muuojo** Was not motivated by the incentives but the recognition that students received when they had performed well – the identification, acknowledgement and applause. Always wanted to do better. Motivated by the acknowledgement of achievement. "Knowing that your efforts are recognised was highly motivating". **Segodi** Was motivated by incentives. Was motivated to be involved in her reading and doing of tasks in order to perform well to receive a reward and the	Four students out of the eighteen in this group indicated not being motivated by the incentives. Two of them said they have personal or self-motivation. The rest found the rewards motivating, especially the praise and the recognition that accompanied it. The motivation to receive rewards made the students to become more involved in their work. The main issues raised and the number of

	Ndlovu Was so envious of students who received rewards. Wanted to get a reward and was therefore motivated to work harder to get one. Motivation was not only for the reward itself but for the recognition, as the whole class becomes aware of a student's good performance.	**Kekana** Motivated by incentives. Wanted to outperform others to receive reward. It motivated him to work harder. The reward becomes a plus. **Masanabo** Getting a reward provided a pleasant feeling. Was always motivated to work hard to receive a reward and associated recognition and praise. **Machaba** Was getting rewards in high school. Has the desire to be on top. Motivated to work harder and get rewards when others are being rewarded for their performance. Motivation is low when alone and not in class which is a challenge to overcome **Meyer** Was serious with tasks because of incentives. Motivated to work hard to get rewards. Became more confident as was performing well in tasks. **Molwantwa** Motivated to work hard and receive a reward. "It feels nice when you do well and receive recognition."	recognition.	students were distributed thus: Motivated by incentives to work hard 13 Recognition and acknowledgement 6 Praise 4 Involvement 3

		Nkosi Was motivated by incentives and also the recognition given in class. "One is seen as being a smart student which is motivating."		
Extensive Reading 15 students	**Maringa** Did not submit portfolio due to lack of time. **Mondlane** Did not participate due to lack of time **Matemane** Overwhelmed with pressure from subject areas so did not pay attention to EOT classes. Did only vocabulary exercises for portfolio. Found it beneficial. Learnt new words. Due to time constraints did not do extensive reading. **Ndlovu** Used the reading to relieve stress from attending lectures all day. Did not like reading but undertook the reading project because was required to	**Phalane** Became involved in story. Could not wait to finish to find out the end of the story. Realised that speed, comprehension and interest increased as the reading progressed **Mabitsela**Used to read slowly, but continued with the required reading. Saw great improvement. Speed increased. Became very involved in the readings, books were interesting. Would resort back to reading after the exams. **Aphane** Had to manage reading. Timing, etc. Speed improved. Felt good because was aware of progress. At the beginning found reading difficult but as she continued she begun to enjoy it. Borrowed more books from the lecturer so could carry on reading even after the class project. Understanding improved. Imagination was involved in reading. It influenced reading of academic texts. Used to hate marketing because of the reading,	**Muuojo** Did not participate **Segodi** Did not do many tasks due to pressure from other subjects. Did not participate	Four of the ten students with average marks did not participate in the extensive reading project. Three of the four students who obtained lowest marks did not participate. The fourth student participated and improved to obtain average mark in the posttest. Two students with highest marks did not participate. All in all 56% of the students (9 out of 16) did not participate. They all cited pressure of work as the reason for their non-participation. The 44% that participated reported improvement in speed, understanding,

	do so. Mind used to wonder when studying but when started reading for pleasure this did not happen and now can study without mind wondering. Reading speed increased and this increased willingness to read more. "I felt like I could read more and more. I became so involved in a motivational book I read that I started to do what the book suggested".	but now enjoys the reading her textbooks and also understand better. **Matsei** Tried to do the reading project but could not complete due to poor time management that left her pressured with work from other subject areas. **Kekana** Did not participate because could not find the time due to pressure from other subjects **Masanabo** Did not participate, but completed vocabulary exercises **Machaba** Did not participate **Meyer** Helped to increase her reading speed and understanding which increased her motivation and confidence. **Molwantwa** Observed improvement in speed and understanding as reading continued		vocabulary, and reading habits. The main issues raised and the number of students were distributed thus: Reading habits 3 Cognitive benefits 3 Speed 7 Comprehension 6 Motivation 3 Involvement 4 Interest 2 Enjoyment 2
Autonomy and Choice 2 students		**Phalane** Motivated by the choice given in selection of texts for tasks and reading project. Was able to choose books that interested him and that were at his level of		No direct question asked but two students alluded to the item. Both students reported that they were

		competence.		motivated by choice and autonomy. The main issues raised were distributed thus: motivated by choice 2 increased interest 2 enjoyment and involvement 1
		Mabitsela Being given choice to select texts for tasks and books for reading project was motivating. It made it possible for them to select what interested them so they enjoyed the reading and became involved.		
Competence support / Strategy Instruction 18 students	**Maringa** Used to read for the sake of reading. Was just reading words without making effort to comprehend. Started practicing suggestions from classes on how to read and extract main ideas. Applied suggestions to reading of textbooks in IT. Found speed increased. Monitored his speed. As speed increased, understanding also increased. **Mondlane** Was not using strategies before class. Started using strategies after had been introduced to in classes. The use of mindmap for	**Phalane** Had knowledge of some strategies, e.g summarising by identifying main ideas and supporting details. Realised that the more he read the more strategies developed automatically. He is already a reader so was already using some of the strategies taught in class. Has been applying strategies to academic texts. Now reads faster than before and comprehends better **Mabitsela** Was a very slow reader, but with the introduction of strategies, speed improved, together with understanding. Really felt good about applying strategies and seeing results. (strategy instruction increased self-confidence) **Aphane** Applied strategies introduced and found them helpful	**Gumbie** Was not using strategies. Would just read a text. Now, by using strategies thought, has improved in comprehension and is able to pick out main ideas. **Muuojo** He knew about some of the strategies. After class discussions was motivated to change his strategies for the better Became aware was applying wrong strategies for reading: was reading by listening instead of using eyes. Practised on becoming a seeing reader which helped increase speed and understanding in exams and reading in other **Segodi** Hardly read novels. Was not using strategies until class. Applied some of the strategies taught in class to other subject areas. Saw the benefits, but stopped	Students found strategies very helpful in improving their reading speed and understanding. The main issues raised and the number of students were distributed thus: 15 Students not using appropriate strategies Use of appropriate strategies taught resulted in Increased speed 9 Improved understanding 12 Improved academic performance 2 increased motivation 3 transfer of skills 6 Increase in self -esteem

	main ideas and rearrangement of structural ideas assisted in understanding of texts in other subjects. Timed reading to increase speed and saw improvements. Reading 6 pages in 30 minutes.

Matemane Was not using strategies before classes. After introduction of strategies in class, have been trying to use correct strategies. Speed increased and understanding improved. The techniques helped him in studying for the other subjects. Motivation and confidence increased. Passed all subjects.

Ndlovu Was not using a number of the strategies taught. Now using them extensively. Using mindmap to | which had a positive effect on him and increased his motivation.

Matsei Was introduced to some of the strategies in high school, but had forgotten. The explanations helped to remind him and to make him aware of other strategies he did not know of. Believes extra tasks in the classes helped him. Applied strategies to the readings in other subjects such as Economics and Marketing.

NaidooSpeed reading exercises helped. Speed has now increased so reads faster and understands better when applying appropriate strategies.

Masanabo Has been applying strategies taught. Speed and understanding have increased.

Machaba Knew about most of the strategies from TUT where he did first year, but was not using them. Did not know how to use them. Awareness from classes made it possible to apply strategies. Found using strategies very beneficial. E.g applying and using background | after a while. Reason: time constraints | 4 |

	make notes in other subjects	knowledge to evaluate texts. **Meyer** Was using most of the strategies. Became aware that was using wrong technique to read – listening reader. Started practicing correct techniques of reading after explanations were given in class. Now focuses more on understanding and meaning not just reading. **Molwantwa** Was using some of the strategies but not appropriately. Struggles with main ideas and summaries. Started implementing strategies taught. Observed improvement in speed and understanding. Now uses context to assist in obtaining meaning while reading. **Nkosi** Was not so aware of strategies. After they were introduced in class she started using them. It made reading time shorter. Obtained clearer understanding. Used reading techniques during literature exam. Skimmed the relevant sections for global understanding before reading. Used to be a slow reader. Has improved a		

		lot. Especially with movement of eyes, etc. Understanding has also improved. Feels he is a good reader now. Very excited abut it. **Kekana** Was not using strategies in high school. His writing of notes became easier and more structured in the 2nd term, after distinguishing main ideas and the use of mindmap had been taught in class. Applied reading strategies taught in class and improvement in understanding and reading speed. Still applying strategies to reading		
Collaboration **17 students**	**Maringa** Prefer individual work because one is more challenged when working on his own. One gets other ideas in group work so challenge is minimal. However, benefited from group work. Received help from other students on how to extract main ideas. Used to read passively. **Mondlane** Enjoyed group work because	**Phalane**Though does not have preference for group or individual work, benefited from the group activities while others also benefited from her knowledge and skills. Group work led to contributions from various students which helped in producing a better quality project. For example discovered how other students study when ideas were shared and decided to try it. It helped. **Mabitsela** Benefited a lot from peersthrough collaborative learning. Assistance from peers helped with understanding, which increased his	**Gumbi** Group work and pair work beneficial because one gets ideas from others. Someone shared a good studying strategy in their group. **Muuojo** Prefers group work. Discussions give opportunity for everyone to get involved. When working in a group to solve a problem, it becomes easier to identify the problem at hand as many minds involved and also easier to provide solutions as they will be brainstorming with various ideas. However, when groups are bigger, it is less organised and	Besides the three students who did not view the collaborative learning positively, the rest of the students embraced this social learning technique. They reported that it was of great benefit, as they shared ideas, made friends and interacted in learning which made learning, interesting, enjoyable and fun. The main issues raised and the number of

various ideas are shared. Benefited a lot from other students' ideas **Matemane** Collaborative work and learning helps one to get new ideas from others". Was able to assist others in his group during collaborative project. **Ndlovu** Assisted in making friends in the class. Also gained understanding as a result of discussions. Benefited from the ideas and explanations of other students.	confidence in his ability**.** **Aphane** Did not feel alone. Made friends in class as a result of frequent group discussions. Was able to interact and benefit from discussions **Matsei** Did not like it initially. One reason being "ome students feel one is stupid when you are not on the same level with them". Later became used to it and even formed a study group for Economics from the class. Shared her ideas during group learning. Group members thought her ideas were brilliant and applied them. This really made her happy and motivated her because she perceived her group members as very intelligent. **Kekana** Prefer individual work. Group work problematic. Likes the initial group discussions but all tasks should end as individual products. Group discussions enable one to gain ideas and then to apply to own work. **Naidoo** Sometimes problematic. Some don't participate and just	some students do not contribute. Pair work may counteract some of the disadvantages of large group work. Feels more motivated to work on tasks allocated to him by group. When he is handling a task by himself, he can be distracted by other factors. Prefer group work. It provides opportunity to share and to get various ideas, differing views and feedback. Finds the interaction and collaboration beneficial **Segodi** Reserved so prefer to work on his own. However saw the benefits group work:" you see things from different angles." Being in a group helped her to come out of shell, to participate, interact and contribute.	students were distributed thus: Sharing, interaction and involvement 7 Making friends 4 Interest, enjoyment, happy, fun and nice 6 Understanding and learning 2 Self- efficacy 3 Encouraging and motivating 4 easier to do tasks 2 Better quality work 3 challenges 2

		benefit from others' work. **Masanabo** Prefer individual work. However, benefited from other students during group work. **Machaba** Prefers group work/discussions more. Does not communicate much due to shy personality, however, approach in class enabled him to make friends. Begun to communicate share ideas and interact after making friends. Learnt a lot from peers. Explanations from peers increased his understanding. Obtained 35% working alone but 65% when engaged in group discussions. Now study together with friends. Was used to doing things together as a collective and therefore finds collaborative learning and group work very acceptable and beneficial. **Meyer** Enjoyed group discussions and group work because like sharing of ideas. Was unsure of many things and got direction from peers. "Group work is more fun. Makes learning more interesting." Improved in group work 60% but		

		40% for individual work.		
		Molwantwa Prefers to work on her own. More serious and focussed when on her own. Get better marks in group but prefers individual work. Think more productively when doing tasks by herself.		
		Nkosi Collaborative learning makes one aloof and passive. More focussed and intensive if working on his own. Due to OBE teaching approach in high school, was used to group work. Some advantages of group work like learning from others, and gathering various ideas to solve a particular problem was nice.		
Relevant texts 16 students	**Maringa** Attitude was a bit negative as was not doing economics. Felt Economics students will find it easier due to familiarity, background knowledge. Accepted generic texts better. **Mondlane** Felt texts gave EMS positive attitude and increased	**Phalane** Texts from subject field Increased his motivation. It helped with understanding of texts and concepts. **Matsei** Was motivated by text from subject field. He became more focussed because he found the texts relevant. **Kekana** Using texts from subject field made Literacy module more relevant, exciting and interesting for	**Gumbie** Use of texts from subject field was motivated him Could apply background knowledge and be able to relate to the texts, which made it easier. " It was like revision". **Muuojo** Texts from subject field were interesting because they were relevant. Generic texts on current issues would also increase interest **Segodi** Since economics was best	Besides two students all the students found the texts from economics and law very relevant. They reported that it made tasks easier to do as they could apply background knowledge. The texts also enabled them to understand strategies better, and increased

their motivation. Would prefer texts from his subject field so attitude and motivation can be better **Matemane**Texts from subject area as examples and for tasks made it easier to understand and also interesting. **Ndlovu** Believes economics and science are connected. Could link the text titled *Economics is a science* with his previous knowledge, from one of his modules in philosophy. Was interested as a result of the scientific contents	her. Was able to link learning in Literacy module with other subjects. It gave him more drive to do tasks given in class. Interest low when generic texts or texts from other subject areas were used. **Naidoo** Subject related texts raised his interest and provided more insights. **Masanabo** Subject specific texts were easy to understand due to application of background knowledge. Also more interesting. Feels generic texts on interesting topics would also be exciting and motivating. **Machaba** Since Economics and Finance apply to everyone's life, he was interested and motivated in doing tasks even though texts not from his subject field. However, he would have had much better understanding had texts been from his subject field. **Meyer** Would have enjoyed tasks and understood better if texts used were from her subject field. Not familiar with Economics.	subject was interested in the texts from economics textbook. Found tasks on economics texts easier to do because of background knowledge.	their interest and motivation. The main issues raised and the number of students were distributed thus: Application of background knowledge 5 Easy tasks 6 Increased interest and motivation 11 Attitude change 2 better understanding of strategies 5 Transfer 2 Literacy module relevant and real 4 More drive and more focussed 4

		Molwantwa Texts from subject area helped. Made learning and doing tasks more real and relevant. Feels will learn something to apply in Economic so was more focussed. Generic texts that were interesting were also motivating. **Nkosi** Texts from subject field made understanding easier and gave her the zeal to focus and find out more from the texts. Was motivated to apply himself more in the reading and the task.		
Environment 17 students	**Maringa** Friendly, semi- formal, unrestrictive environment enabled him to do tasks well. Felt free in class. Made him interested in class. **Mondlane** Semiformal environment made him feel lazy. Prefer formal restrictive environment. **Matemane** Environment was supportive. Class bonded with each other	**Phalane** Enjoyed the free and relaxed environment. It enabled him to work freely without pressure. It also promoted interaction which assisted him in learning. **Mabitsela** Semi formal, relaxed environment enjoyable. Lecturer was very approachable. Had no hesitation to approach lecturer or peers for assistance in that environment. Enjoyed attending classes. Was motivated to work hard because classes were enjoyable. **Kgwale** Found the classes	**Gumbie** Semiformal environment enabled students to share their ideas freely. The environment was motivating. The fact that the environment allowed students to freely ask questions, seek for clarification, or share ideas freely, motivated her to focus on her work and excel. **Muuojo** Good balance between formal and informal. Semi formal environment allowed students freedom to think freely. Unrestrictive semi-formal environment allowed students to form relationships with other	Besides two students who felt that the environment was too relaxing, the rest of the students felt the environment was enabling. They reported that it made them feel free in class, enabled them to think creatively, and made learning fun. They also emphasise on the interactive context it created, as well as providing them with opportunity to make

and with lecturer, which made classes enjoyable and learning easier. Was relaxed in class and comfortable, so could work better. The freedom and interaction was motivating. Able to make friends and learn from them as the environment was conducive. Looked forward to attending classes **Ndlovu** Semiformal environment helped students to relax and be more balanced. It enabled him to conceptualise and think freely. Really enjoyed the class. It was his best class.	enjoyable and fun. Lots of laughter which made it relaxing and possible to do tasks with a free, relaxing and clear mind. Could share ideas freely and think more creatively. **Matsei** Semi formal environment made her too relaxed at times. However, was focussed when she felt tasks were interesting and relevant to her. **Kekana** Observed that the environment was different from other classes. For first year students, it made adjustment to university easier; adjusting to academic life. The environment made one relax and think, concentrate without stress, which made itinteresting. **Naidoo** Was the only Indian in class felt left out of lively class discussions. Semi-formal environment was encouraging and would have enjoyed classes better if there were more Indians to relate to. **Masanabo** Enjoyed class due to semi-forma, relaxed environment. Provided interaction and contributed to deeper understanding	students, which was helpful when one needed assistance. Various opportunities given for interaction and learning which made learning fun. It helped with conceptualisation and understanding. **Segodi** Environment was supportive. Students were free to ask questions and seek for further assistance. Environment made him feel free to participate and be involved in discussions.	friends, which was quite important to them as first year students. The main issues raised and the number of students were distributed thus: Freedom in class 6 Interesting and motivating 10 Fun and enjoyment 9 Interactive context 5 Less pressure/less stress 3 Opportunity to share ideas 3 Allowed for easy adjustment to first year 4 Opportunity to make friends, bonding 5 Comfortable and relaxing 6 Allowed for free flowing discussions 3

		and enhanced thinking.		
		Machaba Semiformal environment made it possible for him to make friends, which helped with studies because he could easily ask for extra help from lecturer or seek for explanation from friends. He would not have been able to seek for assistance from lecturer if the environment was not semiformal and relaxed, as he is a very shy person.		
		Meyer Environment made her comfortable and not stressed as in other lectures. Was not under pressure. Felt free and relaxed. When classes started was stressing but when realised that the environment was relaxed and semiformal, became relaxed and comfortable. Was motivated to attend classes. Did not miss any lecture period.		
		Molwantwa Semi-formal environment good but has down side. Students may be too relaxed to attach importance to work. Performance decreased because became too relaxed and less focussed.		

		Nkosi Semi-formal environment was a big relief from all the strict formal lectures in other modules. It enabled him to interact and learn from those around him. The environment and approach, motivated him and gave him a reason to attend classes. Was able to make friends and enjoy classes due to relaxed environment.		
Comments 15 students	**Maringa** Was not reading for pleasure. No novels at home. Now reads, and read books during holidays. **Matemane** Teaching approach helped with interaction and bonding which made learning easier and fun and therefore motivating. Reading for other subject areas improved and found assignment and projects easier to do. **Ndlovu**For the first time read novels during holidays. "something I have never done"	Moche The classes have changed the way I study for the better. My understanding has greatly improved. **Matsei** Applied reading strategies to reading texts in other modules. Saw improvement in reading ability and speed. **Kekana** Less attention with Literacy module. Overwhelmed with studies – assignments, tests, etc. When reading easily gets bored, but would read something interesting that has been recommended by others. Now reading during holidays. **Naidoo** Was disappointed. Surprised at TALL test results at the beginning of the year.	**Gumbi** Due to environment, was more focused in doing tasks. Applied strategies to reading in other modules and found them useful in improving his understanding. **Muuojo** Really enjoyed the classes due to approach taken. Benefited from the reading techniques taught in class. Now understands what he reads better than before. Since module consists of students from various faculties, the approach taken enabled them to interact and benefit from one another He himself started reading for enjoyment at around 17 years. Now enjoying reading even more due to classes. Now reading daily due to advice of lecturer. Experienced the class as a social learning	Comments varied and touched on various aspects. Students reported on positive reading habits, increased motivation improved speed, understanding and general performance The main issues raised and the number of students were distributed thus: Social learning interaction, friendship, bonding 6 Affective issues enjoyment, motivation and interest 8 Cognitive benefits easy, understanding, 5

Applied strategies when reading. Used new strategies to read for meaning. Could focus better when reading. Improved performance in Module test: from 54(March) to 64 (May)	**Masanabp** Felt very free in class. Learning was enjoyable. Have been trying to use strategies and is helping with studies. Was overwhelmed and pressurised with workload. **Machaba** Willing to work hard. Most childhood reading was in home language. Did not read for pleasure in English. **Meyer** Initially stressed, not sure of what was required for TALL that's why obtained low grades. Has observed great improvement in reading due to classes. Now comfortable. Not afraid to ask questions. Freedom in learning has contributed to improvement. Was uncomfortable learning in English initially but after completing the module, and seeing improvement in reading in English, feels confident, and will change to English instruction next year, 2011. **Molwantwa** Was overwhelmed with tertiary work and lifestyle. Was not coping so gave less attention to literacy module. Her time management was poor. Also	environment which enabled students from different faculties to make friends, interact and learn skills from each other. **Segodi** Would be doing more extensive reading for pleasure to improve reading skills.	Positive reading habits 6 Use of appropriate strategies 4 Freedom in class 4

		demoralised at the beginning when friends obtained codes 4 and 5 in TALL and she obtained code 2. Would prefer TALL to also assess understanding and comprehension in the form of writing. Not solely multiple choice. **Ntuli** Perception of literacy module changed as explanations were given and tasks were linked to general outcomes.. Concerned with "what is in this for me?"		