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SUMMARY

Reading comprehension is one of the basic learning skills that need to be learned in an early school years. The English language is generally introduced as early as Grade 2 level in township primary schools. Township learners are at most exposed to English as the language of learning and teaching (LoLt) for three years (Grade 5-7) before entering secondary school. Most township primary school learners enter secondary school with poor English language development and poor language proficiency. Reading comprehension is one of the problems experienced by most township secondary school learners. Lack of reading comprehension skills negatively affect their ability to constuct meaning from what they are reading. Reading support techniques or strategies need to be sought and developed to address the reading comprehension problems experienced by learners especially from the disadvantaged enviroment. ind it difficult to understand or interpret what they are reading.

This research focused on the use of the imaging technique on a learning suport in developing reading comprehension skills of township secondary school learners. The emphasis was mainly on how this technique can be adapted in order to enhance its mastery in developing reading comprehension skills. This imaging technique is seen as a feasible technique in a holistic approach to develop reading comprehension skills. The imaging technique makes use of the formation of multisensory pictures during the reading process which are valuable in the independent construction of meaning. The use of imaging for reading enhances active learning and memory.

The research was conducted with learners in Grade 9 in a secondary school in a Pretoria township. The participants in the research group experienced reading comprehension problems, lack of English language development and difficulty in the use of English as the (LoLT). Some of the learners in the research group appeared to be experiencing intellectual learning disability. The practical implementation of the imaging technique was done in twenty sessions. A control group attended twenty reading support sessions using a dictionary method, for the same texts. Qualitative and quantitative analyses of the results are performed and discussed.

Keywords:

- reading comprehension
- second language as LoLT
- senior phase (Grade 9)
- reading problems
- township secondary school
- imaged pictures
- learning support
- imaging technique as reading support
- learning support
- assessment

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CHAPTER ONE

INTRODUCTION, PROBLEM FORMULATION, AIM OF RESEARCH, RESEARCH STATEMENT, CLARIFICATION OF CONCEPTS, RESEARCH DESIGN AND RESEARCH PROGRAMME

1.1 INTRODUCTION

1.1.1 The challenge of reading comprehension in South Africa

Today our world is a reading world. Richeck, Cardwell, Jenning & Lerner (1996:4) hold the view that because reading is the basic requirement for all academic subjects, failure in school can often be traced to inadequate reading skills. Gunning (2000:2) maintains that reading is first and foremost, magical. It opens the door to a vast world of information, fulfilment, and enjoyment. After having learned to read, the person is never quite the same. The challenge of reading comprehension in South Africa especially in the township schools is great since learners experience difficulty with reading comprehension.

Difficulty reading with comprehension leads to frustration and demoralisation as far as most learning at school is concerned. In South Africa, many learners especially from historically disadvantaged townships and rural areas experience a diversity of learning problems of which one is certainly poor reading comprehension. Unfortunately some of these learners leave primary school and proceed to secondary school with little or no support having been given in order to overcome their reading problem. The scholastic performance of learners who experience reading difficulties is usually poor. Difficulty to read with comprehension negatively affects the learning and understanding of other school subjects, hence the poor performance in their overall learning and a high dropout rate related to economic reasons. Donald, Lazarus and Lolwana (1997:152) point out that some of the learners may leave school early with an aim of earning a living since the family is struggling economically and the fact that there is no visible progress in their school work.

When looking at the South African township secondary schools, we find that there is a serious need for ways or techniques that can be used to improve the reading comprehension of these learners in Grade 8 and 9. For techniques of best practice and learning support to be effective in difficult conditions such as township secondary schools, they have to meet the following requirements:

- They should be fit for use in a group of learners.

- They should not be sophisticated methods that need expert knowledge in order to be successfully implemented.
- They should be techniques that can be used by teachers in ordinary school settings.
- They should be able to improve the learning and achievement in other subjects.
- They should be able to address the reading problem of learners in a holistic manner.

One technique that merits research in the improvement of reading comprehension is the imaging technique. Imaging, or Gestalt imagery, is the ability to create imaged wholes. The creation of imaged wholes is seen as a critical factor in oral and written language comprehension. Bell (1991:246) maintains that, despite good decoding, good vocabulary and adequate background experiences, many individuals experience weak imagery, thus processing "parts" rather than "wholes" from verbal stimuli, spoken or written. This contributes to language comprehension difficulty that may show in the following symptoms: weak reading comprehension, weak oral language comprehension, difficulty following directions and a poor sense of humour.

The Department of Educational Psychology of the University of Pretoria has already conducted two studies on the effect of teaching learners to use the imaging technique in the improvement of reading comprehension. One study was done by Wagner (1999) where Grade 5 learners in a multicultural former model C school were involved. The second study was done by Jordaan (2000) in a special school, and it involved learners in the intermediate phase who were learning disabled and environmentally disadvantaged. Both studies indicated that the imaging technique has a potential to improve the reading comprehension of learners in the primary school facing diverse barriers to learning.

No research looking at the use of the imaging technique in township schools or at secondary school level in South Africa has been found. Educational context and the level of cognitive development and functioning are crucial considerations in examining the use of learning support techniques from a psychological perspective. Should the imaging technique as learning support for reading comprehension be researched in respect of secondary school learners in township schools, it would therefore be necessary to look at the particular way(s) in which it would have to be adapted to suit these particular learners.

1.1.2 The problem of having a second language as the language of learning

One of the barriers of learning, is learning by means of a second language. Donald *et al.* (1997:157) highlighted that before the change of government in South Africa in 1994, the policy that applied to all speakers of languages other than English and Afrikaans was that, beyond the first four years of school (that is, Gr R to Gr 3), the medium of instruction had to shift to one "official" language. In practice, this means that the majority of children have to learn through a language other than their first language (that is, the language in which they are most competent, and in which they feel most comfortable). The fact of the matter is that most learners in the township areas are neither comfortable nor competent in English or Afrikaans. The difficulty that learners are encountering is that they learn in English at school as a medium of instruction without prior exposure to the language during their early years of development. Township learners are at most exposed to English as a medium of instruction for three years (Gr 5-7) before entering secondary school. Despite the new changes in the education provision in South Africa as far as the second language as a medium of instruction is concerned most schools in the townships still prefer English from Grade 4 up to high school level.

Donald *et al.*(1997:157) point out that a basic and uncontested notion in educational psychology is that language and thinking - and therefore learning - are intimately tied together. Because of this basic relationship between language, thinking and learning, there is now a great deal of evidence that if children's process of formal learning is abruptly cut off from their first language, this can negatively affect cognitive development in general as well as scholastic performance in particular.

Secondary school learners often experience reading problems. In South Africa there are few special programmes to support the development of English as a second language (L2) and reading skills for secondary school learners. Many learners from educationally disadvantaged environments are unable to access the very few special programmes. There is an overwhelming need to develop techniques which will address the development of the second language (L2) as the language of learning and teaching in the early grades of secondary school. Reading comprehension should receive special attention since it forms a focal point for overall language development.

1.1.3 The disadvantaged environment

An educationally disadvantaged environment logically exacerbates the problems of any learner,

especially those who need to learn through the second language. Donald *et al.* (1997:182) maintain that a school with too few classrooms, poor teaching and library resources, high pupil teacher ratios and inadequately qualified teachers will struggle to help its students achieve. Learners in the townships often attend in poorly resourced schools while coming from poverty stricken families. Some of these learners lack emotional support, intellectual stimulation, proper language development and adequate socialisation. Lack of resources such as books, magazines, newspapers and dictionaries at home puts the child in a disadvantaged position.

In addition to these facts most poorly resourced schools in South Africa have also had very little help from Education Support Services. Reasons for underachieving are seldom picked up or appropriately treated (Donald *et al.* 1997:182). Thus a technique of reading support that will take the above mentioned factors into account in the ordinary classroom will be of great help to both the educators and the learners in improving reading comprehension early in the secondary school.

1.2 PROBLEM FORMULATION

In this research the researcher will be investigating how the imaging technique can be made of use in the particular situation of a township secondary school, as a form of group learning support to improve reading comprehension.

The learners that will be involved in this research are Grade 9 learners from a township secondary school. Grade 8 learners are an appropriate group with whom to conduct the research study on the imaging technique since it is their first year at secondary school level. Grade 9 learners, however, will be selected to participate because, during the year of the research study, the Grade 8 learners are being introduced to Outcomes Based Education (OBE) in Curriculum 2005. The change of the curriculum, the new way of learning and the uncertainty of both educators and learners about OBE introduce variables which will affect interpretation of the research results. More stable learners who have followed the usual way of learning are needed so that the results of the research will not be compounded by changes brought by OBE.

The research problem is thus formulated as follows:

How should the imaging technique be adapted for optimum value as a technique in developing the reading comprehension skills of learners in Grade 9 in a township secondary school?

The main problem will be elucidated by researching the following subquestions:

Subset 1: Content:: reading comprehension and the imaging technique

(a) What extrinsic barriers are obstructing the development of reading comprehension skills in English as the language of learning and teaching of Grade 9 learners in a township school?

(b) What extrinsic barriers are obstructing the mastery of the imaging technique as learning support to improve the reading comprehension skills of learners in a township secondary school?

(c) How should the imaging technique be adapted to enable learners in a township secondary school to master the technique and thus improve their reading comprehension skills?

Subset 2: Educator

(a) What are the difficulties experienced by the educator in the use of the imaging technique in learning support for reading comprehension in a township secondary school?

(b) How should the imaging technique be adapted to enable the educator successfully to use the technique in learning support and across the curriculum in the township secondary school?

Subset 3: Learners

(a) What intrinsic barriers are obstructing Grade 9 learners in a township secondary school in developing their English reading comprehension skills?

(b) What intrinsic barriers are obstructing Grade 9 learners in a township secondary school in mastering the imaging technique in learning support to improve their reading comprehension skills?

(c) How should the imaging technique be adapted to enable the learners in a township secondary school to master the technique and improve their reading comprehension skills?

1.3 AIM OF RESEARCH

The aim of this research is to examine and adapt the imaging technique for optimum value as a feasible learning support technique in developing the English reading comprehension skills of learners in Grade 9 in a township secondary school.

1.4 ASSUMPTIONS

The following assumptions on this study are as follows:

- The imaging technique is viewed as a learning support that can be used in the development of reading comprehension skills of township secondary school learners.

- The development of the reading comprehension skills through the imaging technique is seen as a key to successful learning of township secondary school learners who experience a diversity of reading difficulties.

1.5 RESEARCH STATEMENT

The research project aims at investigating the practical implementation of the imaging technique to improve reading comprehension of Grade 9 learners in a township secondary school. There is a need to address the barriers of reading comprehension experienced by township learners in the secondary school. Thus an ecosystemic approach that helps in the understanding of the development and learning of children in more holistic and interactive terms is needed. To fully understand and to address the reading comprehension problem on any group of learners it is important to see how the dynamic interdependence and interaction relationships between the educator, learner and content affect reading comprehension.

The point of departure of the research is theoretically from an orthodidactic framework where improvement of the interaction between the educator, learner and content aims at the improvement of reading comprehension. The research will look at the Grade 9 learners in a township secondary school who face challenges of reading comprehension such as second language problems, teaching styles, cultural differences and the curriculum holistically. The research will also look at the challenges facing educators in the township secondary schools. Finally, to fully address the research problem unpacked in 1.2, the research will look at the content as the task of reading comprehension as well as the task of imaging that impact on the learner's emotional feelings, confidence and competency.

The imaging technique will be implemented in the mainstream township secondary school. The aim is to use the technique as a support to improve the reading comprehension of secondary school learners and the learning of other subjects. The use of the imaging technique is also aimed at empowering educators with skills so that they can use it as a support in helping learners to improve their reading comprehension and their scholastic performance in all learning areas.

During the development of the imaging technique in reading comprehension, factors that are expected to influence the implementation of imaging and the involvement of the learners include the following:

- The level of the learner's cognitive development.
- The amount of English vocabulary the learner possesses.
- The method to be used when facilitating imaging .
- The milieu or cultural conditions of the learner.
- The learner's affective conditions.
- Explicit instructions and terminology to be used when implementing imaging technique.
- The learner's cognitive and experiential framework.

In order to conduct and report on this research successfully, the clarification of some concepts is necessary.

1.6 CLARIFICATION OF CONCEPTS

1.6.1 Reading Comprehension

Irwin (1991:9) defines reading comprehension as the process of using one's own prior experiences and the writer's cues to construct a set of meanings that are useful to the individual reader reading in a specific context. McNeil (1992:18) sees reading comprehension as a process which involves actively constructing meaning among the parts of the text and personal experience. The text itself is the blueprint for increasing meaning. Comprehension and retention are achieved by strategies for integrating text within personal knowledge and experience.

1.6.2 Imaging for reading comprehension

Imaging is a reading comprehension technique that is embedded in the Gestalt theory. Gestalt

is defined as a complex organized unit or whole that is more than the sum of its parts (Bell 1991:247). In reading comprehension imaging is the making of pictures in the mind on what one is reading about. Aristotle once believed,"It is impossible even to think without a mental picture..." (Bell 1991:249). Imaging for reading comprehension relies on verbal training, directing the learner to make pictures in the mind on information to be learned. The development of metacognitive skills on visual imagery as a strategy will expectedly help learners in the improvement of reading comprehension.

Esrock (1994:196) indicated that imaging promotes the following in reading comprehension:

- It focuses on the whole rather than the parts.
- It creates sensory links between incoming language and prior knowledge.
- It positions the learner within the text.
- It helps in making the fictional world concrete.
- It enhances memory.

Training of learners on imaging for reading comprehension is important and group participation is essential.

1.6.3 Second language

Bernhardt (1998:2) defines second language as a language that is not spoken in the home and yet may be the language of wider communication. According to Ellis (1994:6), the term "second language acquisition" refers to the subconscious or conscious processes by which a language other than the mother tongue is learnt in a natural or a tutored setting when it is used as a medium of instruction. He also points out that the term "acquisition" should be used to refer to picking up a second language through exposure, whereas the term "learning" should be used to refer to the conscious study of a second language.

1.6.4 Disadvantaged

According to the Oxford Dictionary compiled by Thompson (2000:244) the term disadvantage means unfavourable circumstances or condition. Disadvantaged therefore means lacking normal opportunities through poverty.

Le Roux (1994:28) points out that Pretorius (1986:79) and Rutter and Madge (1981:5-6) maintain that families in disadvantaged environments are subjected to adverse factors such as poverty, cultural and geographic isolation, membership of a non technological cultural group etc.

Common conditions shared by such families include low economic and social status, low level of education, poor housing, limited privacy insufficient and unsuitable food, inadequate parental care, neglect, rejection, parental absence, unemployment and inferior occupations. Most township school learners often come from such a disadvantaged environment.

1.6.5 Learning Support

The term support means to give help or assistance, strengthen or encourage, (Thompson 200:916). Learning support is help or assistance given or rendered to a learner experiencing learning problems or difficulties in order to overcome them. Baskwill and Whitman (1997:7) believe that the most important aim of learner support is to help all learners to see themselves as effective readers who can become independent readers. A further gaol of support is to help learners develop the ability to use reading strategies or skills independently in a balanced and integrated manner.

1.6.6 Learners in a township secondary school

Today most of the learners in the township secondary schools come from a disadvantaged environment. Learners whose parents are financially better off often go to ex-Model C schools and further their studies there. Learners from financially disadvantaged homes remain in the township schools. The scholastic performance of learners in the township secondary schools is often poor. Most of these learners experience English which is the language of learning and teaching as problematic during their learning.

The above mentioned factors have a negative impact on the reading comprehension of learners in the township secondary schools. Donald *et al.*(1997:183) point out that most learners who are educationally disadvantaged, are underachieving, repeating classes, becoming frustrated and dissatisfied with schoolwork. Wallace, Temple and Crawford (2000:332) mention that learners experiencing learning difficulties ultimately develop the feeling of learned helplessness or passive failure which is a sense that no matter what one does, nothing will help. This has been seen in adolescents in township schools who have reading problems, when they honestly believe that no amount of effort will bring about escape from a cycle of failure.

1.7 RESEARCH DESIGN

The following research steps will be executed:

1.7.1 Literature study

The theory that underlies the phenomenon, practice and adaptation of the imaging technique as a support in improving the reading comprehension of learners in a township secondary school.

- Reading comprehension in the secondary school.
- Reading problems in the secondary school.
- Reading in the second language of learning and teaching in the secondary school.
- Reading support in the secondary school.
- Imaging as a holistic approach in the improvement of reading comprehension in the secondary school.

1.7.2 Empirical research

The findings of the practical research will be based on the following three reliable and valid points:

(1) Formative and summative assessment

Within a pretest - posttest design assessment of reading comprehension skills will be done in order to select the sample. The pretest results will be used as a diagnostic assessment in addition to being the selection of learners. Learners who obtain the lowest scores in Grade 9 will be selected and randomly assigned to the experimental group, control - treatment group and non-treatment group. The control group will receive a different method of reading support where explanation of difficult vocabulary words will be done. The different learning styles used in the imaging technique and the usual way of learning in the control group will be observed and compared in order to see how they impact the development of reading comprehension of township learners in the secondary school. The post-test results will again be analysed in detail as a diagnostic assessment.

(2) Examination and adaptation of the imaging technique as a support in helping learners with reading comprehension problems.

The examination of the imaging technique will be conducted with the experimental group of township learners in a secondary school. The research group will be Grade 9 learners of the senior phase who experience reading comprehension problems. The imaging technique will be implemented after school hours with appropriate literature and will be further developed and adapted to learners in the township secondary school. Learners will be helped in various sessions. After every session there will be reflection to reappraise the session in order to make

the necessary adjustments on the problems encountered. Continuous observation of learners' problems as well as their successes will be done.

(3) Interviews

Semi-structured interviews with learners will be conducted continually in order to get feedback from the learners about their experiences and difficulties concerning the content of the reading and the imaging technique.

1.8 RESEARCH PROGRAMME

Chapter One contains the Introduction, Problem Formulation, Aim of Research, Assumptions, Research Statement, Clarification of Concepts, Research Design and Research Programme.

Chapter Two will be concerned with the underlying theory and the development of the imaging technique as support that can be used in the improvement of reading comprehension. The investigation will focus on learners in the secondary school who experience reading comprehension problems. The principles of imaging will be investigated, with attention to the factors of environmental disadvantage and learning through a second language.

Chapter Three will be concerned with the implementation of imaging with an aim of examining the technique to improve the reading comprehension of Grade 9 learners. The results that will be obtained from the Pre-test and Post-test data and observations and reflections on the sessions will be interpreted in a qualitative manner. Interviews will be reported. The limitations of the study will be acknowledged.

Chapter Four will contain the Summary, Conclusions and Recommendations on the research.

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CHAPTER 2

ADDRESSING THE BARRIERS TO READING COMPREHENSION DEVELOPMENT OF LEARNERS IN A TOWNSHIP SECONDARY SCHOOL: A LITERATURE REVIEW

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CHAPTER TWO

ADDRESSING THE BARRIERS TO READING COMPREHENSION DEVELOPMENT OF LEARNERS IN A TOWNSHIP SECONDARY SCHOOL: A LITERATURE REVIEW

2.1 INTRODUCTION

Reading is a highly complex act that must be learned. Bernhardt (1998:9) holds the view that reading is not a single skill but a combination of many skills and processes in which a reader interacts with print to derive both meaning and pleasure from the written words. Inability to read hampers the individual's overall learning and daily functioning in a literate society. Teaching learners to read with comprehension is a prerequisite to successful learning at school. Burns, Roe and Ross (1992:4) maintain that learners who cannot see any advantage in learning to read will not be motivated to learn either. Learning to read takes effort, and learners who see the value of reading in their personal activities will be more likely to work hard than those who fail to see the benefits.

In this chapter the focus will be on the following; the development of the reading comprehension skills of secondary school learners, reading comprehension problems experienced by secondary school learners, reading comprehension in the second language as the language of learning and teaching, reading support in the secondary schools and the use of the imaging technique as learning support to improve the reading comprehension of learners in a township secondary school.

2.2 READING COMPREHENSION

2.2.1 Definition of reading comprehension

According to Richeck *et al.* (1983:7), reading is defined as an ability to gather meaning from printed symbols. To some later theorists however, recognizing words is the essential ingredient, others stress literal comprehension of printed words, sentences and paragraphs, and others emphasize the important role of inference, prediction and judgement in reading.

Taverner (1990:1) views reading as something more than reading of black marks upon a page: it is for meaning and one which requires the reader to be an active participant. He further states that reading takes pupils beyond first hand experience: it enables them to project themselves into unfamiliar environments, times and cultures, to gain sympathetic understanding for other ways of life and to experience joy and sadness vicariously.

According to Robeck and Wallace (1990:27), reading is a process of translating signs and symbols into meanings and incorporating the new information into existing cognitive and affective structures.

To Irwin (1991:8), comprehension can be seen as the process of using one's own prior experiences and the writer's cues to infer the author's intended meaning.

McNeil (1992:16) defines reading comprehension as a process of making sense out of text. Reading comprehension is a process of using one's existing knowledge (schemata) to interpret text in order to construe meaning.

Alley (1994:5) defines reading literacy as the ability to understand and use those written language forms that are required by society and/or valued by the individual. The category of language forms "required by society" refers to those kinds of literacy tasks which are needed to cope with the business of living in an organized society reading notices, direction maps, graphs etc. The latter part of the definition allows for the inclusion of leisure reading, but as less often required for survival in society. Le Roux (1993:152) points out that (Cummins 1981:21) postulated that colloquial language known as Basic Interpersonal Communication Skills (BICS) consists of the "visible" aspects of language such as pronunciation, basic vocabulary and grammar, which allow pupils to converse fluently in undemanding every day situation. However BICS alone are not sufficient for academic success. This definition would indicate that the reader's skill of reading comprehension is still on the basic interpersonal communication level BICS of processing reading information.

Jackson and Coltheart (2001:11) take reading to be a cognitive activity that is accomplished by a mental information - processing system that is made up of a number of distinct processing subsystems. The nature and functioning of this mental information-processing system is expected to change as a reader becomes more practised and skilled and acquires new knowledge. According to this definition the development of reading skills would also be important at the higher level of thinking where academic work can be processed. (Cummins 1981:21) defines Cognitive Academic Language Proficiency (CALP) as the proficiency needed to understand academic concepts and to perform the higher cognitive operations that are required to achieve in school.

The above mentioned definitions of reading comprehension incorporate concepts such as schemata, existing knowledge, cognitive process, social process, literacy, vocabulary knowledge and active participation of the reader when interacting with the text to generate meaning on what he/she is reading about. Other definitions consider the purpose of the reader and the context within which the reader is functioning. These definitions indicate that reading comprehension skills equip the reader with basic interpersonal communication skills BICS in order to function easily in his or her society as well as higher cognitive academic language proficiency CALP skills. Hence no single definition of reading comprehension is fully adequate.

2.2.2 Development of reading comprehension skills of secondary school learners

The development of reading skills generally begins from preschool years and continues up to higher education level. Gunning (2000:12-17) identified the following five stages of reading development:

Stage One. Emergent literacy (Birth to five years)
Stage Two. Early reading (Kindergarten and first grade)
Stage Three. Growing independence (Grades two and three)
Stage Four. Reading to learn (Grade four through to Grade six)
Stage Five. Abstract reading (Grade seven and up)

Gunning (2000:16) maintains that at Stage Five (Grade seven and up) much of the school learning is conveyed by texts that are longer, more complex, and more abstract. Reading interests are more varied and individualized. This indicates that, in developing reading comprehension skills, the learners' age and developmental stage need to be taken into account.

Recent theories on reading comprehension skills advocate metacognition, prior knowledge and active interaction of the reader with the text to achieve meaning or comprehension. The development of reading comprehension skills initially aims at equipping the learners with basic communication skills in order to function adequately in their society. At this level reading is seen as a communication mode. Bouwer (1989:116) maintains that readers gain access to knowledge and world incidents by means of reading books, magazines and newspapers, watching TV, surfing the internet etc. The early development of reading comprehension skills may even begin before formal learning commences at school. The primary schools play an important role in developing basic interpersonal communication skills in the learners in both spoken and written media.

Reading comprehension skills need to be taught. Danielson and La Bonty (1994:65) maintain that instruction in comprehension occupies less than one percent of instructional time in the classroom. They further mention that educators should develop in their learners a thorough understanding of what reading comprehension means, how it can be monitored and what can be done when comprehension fails to occur (Danielson and La Bonty 1994:65). Samuels and Farstrap (1992:188) also hold the view that instruction in reading comprehension involves giving students opportunities to activate their background knowledge, discover information, and construct new understanding.

Current theories on reading comprehension advocate the importance of prior knowledge, that is, the background information that a reader brings to the text. Gunning (2000:204) holds the view that, because comprehension involves relating the unknown to the known, it is important that students become aware of what they know about a subject. Before students read a selection, the teacher should activate students' prior knowledge through questioning. By so doing, the educator will be supporting the development of reading comprehension skills in learners.

The development of reading comprehension skills does not necessarily mean the increase of word knowledge or vocabulary. Aaron and Joshi (1992:53) hold the view that simply increasing the reader's vocabulary size does not by itself automatically guarantee a corresponding improvement in comprehension of sentences and text. Sentences and texts require that the reader go beyond the lexical information present on the printed page. This indicates that reading comprehension skills need to develop towards a higher level of thinking.

Secondary school learners are at the stage where higher levels of reading comprehension skill need to be introduced. According to Bouwer (189:116), reading does not only keep people in touch with their environment, but it also promotes personal development. It enriches vocabulary and logical thinking. Taverner (1990:4) maintains that reading can also be used as a means of learning. Reading constantly subjects the reader's mind to new information requiring him/her to adjust his/her thinking.

This indicates that the learner needs to develop higher order thinking skills for academic learning. Bouwer (1989:116) also mentions that academic progress is frequently the result of reading. Learners use their reading skills to improve their study skills, manage their time, take notes, read with comprehension and to learn to read with analysis of the text in order to form their own interpretations and views. The latter reading comprehension skill reflects CALP which

is characterised by advanced vocabulary, high reading speed, logical, critical reading as well as creative reading.

The demands and challenges in the development of reading comprehension skills of secondary school learners, especially of township secondary school learners, need to be contemplated with reference to the above.

2.2.3 Demands and challenges in the development of reading comprehension skills of township secondary school learners

In most secondary schools, learners are generally found who experience reading comprehension difficulty. However, it is often taken for granted by teachers that, at this level, learners are able to read with comprehension and little is done to support those who aren't. Learners who fail to read with comprehension are often left only with an option of using a dictionary to enhance comprehension. In township secondary school, the standard of reading comprehension might be low for various reasons!

A strong challenge in the development of reading comprehension skills of township secondary school learners is contained in their scholastic background. The scholastic background of most township secondary school learners is often characterised by poor performance. Often the reading comprehension level with which they enter the secondary school, is not yet at the basic level of interpersonal communication. These learners can be referred to as high-risk learners in the development of reading comprehension skills at the higher levels, especially if such skills will not be taught explicitly during Grade 8.

Taverner (1990:5) holds the view that reading is more than seeing words clearly, more than pronouncing words correctly, more than recognizing the meaning of isolated words. Reading requires one to think, feel and imagine. Effective reading is purposeful. This emphasizes yet again that the development of reading comprehension skills should reach a level where the learner functions at the higher levels of thinking. Secondary school learners need to be assisted to begin to develop their cognitive academic language proficiency in order to meet the demands of further and higher education.

The demands and challenges that face educators and learners in township secondary schools frequently include a lack of resources. Lack of books such as fiction, non-fiction and reference books (encyclopaedias and dictionaries) puts the schools in a disadvantaged position. Most

fiction used in the classroom in township secondary schools is not culture-friendly. Some of the information in these books is far removed from the learners' experiential knowledge. Thus, when reading, they experience a problem of how to assimilate the new knowledge with their existing knowledge.

Educators, as facilitators of knowledge, play an important role in the development of reading comprehension skills of learners. In the definitions of reading comprehension mentioned earlier metacognition is one component that is important in enhancing reading comprehension. Irwin (1991:4) defines metacognition as conscious awareness and control of one's own cognitive process. This involves knowing when one does or does not understand something and knowing how to go about achieving a cognitive goal such as successful comprehension or long term recall. Educators need to assist learners in making them aware of their cognitive process and how it can help them with reading comprehension. Educators also need to equip learners with strategies for improving metacognitive skills in order to improve reading comprehension.

According to Aaron and Joshi (1992:176), a metacognitive strategy to teach students to plan, implement and evaluate strategic approaches to reading comprehension is described by Palincsar (1986) as reciprocal teaching. Before starting to read each day, students and their teacher review the skills necessary for successful reading namely, strategic planning, self monitoring of comprehension, and self evaluation. Comprehension monitoring is a very basic metacognitive process. Aaron and Joshi (1992:173) hold the view that if a learner reads and comprehends poorly but is aware of this fact, he/she can take appropriate measures to remedy the comprehension failure. In contrast, a child who does not monitor his/her own comprehension will not take corrective action. Thus, making learners aware of their metacognitive processes and also using them is the challenge that is faced by both educators and learners in the development of reading comprehension of township secondary schools.

According to schema theory, a schema is the background knowledge on which the interpretation of the current text depends. McNeil (1992:19) explains that schemata consists of the reader's concepts, beliefs, expectations and processes - virtually everything from past experiences that is used in making sense of things and actions being present. In reading, schemata are used to make sense of the text; the printed words evoke the reader's experiences, as well as past and potential relationships.

A notable challenge which educators in a township secondary school face is maintaining or enhancing the learners' interest, motivation and self-concept. The researcher has observed that the interest and motivation of most township secondary school learners are often low and this affects their self-concept negatively. On the other hand, educators often lack the motivation, creativity and skills on how to present good quality lessons that can promote learning in an interesting manner. According to Donald *et al.* (1997:115), some teachers are able to express their enthusiasm in such a way that students begin to feel enthusiastic about their work. Others are demoralized, showing little interest in their work. This attitude rubs off onto the students, who are also likely to show little interest in their work. In South Africa the above mentioned factors are the daily experiences of most township secondary schools. Unfortunately there is little research that has been done about this state of affairs. Most facts mentioned above are the personal experiences of the researcher.

2.3 READING COMPREHENSION PROBLEMS

2.3.1 Reading comprehension problems experienced by secondary school learners

Reading comprehension problems experienced by secondary school learners is also viewed from an orthodidactic perspective. The interaction relationship between the educator, learner and content forms the basis for all formal learning. Once this harmonious relationship is disturbed or does not move smoothly then learning problems may arise, of which one is a reading comprehension problem (Van Niekerk 186:189).

When learners learn to read, not everybody succeeds equally well in their reading, especially not in reading comprehension. There are various forms of reading and proficiency in the language of the text that logically affect the understanding of the text. Learners experiencing reading difficulties of any nature will to a large extent experience difficulties with comprehension. Barriers to reading with comprehension may arise from various aspects such as intrinsic factors e.g. the learner's cognitive style, motivation etc. and extrinsic factors such as the learning environment, cultural background, resources and teaching styles.

One of the reading comprehension problems experienced by secondary school learners is an inability to use their metacognitive processes. Educators need to teach learners how to choose appropriate strategies when reading to enhance comprehension. The use of metacognitive process demands the learner to actively interact with the text. Irwin (1991:7) holds the view that comprehension is an active process to which the reader brings his/her individual attitudes, interests, expectations, skills and prior knowledge. Active participation in reading comprehension

enables the learner to monitor his/ her reading. Most secondary school learners who experience reading comprehension problems or difficulty, often fail to monitor their understanding and also lack the skills of how to remedy the problems they encounter during reading, hence comprehension is not achieved.

Some of the secondary school learners experiencing reading comprehension problems find it difficult to elaborate on what they are reading. According to McNeil (1992:72), comprehension can be improved by deep processing of text material or information. One form of deep processing is elaboration, the embellishment of what is read. According to Gunning (2000:222), the term elaboration refers to additional processing of text by the reader which may result in improved comprehension and meaning. Elaboration involves building connections between one's background knowledge and the text or integrating these two sources through manipulating or transforming information. The different types of elaborations include making predictions, integrating the information with prior knowledge, forming mental images, responding effectively and responding with higher-level thinking process.

Another problem secondary school learners experience with reading comprehension is an inability to read critically. According to Burns *et al.* (1992:278), the critical reader must be an active reader, questioning, searching for facts and suspending judgement until he/she has considered all the material. This level of reading is essential for higher-education students but it should be developed as early as Grade 8 onwards. Educators need to teach learners to read critically from early grades by encouraging critical thinking. When reading a story in class, educators can ask, "Do you think this story is real or make-believe? Why do you think that?" (Burns *et al.* 1992:278). According to Aaron and Joshi (1992:167), critical reading is part of comprehension skill, and the development of critical thinking is one of the goals of education.

Most secondary school learners often fail to read creatively. Creative reading, just as critical reading, is one of the higher-order thinking skills. Burns *et al.* (1992:258) maintain that creative reading involves going beyond the material presented by the author. Creative reading requires readers to think as they read, and it also requires them to use their imaginations. Thus educators need to carefully nurture creative reading, trying not to ask only questions that have absolute answers, since this will tend not to encourage the diverse processes characteristic of creative reading.

Reading comprehension further rests on making meaning or interpreting the text at hand. Burns et al. (1992:266) maintain that interpretive reading is reading between the lines or making inferences. It is a process of deriving ideas that are implied rather than directly stated. A text is never fully explicit. Some relationships among events, motivation of characters and other factors are left out of text with the expectation that readers will figure them out on their own. For example, consider the sentence "Our neighbour unlocked the door". An inference one might make is that the instrument used to unlock the door was a key. Thus the ability to draw inferences is a cornerstone of reading competence (Mayer 1998:94). Educators need to develop these reading comprehension skills gradually up to a higher level in order to combat reading comprehension problems.

2.3.2 Reading comprehension problems experienced by township secondary school learners

(1) The township environment

Vacca, Vacca & Gove (1991:65) maintain that the roots of reading begin at home. They also mention that early readers have access to a variety of easy material in the home. Such homes are frequently characterized by one or more parents and older siblings who read regularly.

In South Africa, the researcher has observed that township learners who come from families where parents have a low level of education, early stimulation is very little if not absent. In some families, parents are "educated", meaning that they can read and write, but still they never buy books or read stories to their children. In other families, books are there such as magazines, newspapers or literature books, but these parents still lack the knowledge that they should develop literacy in their children from an early age. Thus ignorance, lack of interest and motivation in reading on the part of the parents is a great barrier in the development of literacy in the early ages of township learners.

Most township secondary school learners often come from a disadvantaged environment. Rude & Oehlkers (1984:332) hold the view that one reason why learners fail to develop the ability or motivation to read by the time they reach adolescence, is the lack of literate role models in their lives.

Gunning (2000:24) also believes that children begin developing literacy long before they enter school. He further highlights that children in high literacy families in their five or six years before

going to school, have already acquired a great deal of insight into the reading-writing process. In South Africa, there are very few learners who have acquired reading and writing before they begin school. Most township learners don't go to a pre-school before they enter school. In some who do go to pre-school, the development of literacy at the age of six still leaves much to be desired. Le Roux (1994:60) points out that empirical research done by (Verhoof 1990:508) has shown that poverty-culture pupils who had received pre-formal education were more motivated to achieve and displayed a better self-concept. He further states that the pre-school education programme is essential for the pre-school child from a culture of poverty because it represents the basis of formal education. The development of literacy in the township schools generally begins when the learners go to school in Grade 1. Some parents begin to be involved in their children's learning when children are at school.

Wood & Dickinson (2000:233) highlight that recent research conducted in the US. Department of Education found that learners at risk for educational failure represent the fastest growing segment in American schools. They point out that people who lack the ability to read and write are severely restricted in their acquisition of knowledge, which becomes evident when observed in the academic settings where learners who lack reading capabilities begin to fail in other areas of learning. In South Africa, especially in the township and rural areas, the picture of the above problem may be even darker if the research is replicated.

(2) The linguistic aspect

Literacy entails the ability to read and write. It involves all the language arts, reading, writing, speaking and listening, with thinking being part of each element (Cooper 1993:6). Bialystok (2001:152) views literacy as the ticket of entry into our society, it is a currency by which social and economic positions are waged and it is the central purpose for early schooling. In some sense children are sent to school to learn to read. In Gauteng township learners are brought up in a multilingual environment where Zulu, Ndebele, Swazi, Tsonga, Tswana and Sepedi languages are being spoken. In some families one parent may be a Zulu speaking person while the other may be speaking Sepedi. Children from such a family may grow up speaking both languages. Most Ndebele and Swazi learners in the Gauteng township areas learn Zulu as their first language. The researcher has observed that neither of these languages is well developed by the time the learners reach secondary school level. Literacy development in Zulu as the first language is often poor due to lack of reading material such as newspapers, magazines and the small number of native Zulu speaking people in the townships in Gauteng especially around the Pretoria area.

It has already been mentioned that language development is a prerequisite in the development of reading comprehension skills. Wood & Dickinson (2000:178) hold the view that the native language or (mother-tongue) plays a critical role in promoting literacy and ultimately in the overall success of Limited Proficiency Learners (LEP). They also mention that literacy instruction in the native language is the most pedagogically sound way to teach learners acquiring English about the relationship between meaning and print in both the native language and English. Research has shown that learners with high levels of literacy proficiency in the first language (L1) perform much better on tasks of academic language proficiency and literacy proficiency in their native language (Wood & Dickinson 2000:178). Most township secondary school learners who experience reading comprehension problems in English experience overall literacy problems. Their level of English language development is often inadequate. They usually also fail to express themselves adequately, both in spoken language and in written language.

The limited use of English language by township learners is attributed to the following: These learners acquire English as a second language under an entirely different set of conditions: he/she learners English at an older age, at least pre-primary or primary age. Learning takes place within a group of the formal environment of the classroom. The introduction to English is largely through the printed word, and learning the rules of the language is primarily mechanical. Moreover, adequate and appropriate adult models might be lacking, since teachers in black schools are themselves often limited in their command of English (Le Roux 1993:155). Thus communication in English for township learners is still a problem in their everyday environment due to the above-mentioned factors.

Another problem that aggravates reading comprehension problems is the English linguistic components that differ from those of African languages. This linguistic problem makes it difficult for township learners to master these components since they don't form part of their daily experiential world.

Bialystok (2001:154) holds the view that learning to read is the acquisition of culture, and is therefore a central part of children's socialization from the earliest encounters with text. Thus the family context of language use has left no doubt that family support and early exposure have a profound influence on the child's development of literacy skills. Literacy skills are the building blocks of language. Language development is a prerequisite in the development of reading comprehension skills.

2.4 COMPREHENSION OF TEXT IN THE SECOND LANGUAGE

2.4.1 Introduction

One of the barriers to reading comprehension is the use of a second language. Most township secondary school learners learn through English, which is their second language. Gregory (1996:7) highlights that in pedagogical discussions, learning to read has long been considered a mental or interpersonal process. Cook (2001:89) maintains that the cognitive process of reading is restricted in the second language. Reading, like speaking, occurs in a context rather than in the sentences themselves, but is derived from the previous knowledge stored in the reader's mind and the processes through which the reader tackles it. The background knowledge into which a text fits, sometimes called schema, plays a large role in how it is read. Experience has shown that the low level of English language development attained by most township secondary school learners is one of the greatest barriers to reading comprehension.

2.4.2 Development of reading comprehension skills in a second language as the language of learning and teaching (LoLT)

The development of English language proficiency as the language of learning and teaching is a pre-requisite in the development of reading comprehension skills for academic purposes, by township secondary school learners in South Africa. Bialystok (2001:175) maintains that: "for children in school, reading is the primary source of knowledge transmission and expression, and if this exchange takes place in a weaker language or depends on compromised skills, the consequences for children's education are obvious. Vacca *et al.* (1991:50) believe that meaningless pronunciation drills should be avoided when developing the second language. All instruction and practice should provide opportunities for natural, meaningful communication. If learners feel comfortable and confident in the use of a second language then they will be actively involved when interacting with the reading text. They will also be able to use their cognitive process in order to create meaning and sense of what they are reading.

The English language is generally introduced as early as Grade 2 level in the township primary schools. Township learners are exposed to English through formal learning at school and media such as TV, radio, newspapers, books etc. Learners from township secondary schools don't have much opportunity to learn the English language in an informal way. Wallace, Charles and Temple (2001:76) hold the view that among factors which influence a person's ability to learn a second language, are the age of acquisition, the role of the language, and the exposure to the second language. The development of basic communication skills in the second language or

language of learning and teaching is imperative in enhancing the development of reading comprehension skills.

Cook (1991:3) holds the view that one crucial component in second language learning is what students bring with them into the classroom. Second language learners often have fully formed personalities and minds when they start learning the second language and these have a profound effect on their ways of learning and how successful they are. The development of English as the language of learning and teaching in South Africa is important in enabling learners to achieve comprehension when they assimilate new knowledge with their prior knowledge.

The development of basic communication skills in the language of learning and teaching will facilitate the development of reading comprehension skills. The problem township secondary school learners experience is their inability to use English in their daily lives. Donald *et al.* (1997:165) suggest that one way of developing the second language proficiency of disadvantaged learners is by devising opportunities for active language communication in the classroom - not just educator talk and passive learner response (Mills and Mills 1998). This is particularly important in helping learners to grow in language competence and confidence in their own and second language development. According to Gunning (2002:2), reading is very much a language activity and, ultimately, our ability to read is limited by our language skills. Without language there actually would be no reading. The development and the enrichment of English as the language of learning and teaching is important in enhancing reading comprehension skills.

Most township secondary school learners are often afraid to communicate in English since they feel inadequate and incompetent. Bond, Tinker & Wasson (1979:105) highlight that learners from homes in which a language other than English is spoken may know little or no English. They may be unable to understand or to speak English well enough to participate in ordinary classroom activities. They further mention that the reading difficulties of learners who are learning in English as a second language tend to be due to their inability to understand or speak English. Educators should therefore encourage learners to use the English language without any fear of failure since this fear is detrimental to the development of the English language and reading comprehension skills. Wallace *et al.* (2000:43) maintain that anxiety is another reaction to academic stress and failure in the learning situation. Anxious learners need reassurance that they can learn the second language by the very act of communicating in it.

Motivation is one factor that plays an important role in the learning of the second language. According to Cook (2000:115), learners will find it difficult to learn a second language if they have neither instrumental nor integrative motivation as in the case of school language teaching. Instrumental motivation means learning the language for an ulterior motive unrelated to its use by the native speakers - to pass an examination, to get a certain kind of job, and so on. The integrative motivation reflects whether the learners identify with the target culture and people in some sense, or reject them. Once learners realize that reading contributes to their personal development, they will be motivated to read. Samuels and Farstrap (1992:181) hold the view that the reading environment is optimum when learners are enthusiastic about reading and have an I...can...do...it attitude. The educator's ability to help learners develop this enthusiasm depends on the presence of two factors: success and usefulness of reading. The educator can provide learners with opportunities for success by giving them reading instruction that is within their zone of proximal development.

To gain some insight into the process of comprehension, Gunning (2000:199) explains it by using the following paragraph as to how one goes about comprehending it.

> A hoatzin has a clever way of escaping from its enemies.
> It generally builds its home in a branch that extends over a swamp or stream.
> If an enemy approaches, the hoatzin plunges into the water below.
> Once the coast is clear, it uses its finger like claws to climb back up the tree.
> Hoatzin are born with claws on their wings but lose the claws as they get older.

Gunning (2000:200) explains that for comprehension to take place, one would rely heavily on the knowledge one brings to the text. One definition of comprehension states that, comprehension is the process of building connection between what we know and what we don't know. He further highlights that it is currently theorized that our knowledge is packaged into units known as schemata. Comprehension therefore primarily involves activating or constructing a schema that accounts for the elements in a text.

In constructing the meaning of the selection on the hoatzin, one has to use various processes to activate the appropriate schema and fill in the slots or gaps in the story. By reading the first sentence assuming that the learner did not know what a hoatzin was, he/she may have made reasoned prediction that it was some kind of animal. The information in the first sentence was

probably enough to activate his/her animal - survival - from - enemies schema. Learners for whom English is their first language will find it easy to predict that a hoatzin is an animal trying to survive from its enemies. Township secondary school learners who are using English as a second language and who lack a lot of English vocabulary words will find it difficult to make such a prediction. Although these learners have a schema on animals and their survival, this schema has not been developed in English.

To understand the above paragraph, the whole paragraph must be seen as a "whole" and learners need to comprehend the incoming written or spoken language as a whole. To understand one word in the sentence which is difficult does not lead to comprehension. Comprehension of language of this whole paragraph will lead to understanding or comprehension of the text. Hence the use of mother-tongue to explain what this paragraph is all about, will activate the schema on animals and their dangers to learners. Once these schemas are activated then learners are in a position to connect what they know with the new information they are reading to construct meaning. It will also help them to infer and to draw conclusions on how the hoatzin is able to survive from its enemies. Thus a technique that would take the learners' level of second language knowledge and the barriers affecting the development of reading comprehension skills into account will be vitally important especially for township secondary school learners.

2.4.3 Barriers affecting the development of reading comprehension in the language of learning and teaching

One of the barriers in the development of reading comprehension skills is learning through the second language. Wood (1994:113) argues that, since second language learners have an extensive base of prior knowledge that has not been developed in English and the cultural traditions of English, special attention needs to be given to their prior knowledge when developing reading comprehension skills. He further emphasizes that learners learn, understand and remember more when their background knowledge is activated and organized prior to engaging in a reading task. Township secondary school learners' background information is in their first language. Second language text hampers the processing of new information. Thus learners may fail to comprehend what they are reading in their textbooks and worksheets.

Second language also negatively affects the development of the cognitive structures. Samuels and Farstrap (1992:50) describe language as the medium of human learning, which makes

human learning quite different from the learning process of other species. They also maintain that language facilitates linguistic and cognitive development as a simultaneous and integrated process. Thus, when language and thinking develop, concepts and schemata are built. Inadequate second language development negatively affects the active involvement of learners with content and written text both cognitively and a affectively in creating meaning from what they are reading. Wallace *et al.* (2000:68) remind us that reading is language expressed in written form. The ability to express and receive thoughts through language, is therefore, fundamental to being able to read and a second language as LoLT may impact directly on this ability.

Another barrier to the development of reading comprehension skills in a second language for learning and teaching is the learners' unwillingness to meet the demands of learning the second language itself. Cook (2000:126) maintains that strategies employed by people known to be good at second language learning actually reveal that second language learning can be very demanding. She points out that good language learners persevere inspite of those emotional barriers. Township secondary school learners generally do not want to make the effort to improve their second language proficiency on their own. The learner's willingness to learn and to improve himself/herself far surpasses what the teacher can do in class. Cook (2000:129) further highlights that the learner's involvement, the learner's strategies and the learner's ability to go his/her own way is what counts, regardless of what the teacher is trying to do.

Some of the external barriers that affect the development of reading comprehension skills are related to the poor learning environment most township learners find themselves in. These learners usually come from families and schools that lack emotional support as far as learning is concerned. The school alone may not be in the position to improve reading comprehension skills without the help of parents. Alley (1994:89) mentions that some research studies indicated that variables such as parental occupation and education, home and literacy resources and interactions between parent and child concerning literacy and language could exert an influence on the performance of children in reading.

The researcher has observed that the number of learners experiencing reading comprehension problems is high in township secondary schools hence the high failure rate in matric. Recently the Deputy Minister of Education Mr Mangena mentioned that the pass rate of mathematics Higher Grade in black schools is less than one percent due to poor English knowledge since the learners learn Maths in English. Again lack of support programmes makes it difficult to help

these learners. On the other hand, since learners experiencing reading comprehension problems are many, they don't see any need to improve themselves. To them, the inability to read with comprehension seems to be a norm that should be accepted and there is nothing to be done about.

The challenge is therefore how to help township secondary school learners to improve their reading comprehension skills. In terms of all the barriers mentioned above that hamper the development of reading comprehension skills the challenge is therefore which technique can be used in order to improve the development of reading comprehension skills of township secondary school learners.

2.4.4 Challenges faced by township secondary school learners in the development of reading comprehension skills in the LoLT

One of the challenges in the development of reading comprehension skills in the township secondary school is the poor culture of learning. According to Donald *et al* (1997:87), culture refers to the atmosphere or "ethos" including the values, norms and benefits which are reflected in patterns of interaction. Culture also includes the written and unwritten rules (norm) that determine the way things are done. Developing a culture of learning and teaching in a school is a pre-requisite for the development of reading comprehension skills. When a positive learning atmosphere prevails at school and in the classroom, learners experiencing any learning problem will feel comfortable when support is given even if it is after normal school periods. The culture of learning and teaching promotes a healthy learning environment for learners and also motivates them to achieve. The poor culture of learning has a negative effect on the overall learning of township secondary school learners. Learners often become demotivated, are reluctant to participate in class activities, absenteeism is very high, they are bored and don't want to put effort into their learning.

Another challenge in the development of reading comprehension skills is the poor scholastic performance of most township secondary school learners. These learners lag so much behind the required level of performance in almost all the learning areas and the challenge is how to improve their poor performance. The challenge faced by township secondary school learners is to discover what are the intrinsic barriers obstructing them from developing reading comprehension skills in the language of learning and teaching? One of the intrinsic barriers is their poor development of the English language. To overcome this barrier educators facilitating the development of reading comprehension skills, need to come down to the level of the

learners. By this one means that, if possible, the mother-tongue may be used to explain concepts in the process of comprehension. This will also help learners who are engaged in peer reading to communicate in the mother-tongue in order to participate actively when reading a text. Mother-tongue use will help in the activation of prior knowledge which is critical in constructing meaning on the new information that is being read.

Language enrichment is another challenge that township secondary school face in the development of reading comprehension skills. A holistic approach in the teaching of English language will be necessary in order to improve reading comprehension. Cook (2000:66) maintains that one main issue is understanding the meaning of words. The development of learners' vocabulary in English is one of the basics in the development of reading comprehension skills. Cooper (1993:192) holds the view that as readers develop vocabulary, they learn two aspects about words: recognition and meaning. Unfortunately this is not the case with township secondary school learners since English is not their first language. Township secondary school learners may recognize a word but fail to pronounce it or they may be able to read or decode that word but still without understanding its meaning. Thus recognition and meaning vocabulary with township learners do not develop simultaneously as they learn to read and write. Vocabulary knowledge which is a reflection of an individual's knowledge and concepts in a particular area cannot be taken for granted as with L1 learners when reading comprehension is being developed. Undivided attention must be given to text analysis alone in order to help township secondary school learners to develop comprehension skills when learning through the second language. A support programme is needed to help these learners in developing English language comprehension which is imperative in developing reading comprehension skills.

Gunning (2000:150) identified seven principles in developing vocabulary.

- Building experiential background.
  Is to provide students with a variety of rich experiences. These experiences might involve taking children to an apple orchard, supermarket, zoo etc.
- Relating vocabulary to background.
  It is essential to relate new words to experiences that students may have had.
- Building relationships.
  The third principle of developing vocabulary is showing how new words are related to each other.

- Developing depth in meaning.
  The most frequent method of teaching new words is to define them.
- Presenting several exposures.
  Frequent exposure or repetition of vocabulary is essential to comprehension because of limitations in attention and memory.
- Creating an interest in words.
  Generating interest in words can have a significant impact upon vocabulary development.
- Teaching students how to learn new words.
  The seventh and the last principle of vocabulary development is promoting independent word-learning skills.

Educators as facilitators of knowledge need to be equipped with reading comprehension instruction skills in order to help learners with reading comprehension difficulty. The challenge is how to train educators in facilitating reading comprehension skills in such a way that the instruction is adapted to the needs of the learners. The empowerment of educators with reading comprehension skills may help in the establishment of a support programme aiming at the improvement of reading comprehension as well as the learning of other subjects. To equip educators with reading skills it will require that those skills are not sophisticated skills that may need expert knowledge in order to train them. Organising, for example, English language educators for training on reading comprehension and how to implement this in the classroom is the first step towards the facilitation of reading comprehension skills of township secondary school learners.

2.5 LEARNING SUPPORT FOR READING COMPREHENSION DEVELOPMENT IN THE SECONDARY SCHOOL

2.5.1 What is learning support?

Learning support can be described as an intervention approach whereby strategies to improve learning are implemented. Learners who experience learning difficulties such as reading comprehension difficulties and who fail to benefit sufficiently from classroom lessons need support.

Baskwill and Whitman (1997:8) highlight the following underlying principles of learner support:

- Learners learn best in a safe, supportive environment that encourages risk taking.
- Learners learn best by doing.
- Learners learn best when they can establish their own purposes for learning.
- Learners learn best when the language is kept meaningful and whole.
- Learners learn best when people around them demonstrate a love for learning.

Learning support provides learners with a positive learning environment that is characterised by trust. Wallace *et al.* (2000:331) believe that the key stone for success with adolescent learners with reading problems is the establishment of trust. Without trust, learners do not view the educator or anyone in authority as a credible source of information. Learning support creates a positive atmosphere conducive to learning where struggling learners can learn to improve their learning skills.

Learning support is a holistic approach in the improvement of learning as a whole. In other words, learning support is the assistance given to learners experiencing learning problems or learning difficulties to come to a point where they realize the source of the problem and how to overcome it. If learners do not realize why something is difficult to them or why they go wrong and how to correct that difficulty as independently as possible, then these learners have not received appropriate support.

Learning support aims at promoting self-regulated learning in learners. Schunk & Zimmerman (1998:1) hold the view that self-regulated learners, whether historic or contemporary, are distinguished by their view of academic learning as something they do for themselves rather than as something that is done to or for them. Learning support helps learners to acquire skills that will enable them to initiate their learning once they have mastered such skills.

On the other hand, remedial education differs from learning support. The term remedial from the Oxford Dictionary compiled by Thompson (2000:765) comes from the word remedy. To remedy means giving medical treatment or counteracting or removing anything undesirable. Richeck et al (1996:293) point out that the term remediation was used to describe the instruction of struggling readers. This term suggests that, just like a physician, a remedy could be applied to an already existing condition. Remedial education aims at correcting or remedying the wrong the learner makes during his/her learning. Remedial education can be seen as concerned with the

"parts" rather than the "whole". Township secondary schools lack holistic learning support programmes that would help learners to overcome their learning difficulty such as a reading comprehension problem.

Baskwill and Whitman (1997:7) believe that the most important aim of learner support is to help all learners to see themselves as effective readers who can become independent readers. A further goal of support is to help learners develop the ability to use reading strategies independently in a balanced and integrated manner.

2.5.2 Learning support and the challenges in the township secondary schools

Most township secondary schools don't have learning support programmes. The challenge facing these schools is how to establish support services and sustain them in order to develop reading comprehension skills of learners. Allington (2001:111) maintains that the best evidence available indicates that addressing the needs of struggling readers requires a comprehensive and sustained intervention effort. He believes that each teacher has a professional responsibility to continue to become more expert with every year of teaching to support the professional development. Most township secondary school educators lack skills and knowledge in the development of reading comprehension skills. Empowering educators with knowledge and strategies in developing reading comprehension is crucial in establishing a reading support programme in township secondary schools.

Another challenge in the development of learning support in township secondary schools is lack of finances. The researcher has observed that most township secondary school learners come from a disadvantaged family background. Parents often find it difficult to pay school fees since most of them are not working. The schools often depend on the funds offered by the government which are not sufficient to establish a learning support programme. Lack of innovative skills such as fund raising further hampers the establishment of support in most township secondary schools. Allington (2000:117) maintains that, if schools are to develop a high level of reading and writing proficiency in virtually all learners, then funding schools so that class sizes of twenty or so are common, would be a broad first step.

Another challenge in the development of learning support in the township secondary schools is lack of parental involvement. Most parents often fail to take ownership of the schools where their children are attending. Donald *et al.*(1997:161) mention that developing a sense of ownership of the school and its goals in learners, parents and other members of the community, is crucial in

making a school a positive experience for learning. If parents are involved and also take ownership of their schools they will be in a position to assist in the establishment of learning support programmes. Parents are also not involved in their children's learning. Lack of emotional support from the parents puts learners in a disadvantaged position as far as learning and the development of reading comprehension skills are concerned.

The distance between the school and the home of most township secondary school learners is another challenge in the provision of learning support after school hours. Learners have to walk long distances back to their homes in informal settlements areas. These learners walk long distances because they don't have money for transport. The distance between the home and school of most township secondary school learners has a negative impact on the establishment of learning support. If learning support is to be implemented after school hours, most learners who stay far away from school may not be able to attend such support progammes.

Over-crowded classes present another challenge in the establishment of learning support in township secondary schools. Overcrowded classes hamper effective learning in the classroom. Allington (2001:116) believes that when teachers work under conditions of low autonomy they do not seem to develop the very expertise that will be necessary to teach expertly. Under these conditions teachers simply follow the rules and offer a standard form of low level of instruction. Thus having all these challenges in mind, therefore, how learning support for the development of reading comprehension skills of township secondary school learners can be established.

2.5.3 Learning support for the development of reading comprehension skills of township secondary school learners

The learning support that should be implemented in the township secondary school should be fit for the use in a group of learners. By this we mean that the technique should not target individual learners. The technique should not be a sophisticated method that needs expert knowledge in order to be successfully implemented. Sophisticated methods are costly and township schools may not be able to finance them. The technique should be feasible in such a way that educators will be able to improve the learning of other subjects which will lead to the overall improvement of the learning of township secondary school learners.

According to Bond *et al.* (1979:105), the educational problems in improving reading growth of learners with cultural and language differences belong to the developmental reading program rather than to the remedial program. The educational program of these learners should be

adjusted to meet their individual needs. Learning support that needs to be developed in order to address learning difficulties such as reading comprehension difficulties should be learner centred. The support programme should take the learners' level of development and the learners' background knowledge into account. This will enable learners to develop at their own pace. Each learner needs to experience success as an individual and feel no pressure to perform beyond his/her capabilities. High expectations from either educators or parents of the learner may have a negative impact in helping struggling learners to develop reading comprehension skills. Thus the commitment of the learner, educator and parent is vitally important in the development of reading comprehension skills. The support rendered should be adapted to the learner's needs.

Allington (2001:117) believes that instruction time for support needs to be extended. Extended time should be part of the school plan to meet the instruction needs of struggling readers. He also suggests that after school reading buddies can be formed where ten or fifteen minutes of reading can be introduced in order to help learners with reading comprehension difficulties. Group work is another way learners experiencing reading comprehension difficulties can be assisted. In other words, a support programme that can be used in groups of learners is recommended for improving reading skills of township secondary school learners. Group work has a potential to address as many learners as possible, rather than individualized reading programmes. Group work can also promote cooperative learning amongst the learners. Learner participation and involvement needs to be promoted so that learners can realize their own potential and also use it to the optimum level. Motivation, encouragement and support on the part of educators will be necessary in order to create a positive learning atmosphere among the groups.

Although the establishment of a support programme will need the commitment of parents, educator, learners and the availability of resources such as books, magazines, newspapers, TV etc, if there is no appropriate technique that can be used in developing reading comprehension skills having all these resources may be of little help. The implementation of a technique that is feasible, and has the potential of equipping township secondary school learners with reading comprehension skills is more than welcome. The technique that will be used in the development of reading comprehension skills will be the imaging technique.

2.6 IMAGING FOR READING COMPREHENSION

2.6.1 Introduction

The term imaging according to the mini Oxford Dictionary compiled by Howkins, Delahunty & McDonald (1998:313) means to form pictures or ideas in your mind. Imaging in reading is a technique that advocates the creation of pictures or images in the mind while reading, in order to enhance comprehension. According to the Gestalt theory, imaging is the ability to create imaged wholes. The creation of the imaged whole is seen as a critical factor in oral or written language comprehension (Bell 1991:246).

Language comprehension is the ability to connect to and interpret both oral and written language. It is the ability to recall facts, get the main idea, make inferences, draw conclusions, predict facts and get the evaluation (Bell 1991:246). The inability to comprehend language as a whole may be associated with what is called language comprehension disorder. Bell (1991:246) describes language comprehension as an ability underlying the reading process, which goes beyond the use of context, phonological processing, word recognition, vocabulary, prior knowledge and background experiences. He further mentions that learners who experience weak gestalt imagery often process “parts” rather than “wholes”, hence reading comprehension is not achieved. Imaging entails cognition as well as affective aspects in helping the reader to read with comprehension. The theory on imaging for reading will now be discussed.

2.6.2 Theory on imaging

Imaging theory dates back to the times of Aristotle. Aristotle also believed in the formation of pictures in the mind. He once stated that “It is impossible even to think without a mental picture” (Bell1991:247). The imaging technique is embedded in the Gestalt theory. The gestalt theory advocates the “whole” rather than the “parts”. Gestalt imagery is the ability to create an imaged whole. The creation of the imaged whole is a prerequisite to reading comprehension. Learners who experience weak gestalt imagery often processes “parts” rather than “wholes”, hence reading comprehension is not achieved.

According to Esrock (1994:24), (Ingarden) suggests that imaging or visualization occurs during a phase of aesthetic experience in which the reader is apprehending the “concretization” of the literary text. A concretization is a flashing out of the text that brings the fictional work into a synthetic, quasi - sensory immediacy before the reader. This means that the reader brings into actuality what is potentially contained in the text - that is, held in readiness in order to enhance comprehension.

According to Bell (1991:246) imagery is a sensory link. Gestalt imagery connects us to incoming language and links us to and from prior knowledge, accesses background experience, establishes vocabulary and creates and stores information in both long and short term memory. Imaging is also characterized as picture theory or a pictorialist's mode. According to such a model the production and use of visual imagery involves cognitive operations that are specific to picture - like representations. McNeil (1992:73) maintains that comprehension generally increases when readers create images from the information which they get while reading. The key to effective image - making seems to lie in forming mental pictures of persons, events or information.

According to Gunning (2000:228), the term imaging refers to creating sensory representations of items in text. A dual-coding theory holds the view that information is coded in two or dual ways, that is, verbally and non-verbally. Verbal processing seems especially well suited to abstract and sequential text and tends to be characterized by order, logic and organization. Non-verbal processing or imaging tends to be more holistic, less bound by constraints such as logic, and better for dealing with concrete aspects of reality (Gunning 2000:228). These systems, that is, the verbal and non-verbal, can perform independently, in parallel or in a complementary, integrated fashion in which verbal input can stimulate the creation of a non-verbal image and a non-verbal image can stimulate a verbal response (Gambrella & Javitz, 1993, Sadoski & Paivio 1994). According to Gunning (2000:228), creating mental images has been shown to have many benefits. It promotes the use of prior knowledge, and improves the ability to make predictions and draw inferences. In addition to overall comprehension, imaging aids retention. The imaging technique certainly appears to be a holistic approach that can be used as a support in the development of reading comprehension skills of township secondary school learners.

2.6.3 The imaging technique as a holistic approach in the development of reading comprehension skills of township secondary school learners

The imaging technique is one technique that has been identified which may be used as a support in the development of reading comprehension skills. The aim of using imaging technique for reading is to help learners who experience reading comprehension problems to develop and to improve their comprehension skills and memory for content. Comprehension is the main purpose of reading. Since reading is the process of constructing meaning from print, comprehension is therefore a constructive, interactive process involving three factors: the

reader, the text and the context in which the text is read. For comprehension to take place, the interaction among the three factors must be taken into consideration (Gunning 2000:198).

Township secondary school learners often experience reading comprehension problems. The reading comprehension problems generally arise from various factors such as internal factors, that is, within the individual learner and also from external factors, that is, from the environment. Some of the factors that have a negative impact on the development of reading comprehension skills of township secondary school learners are the poor scholastic background, poor reading skills, lack of early stimulation in reading, poor reading comprehension instruction, lack of books, disadvantaged environment, the use of English as the language of learning and teaching etc. The purpose of this study is to examine imaging as a holistic approach in the development of reading comprehension skills of township secondary school learners. Imaging is one constructive method that supports the development of reading comprehension but its technique should be adapted to meet the needs of particular learners (Pretorius & Bornes 2002:197).

According to Burns *et al.* (1992:277), guided imagery can be used to help learners to read with comprehension. Guided imagery can be used before reading, during reading and after reading. Guided imagery before a story can help readers to draw on their past experiences to imaged events, places and things in a story. Creating such images before reading has been shown to produce better literal comprehension than produced by creating the images after reading. Gunning (2000:222) also hold the view that creating images is a powerful strategy for enhancing both comprehension and memory of text.

The advocates of the imaging technique view language comprehension as a critical factor to reading comprehension. Language comprehension is seen as the critical factor in enhancing comprehension. Bell (1991:253) holds the view that although an individual may experience an impaired phonological processing and decoding, weak oral vocabulary, and reduced prior knowledge and background of experience may contribute to weak imaging, these factors alone do not appear to be casual. In other words these factors mentioned above do not cause an individual reader to read without comprehension. He further points out that good decoders are not able to comprehend efficiently. Thus how can imagery help a learner to read with comprehension?

Bell (1991:253) maintains that an individual or learner can have good imagery and good comprehension only if he/she can decode enough words critical to the integration and

processing of the gestalt. This indicates that the learner does not need to understand every word in a sentence in order to form an imaged whole. For learners to form the gestalt imagery when reading they only need to decode enough words critical to imaging in order to process the gestalt imagery which leads to comprehension.

Imaging technique helps the learner to form gestalt imagery which is a sensory link that connects the learner or reader to incoming language. Gestalt imagery also connects the reader or learner to and from prior knowledge, accesses background experience, establishes vocabulary and creates and stores information in both long and short term memory. During the process of imaging the learner stays focus, pays attention, concentrates and it positions him/her within the text in making the fictional world concrete. Above all, imaging enhances memory.

Most township secondary school learners are often poor decoders and also lack vocabulary. Weak vocabulary may interfere with gestalt imagery only if the unknown words are critical to the whole or are critical to the processing of the gestalt. During the reading, process if the learner encounters new words that are not familiar to him/her and those words are not critical to the processing of gestalt, then the imaged concept - context - may serve to stimulate vocabulary development. Bell (1991:253) believes that stimulating images for vocabulary aids in the storage and retrieval of meaning for isolated words. The development of gestalt imagery can be developed by direct stimulation requiring specific questioning. The imaging technique also promotes the active participation of the learner where the learner uses his/her cognitive processes and affect in order to construct meaning and to enhance comprehension.

Imaging should be taught directly. The use of metacognitive processes during reading enhances comprehension. During the implementation of the imaging technique learners should be helped to develop the metacognitive skills of visual imagery as a strategy to improve reading comprehension. Gunning (2000:229) highlights that, when teaching learners to create images, one should start with single sentences and then move to short paragraphs and later longer pieces. Another way of using imagery is to have learners to draw pictures of concepts or topics rather than use of words to describe or talk. This works especially well with learners who are still learning English or other learners who might have difficulty expressing their ideas through words alone. This technique can benefit most township secondary school learners since they have difficulty expressing themselves in English and have a limited vocabulary in the English language.

According to Pretorius & Barnes (2002:204), effective imaging does not come automatically. The skill needs to be acquired and practised systematically in accordance with the learners' abilities as well as the demands of the tasks. During guided imagery learners are asked to relax, to close their eyes and to allow themselves to form images or pictures in their minds about what the educator is telling them or reading to them. The educator may use a short narrative and learners should picture all the events mentioned in the narrative. The use of the senses is imperative in creating the subjective meaning about what one is imaging. After the narrative, learners are asked to open their eyes and to discuss their pictures. Learners may say what they saw, how they felt and this allows deep processing of what was said when they were creating pictures and constructing meanings about the text.

Gunning (2000:229), indicates that imaging should follow the following guidelines:

- Learners create images based on their background. Images will differ from one learner to another.
- Educators may not alter the learners' images.
- Learners should be given sufficient time to form images.
- Educators should allow the learners to elaborate on or expand their images through careful questioning. "What did the truck look like? Was it old or new? What model was it? What colour? etc."

The illustration given above is the basis of the imaging technique in enhancing comprehension and memory. Later, learners are taught how to form images or pictures in their minds while reading. Blachowicz (2001:140), indicates that many researchers have found this ongoing mental activity, of (forming pictures) a hallmark of good readers. Imaging as a holistic approach in the development of reading comprehension skills has the following advantages:

- It can be used in a group of learners.
- Cognitive strategies are used and they enhance comprehension.
- It helps learners to assimilate their prior knowledge with the new information to create meaning and comprehension.
- Imaging enhances memory.
- Imaging helps learners to interact with the text in their own individual way.
- Imaging helps learners to use all their senses to create meaning on the text.
- Imaging helps learners to elaborate, to infer and to monitor their reading.
- Imaging enhances involvement.

- Imaging advocates the “whole” rather than “parts”.
- Relaxation is the key to imaging.

2.6.4 The imaging technique as a support in the improvement of learning of other subjects.

Most learners who experience a reading comprehension problem often perform poorly in other subjects. They are often demotivated, passive and have a negative self-concept or low self-esteem. The imaging technique is a creative technique that enhances active participation on the part of the learners and enables them to create pictures in their minds about what they are reading. Once learners are taught how to form images, how to activate their prior knowledge and to connect it with the new knowledge in order to construct meaning, learners will be in a position to use these reading comprehension skills to learn other subjects. The imaging technique helps learners to be attentive, to concentrate and to monitor their reading. It also helps them to question themselves when they don’t understand and to draw inferences on what they are reading. Learners can share their views or pictures they have formed which enhances group participation. Learners may also use their mother-tongue in order to express and enhance comprehension.

The improvement of reading comprehension skills is the key to the improvement of the learning of other subjects. The ability to comprehend is a foundation for successful learning. Imaging enhances active individual participation with the reading of the text. Gunning (2000:229) points out that imaging is also used as pictorial summary. When learners are learning a content subject, the use of pictorial summaries such as mind maps may help learners to understand the content subject much better. By means of pictorial drawings learners perceive a particular chapter in a holistic way. Imaging advocates the whole rather than the “parts”. Bell (1991:247) maintains that the gestalt is the entity from which the interpretive skills of identifying the main idea, inferring, concluding, predicting, extending and evaluating can be processed. The perception of the whole is the prerequisite to the creation of meaning and comprehension. The imaging technique can therefore improve the learning of other subjects.

Gunning (2000:227) further maintains that learners who are good decoders but poor comprehenders have problems with all kinds of comprehension, but have the most difficulty making inferences. For learners to understand the content of other subjects they need to base their inferences on several pieces of textual or background information. Some learners choose the wrong information on which to base their inferences, and others do not use the text at all.

They over rely on prior knowledge or do not recall or use sufficient petinent facts from the text to make valid inferences. Inferencing is a cognitive skill that can be used in all areas of learning. Learners should be encouraged to apply inferences in class discussions and when reading in the content areas. The educator should also emphasize that learners need to go beyond facts and details in order to make inferences. Thus imaging can be used as support in the learning of other subjects.

2.6.5 CONCLUSION

The development of reading comprehension skills is vitally important in enhancing learning. Most township secondary school learners come from a disadvantaged environment and their learning is hampered by various factors. Poor scholastic background, poor early stimulation, poor culture of learning, the use of English as the language of learning and teaching, language problems etc. negatively affect their learning as a whole. The use of the imaging technique as a support in the development of reading comprehension skills of township secondary school learners is seen as a key to effective learning. The imaging technique will be adapted to the needs of township secondary school learners in order to be effective in helping the learners to overcome their reading comprehension problems. In order to overcome the barriers obstructing the mastering of the imaging technique and to face the challenges in the implementation of the imaging technique one has to adapt this technique to the needs of the learners. Discussion and reflection on what has been done during each lesson with the learners may lead to successful use of the imaging technique as a support in the development of reading comprehension and the learning of other subjects. Imaging aims at helping learners to be self-regulated learners in their learning once they have developed reading comprehension skills.

CHAPTER THREE

EMPIRICAL EXAMINATION AND ADAPTATION OF THE IMAGING TECHNIQUE AS A SUPPORT IN DEVELOPING READING COMPREHENSION SKILLS OF TOWNSHIP SECONDARY SCHOOL LEARNERS

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CHAPTER THREE

EMPIRICAL EXAMINATION AND ADAPTATION OF THE IMAGING TECHNIQUE AS A SUPPORT IN DEVELOPING READING COMPREHENSION SKILLS OF SECONDARY SCHOOL LEARNERS

3.1 INTRODUCTION

The development of reading comprehension skills of secondary school learners is crucial in promoting the overall learning at school. Most learners from the historically disadvantaged environment experience problems in reading comprehension and the use of English as a language of learning and teaching. Lack of English programmes for the development of English language and reading comprehension skills in township secondary schools puts learners in a disadvantaged position.

The main purpose of this research is to examine how should the imaging technique be adapted as a learning support in the development of the reading comprehension skills of township secondary school learners. The extrinsic barriers obstructing the mastery of the imaging technique will be investigated in order to adapt the technique for optimum use in developing the reading comprehension skills of township secondary school learners. The nature of difficulties experienced by the researcher during the implementation of the imaging technique will be examined as representing extrinsic barriers to learning which confronted these learners. The secondary aim of this study is to use the imaging technique effectively as a support in developing township secondary school learners' reading comprehension skills, thereby to improve the learning of other subjects. The research will expectedly bring to light to what extent poor literacy development, the disadvantaged environment, the use of English as the language of learning and teaching, and language comprehension difficulties impact on the mastery of the imaging technique by township secondary schools for the development of their reading comprehension skills.

The long-term aim of the research is to use this imaging technique effectively as a support in mainstream township secondary schools in order to develop the reading comprehension skills of the learners and to improve their overall learning and performance.

3.2 RESEARCH PLAN

3.2.1 Introduction

No research looking at the use of the imaging technique as a support in developing reading comprehension skills of township secondary school learners in South Africa has been found. Empirical design research will be used in the implementation of the imaging technique. Prof Erik De Korte from the University of Leuven in Belgium pointed out in 2001 during a lecture at the University of Pretoria that empirical design research is of value in trying to seek solutions to problems experienced by learners in developing countries. The empirical design research model has been selected so that the researcher may be able to study the barriers obstructing township secondary school learners in mastering the imaging technique and examine in a practical way how to adapt this technique in order to enhance reading comprehension of the particular group of learners.

This research study is mainly qualitative in nature, seeking to analyse and understand the process taking place in each session. Wiersma (1991:32) holds the view that in qualitative research, the researcher attempts to explain the phenomenon under study, including the variance, through description of logical interpretation of what has been observed. According to Bryman (2001:20), qualitative research is concerned with the generation rather than the testing of theories. The reflections on each session will be analysed qualitatively. Wiersma (1991:85) maintains that qualitative data analysis requires organization of information and data reduction.

The data of this research suggest categories for characterizing information as learner factors, facilitator's role, the timing of sessions, the learners' intellectual ability and their familiarity/unfamiliarity with reading. Hence the description of the process the reflection and the interpretation of each session will take these categories into account.

A quantitative comparison of pre-test and post-test data will also be made, seeking to analyse and understand items of success and failure in the learners' performance. The data will be analysed to the learners' age, number of years in the high school, place of dwelling, home language and parental involvement during the participation of the learners in the research.

3.2.2 Participants

(1) The sample

Wiersma (1991:248) explains that in random selection, the individuals are randomly selected as representing a population. In random assignment, commonly used in experiments, the

individuals are randomly assigned to different groups or treatments. Borg and Gall (1989:644) maintain that random assignment is the best technique available for assuming initial equivalence between different groups. The research was conducted with Grade 9 learners. The participants initially comprised 60 learners. A pre-test in English reading comprehension (Refer Appendix A) was administered to all of Grade 9. The 60 learners who obtained the lowest scores (which ranged between 2.5% and 37.5%) were systematically and randomly assigned to an experimental, control and non-treatment group. Each group contained 20 learners. During the course of the research attrition occurred where five learners in the experimental and control groups dropped out of the reading support or went out of school altogether leaving 15 in each group, and 5 learners from the non-treatment group also left the school. Table 3.1 contains a description of the sample before attrition.

Table 3.1 Sample Distribution according to Pre-test Scores before attrition*

Scores		Experimental Group	Control Group	Non-Treatment Group
/40	%			
I	2.5		L1	
2	5	L1		L1
3	7.5	L2		L2
4	10	L3	L2, Ca	L3
5	12.5	L4, L5, L6		NTa
6	15	L7, Ea	L3, L4, Cb, Cc	L4, L5, L6
7	17.5	L8, Eb	L5, L6, L7,	L7,L8, NTb
8	20	L9, L10, L11 Ec, Ed	L8, L9,	L9, L10, NTc, NTd
9	22.5	L12, L13, Ee	L10, L11, Cd, Ce	L11, L12,NTe
10	25	L14	L12	L13, L14
11	27.5			
12	30		L13, L14	
13	32.5			
14	35		L15	
15	37.5	L15		L15
Mean		6.9 (17.3%)	8.0 (20.0%)	7.3 (18.3%0

* Learners who dropped out of the reading support are numbered Ea, Eb…Ca, Cb…NTa, NTb…

Table 3.1 contains the sample distribution according to pre-test scores before attrition. The random assignment of learners in the experimental group was uneven. The experimental group has 3 learners who obtained scores of 2, 3 and 4 while the control group has 2 learners with a score of 4. The non-treatment group was more comparable with the experimental group. There are 3 learners with a score of 5 in the experimental group and 1 learner in the non-treatment group while the control group has none. The assignment of learners with scores of 7-9 is more comparable in all the three groups. The experimental group has 2 learners with scores between 10-15, the control group has 4 learners and the non-treatment group has 3 learners. Thus the uneven assignment of learners especially in the experimental group indicates that this group contains weaker learners as compared with the other two groups. During the analyses of the post-test results this factor will be taken into consideration. All learners assigned in the three groups experienced difficulty with reading comprehension, decoding, lack of English vocabulary and the use as well as the understanding of English as the language of learning and teaching. Some learners had failed Grade 8 and Grade 9 once or twice and even thrice and others were doing Grade 9 for the first time. All three groups contained learners who came from the township and from informal settlements. The learners were from the following language groups: Zulu, Tsonga, Southern Ndebele, Swazi and Northern Ndebele.

Table 3.2 contains a description of learners who finally participated in the research, in terms of possibly relevant characteristics.

Table 3.2 Summary Group Description Pre-test and Post-test following attrition

		Experimental Group		Control Group		Non-Treatment Group	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
No of Learners		15	14	15	15	15	10
Gender	Boys	5	5	7	7	11	7
	Girls	10	9	8	8	4	3
Home	Township	12	12	9	9	9	4
	Informal Settlement	3	2	6	6	6	6
Years in Secondary School	2	1	1	2	2	3	1
	3	10	10	11	11	6	5
	4	4	3	2	2	6	4
Age	13	1	1				
	14	1	1			2	1
	15	4	4	5	5	2	1
	16	4	4	3	3	2	2
	17	4	3	5	5	3	2
	18	1	1	2	2	5	3
	19					1	1
Home Language	Main African Language	3	3	2	2	7	6
	Minority African Language	12	11	13	13	8	4
Learners absent from post-test			1		0		5

Each group contained 15 learners following the attrition.

Table 3.2 shows that the E group has fewer boys (5) while the C has more boys (7) and the NT groups has the most boys (11) each. There are more girls (10) in the E group the C group has less girls (8) and the NT group has least girls (4). The E group contains more learners (12) from the township in comparison with the C and NT group that have fewer learners (9). The E group has fewer learners (3) from the informal settlement than the C and NT group have more learners (6) each. There is only 1 learner who has never repeated Grade 8 or 9 in the E group, 2 learners in the C group and 3 learners in the NT group. The C group has more learners (11) who repeated once in the secondary school followed by the E group (10) and the NT group (6). The NT group has most learners (6) who repeated twice in the secondary school, while the E group has less (4) and the C group has least (2). The NT group has more overage learners (11) when compared with the C group (10) and the E group (9). The E group and the NT groups have 2

learners each who are under age while there is none in the C group. The NT group has more learners (7) from the main African language spoken in the school (Sepedi) followed by the E group (3) and the C group (2). The C group contains more learners (13) from the minority language group, that is, Tsonga, the E group has less (12) and the NT group has least (8).

Table 3.3 (a) shows the learner identification of the experimental group. The experimental group contains 3 learners with scores between 2-4, 5 learners with scores between 5-7, 5 learners with scores between 8-9 and 2 learners with scores between 10-15. The table shows the learners' date of birth, age on 01/06/2001, gender, years in secondary school, home and their language group. There are 5 boys and 10 girls. This group has 10 learners who repeated a grade once in the secondary school, 4 learners who repeated twice and 1 learner who has never repeated a grade in the secondary school. There are three learners from the informal settlement and 10 learners from the township.

Table 3.3 (b) shows the learner identification of the control group. The control group contains 2 learners with scores between 1-4, 5 learners with scores between 6-7, 4 learners with scores between 8-9 and 4 learners with scores between 10-14. There are 7 boys and 8 girls. This group has 2 learners who have never repeated, 11 learners who repeated once and 2 learners who repeated twice. There are 9 learners from the township and 6 learners from the informal settlement. There are 2 learners from the main African language group and 13 learners from the minority language group.

Table 3.3 (c) shows the learner identification of the non-treatment group. The non-treatment group contains 3 learners with scores between 2-4, 5 learners with scores between 6-7, 4 learners with scores between 8-9 and 3 learners with scores between 10-15.There are 11 boys and 4 girls. There are 3 learners who have never repeated, 6 learners who repeated once and 6 learners who repeated twice. There are 7 learners from the main African language and 8 learners from the minority language.

The control group consisted of 15 learners after the attrition. The assignment of learners to the research groups was uneven. The control group had more learners who obtained higher scores in the pre-test as compared with the experimental group and non-treatment group. The control group contained only 2 learners with a score of 4 while the experimental and the non-treatment groups each had 1 learner with a score of 4. The control group had no learner with a score of 5 yet the experimental group had 3 learners and the non-treatment group had 1 learner. The assignment of learners with scores between 8-9 was relatively even in all the three groups. The

control group contained 3 learners with scores between 12-14 while the experimental and the non-treatment group had only 1 learner with a score of 15. Thus the interpretation of the post-test results will be seen against this background.

Table 3.3 (a) Learner Identification: Experimental Group

Learners	Pre-test Scores		Date of birth	Age on 2001/06/01	Gender	Years in Secondary School	Home	Lang.
	/40	%						
L1	2	5	82/11/07	18yrs 6ms	Girl	3	Township	Main African language
L2	3	7.5	85/01/28	16yrs.4ms	Boy	3	Informal Settlement	Minority language
L3	4	10	85/09/22	15yrs 7ms	Girl	4	Township	Minority language
L4	5	12.5	83/06/26	17yrs 11ms	Girl	4	Informal Settlement	Minority language
L5	5	12.5	85/7/05	16yrs.om	Boy	3	Township	Main African language
L6	5	12.5	84/09/27	16yrs.8ms	Boy	3	Township	Minority language
L7	6	15	85/11/11	15yrs 6ms	Girl	3	Township	Minority language
L8	7	17.5	85/06/28	15yrs 11ms	Boy	3	Township	Minority language
L9	8	20	83/11/01	17yrs 7ms	Girl	4	Informal Settlement	Minority language
L10	8	20	82/06/27	18yrs 11ms	Boy	4	Township	Main African language
L11	8	20	84/10/24	16yrs 7ms	Girl	3	Township	Minority language
L12	9	22.5	87/08/28	13yrs 9ms	Girl	2	Township	Minority language
L13	9	22.5	86/12/25	14yrs 5ms	Girl	3	Township	Minority language
L14	10	25	86/03/13	15yrs 2ms	Girl	3	Township	Minority language
L15	15	37.5	83/05/23	17yrs.11ms	Girl	3	Township	Minority language

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Table 3.3 (b) Learner Identification: Control Group

Learners	Pre-test Scores		Date of birth	Age on 2001/06/01	Gender	Years in Secondary School	Home	Lang.
	/40	%						
L1	1	2.5	83/09/01	17yrs.ms	Boy	3	Township	Main African language
L2	4	10	86/11/12	14yrs.6ms	Boy	3	Township	Minority language
L3	6	15	85/07/22	16yrs.1m	Girl	3	Township	Minority language
L4	6	15	82/04/08	19yrs.2ms	Girl	3	Township	Main African language
L5	7	17.5	83/04/30	18yrs.1m	Boy	4	Township	Minority language
L6	7	17.5	85/03/15	16yrs.2ms	Girl	3	Township	Minority language
L7	7	17.5	85/04/22	16.1m	Boy	3	Informal Settlement	Minority language
L8	8	20	84/06/16	16yrs.11	Boy	3	Informal Settlement	Minority language
L9	8	20	86/06/24	15yrs.1m	Girl	2	Township	Minority language
L10	9	22.5	84/05/08	16yrs.11ms	Boy	3	Informal Settlement	Minority language
L11	9	22.5	84/06/16	16yrs.1ms	Girl	4	Township	Minority language
L12	10	25	85/11/11	15yrs.6ms	Boy	2	Informal Settlement	Main African language
L13	12	30	86/09/10	14yrs.8ms	Girl	3	Informal Settlement	Minority language
L14	12	30	85/05/14	15yrs.11ms	Girl	3	Township	Minority language
L15	14	35	84/11/15	16yrs.7ms	Girl	3	Informal Settlement	Minority language

Table 3.3 (c) Learner Identification: Non- Treatment Group

Learners	Pre-test Scores		Date of birth	Age on 2001/06/01	Gender	Years in Secondary School	Home	Lang.
	/40	%						
L1	2	5	83/05/22	18yrs.0m	Boy	3	Township	Minority language
L2	3	7.5	83/10/31	17yrs.7ms	Girl	4	Informal Settlement	Main African language
L3	4	10	83/07/05	18yrs.0m	Boy	3	Township	Minority language
L4	6	15	83/01/05	18yrs.4ms	Boy	4	Township	Minority language
L5	6	15	83/02/27	18yrs.3ms	Boy	3	Informal Settlement	Minority language
L6	6	15	86/12/08/	14yrs.5ms	Girl	2	Informal Settlement	Minority language
L7	7	17.5	86/09/19	14yrs.8ms	Boy	2	Township	Minority language
L8	7	17.5	84/04/05	17yrs.1m	Boy	4	Township	Minority language
L9	8	20	85/08/22	15yrs.9ms	Girl	3	Township	Main African language
L10	8	20	84/06/30	16yrs.11ms	Boy	4	Township	Main African language
L11	9	22.5	81/08/14	19yrs.9ms	Boy	4	Informal Settlement	Main African language
L12	9	22.5	86/07/24	15yrs.0m	Boy	2	Informal Settlement	Minority language
L13	10	25	83/03/06	18yrs.2ms	Boy	3	Informal Settlement	Main African language
L14	10	25	85/03/01	16yrs.2ms	Girl	3	Township	Main African language
L15	15	37.5	84/02/02	17yrs.3ms	Boy	4	Township	Main African language

(2) Research activities with research groups

(a) Experimental Group

The experimental group used the imaging technique. Each session began with relaxation exercises. This was followed by verbal narrative where learners were guided on how to use the imaging technique. Discussions of mental pictures formed during the process of imaging were conducted and learners were encouraged to use their mother tongue. Printed text was

introduced gradually, beginning with one word, a sentence, a paragraph and the whole text. Learners were guided on how to transfer the process of imaging used during the verbal narrative to reading text. The imaging technique was also used in the learning of subjects like Physical Science and Biology. By means of drawings and comprehension questions learners were assessed to determine their understanding. After every session reflection was done to enable the researcher to adapt the imaging technique where learners experienced problems. The detailed analysis in 3.3.2 will focus on the experimental group, followed by brief description of the control group support sessions in 3.3.3.

The following steps were implemented:

* Creating a conducive and trust worthy learning atmosphere.
* Indicate to learners that they need to concentrate, be attentive, focus and listen carefully.
* Give learners an opportunity to exercise imaging by giving them one word before proceeding to full sentences.
* Encourage learners to draw their imaged pictures on narratives and text.

(b) Control Group

The control group used a different method in the development of reading comprehension skills, but the same text and the same comprehension tests as the experimental group. The researcher used the dictionary method where difficult vocabulary words were explained in order to enhance the understanding of the text. Discussions with learners were held where the researcher determined the nature of problems learners experienced during each session. The use of mother tongue during the discussions was encouraged.

(c) Non-treatment Group

The non-treatment group was not involved in any form of reading comprehension support, but only wrote the pre-test and post-test.

3.2.3 Qualitative analysis of sessions with experimental group: Formative Assessment

According to Jacobs, Haasbroek and Theron (1992:47), formative assessment indicates an internal assessment programme that is usually undertaken as part of the development process where the performance of learners in the programme is compared with the aim of the programme.

During the implementation of the imaging technique the participation of learners and their difficulties with the reading material used were observed and recorded. The relaxation exercises used as an introduction to imaging were closely observed. Learners experiencing problems in forming images were assisted. Formative assessment developed gradually from the learners' processing of one word, to one sentence, two sentences a paragraph and finally to full text. Questions and discussions were conducted in order to assess the learners' understanding and their ability and skill in using the imaging technique when reading. The researcher was also monitored closely to ensure credibility and reliable interpretation. There were continual discussions with the supervisor who controlled the researcher's personal emotional involvement so that it should not influence the findings.

Formative assessment took place in the manner described below with regard to the following aspects of each session:

(1) Relaxation exercises

Each session began with the relaxation exercises to help learners to be relaxed, and to allow free flow of the mind while forming mental pictures. They also helped learners to willingly stay focused, to be attentive, take initiative and be creative. The assessment of the relaxation exercises was done through observation and asking questions while the researcher was moving around listening as well as assisting learners who appeared tense and feeling uneasy.

(2) Verbal narrative descriptions

The presentation of the reading text was heralded by a verbal narrative. The verbal narrative was used to enhance the mastery of the imaging technique. Learners seemed more comfortable in processing verbal information than written information.

Guided imaging was first introduced by means of a short verbal narrative in order to stimulate the learners' attention, concentration and interest in developing the mastery of the imaging technique. The learners were guided on how to process incoming information cognitively and effectively by forming pictures in their mind. Formative assessment was done by means of observation, drawing of pictures (Refer Appendix B) and discussion with the learners. Learners who experienced difficulty in mastering the imaging technique were presented with an alternative short verbal narrative which was simpler and within their experiential world.

Formative assessment assisted the researcher in gaining insight in the learners' understanding, involvement, participation, difficulties and frustration they were displaying during the process of imaging.

(3) Presentation of reading material and use of narratives

After the presentation of the verbal narrative learners were given a word card and instructed to form picture(s) in their mind about that particular word (Refer to Appendix C). Once learners had mastered the formation of pictures to written words, the researcher presented them with a sentence. Both the cognitive and affective dimensions of the process were used. By means of observation, drawings and discussions the researcher was able to assess how learners assimilated the new information from the written text and their prior knowledge during the process of imaging. The procedure was later also applied for full text.

(4) Group participation

Borg and Gall (1989:391) hold the view that the participant observer, by virtue of being actively involved in the situation being observed, often gains insights and develops interpersonal relationships that are virtually impossible to achieve through any other method. During the imaging process, after being instructed to form mental pictures about what they had read, learners were told to discuss the pictures and to verify whether their pictures correlated with the text they had read. The researcher moved around listening and observing the participation of each individual learner in the group and also helping where learners had difficulty.

(5) Informal discussions

The formative assessment focussed mainly on two matters:

(a) Language: To establish the level of their understanding and the problems experienced especially with the use of English as the language of learning and teaching. Most learners found it difficult to express themselves in English during the discussions. The researcher allowed them to use their mother tongue to discuss the English reading text and the researcher moved around listening and observing. Learners indicated that they felt more comfortable when they were using their mother tongue for discussion.

(b) Affect: During the discussions the researcher also looked at the learners' emotional feelings such as their likes or dislikes, frustration and interest during the process of imaging. The discussions were used as a reflection after each session to help the researcher to adapt

the technique in such a way that the problems experienced in a session would be overcome in the next session and reading comprehension could be developed and enhanced.

3.2.4 Interview with learners

Interview with learners was held at the end of the reading support. Learners were selected according to their post-test results. Learners whose improvement scores were high, average and low were selected from each group. Open and semi-structured questions were used during the interview to gather information on how they experienced the reading support. The non-treatment group was interviewed about their experience on the pre-test and the post-test.

3.2.5 Quantitative analysis: Summative assessment

The reading comprehension test (Refer to Appendix A) that was used as the pre-test was also used as the post-test. The pre-test results provided the baseline information for the summative assessment. The pre-test and the post-test results were compared to analyse significant improvement or not in the development of reading comprehension skills of township secondary school learners through the use of the imaging technique. Always bearing in mind the type of reading material used in the test, a break-down of the items was done in terms of whether questions were difficult, moderate and easy in order to examine for the difference in the performance of each group. All groups including the non-treatment group were assessed on the reading comprehension test.

3.2.6 Triangulation

In its original and literal sense, triangulation is a technique of physical measurement. Cohen and Manion (1995:233) define triangulation as a research step as the use of two or more methods of data collection in the study of some aspects of human behaviour. They further highlight that by analogy, triangulation techniques in the social sciences attempt to map out or explain more fully, the richness and complexity of human behaviour by studying it from more than one vantage point and, in so doing, by making use of both quantitative and qualitative data. By means of pre-test and post-test comparisons the researcher is able better to interpret the qualitative data of the learners' performance and vice versa. The data collected during the imaging sessions where learners answered comprehension questions on the imaged text, (Refer to Appendix D) also informed on the learners' ongoing performance.

The researcher collected the qualitative data by means of observations, discussions and drawings. The methods which the researcher used in adapting the imaging technique are also forms of triangulation.

3.2.7 Ethical Aspects

Borg and Gall (1989:84) indicate that in planning a study, the investigator or researcher has a responsibility for its ethical acceptability. Prior to this research study the researcher explained the general aim of the research to the principal, parents of learners to be involved, learners in the research groups and Grade 8 and Grade 9 English educators (including the multi-disciplinary panel). By means of a written letter parents of learners to be involved in the research were requested to confirm that they permitted their children to participate (Refer to Appendix E). The learners were assured that all the information gathered during the research would be treated confidentially. The names of the learners involved would not be disclosed and the integrity of all the learners would be protected. Feedback on the findings would be provided to all relevant persons as soon as they were available.

3.3 RESULTS AND FINDINGS

3.3.1 Orientation

The research will be reported on in two sections, the first looking at the process (the reading support sessions and the interviews with three learners, and the second looking at the reading comprehension performance results).

3.3.2 Practical implementation and examination of adaptation of the imaging technique as a support in developing reading comprehension

(1) Introduction

The practical implementation of the imaging technique consisted of twenty sessions. The imaging technique was implemented with the experimental group. Each session took one hour, from 14:00 to 15:00 on Mondays and Wednesdays. Each session began with relaxation exercises with an aim of putting learners at ease and to feel relaxed before they commenced on the imaging for reading. The use of the senses was emphasized in order to help the learners to concretize spoken or written information. After the relaxation exercises the researcher demonstrated how to use the imaging technique.

Learners were usually divided into groups of twos at first and then into groups of threes or fours. Learners were also encouraged to use their mother tongue to discuss their pictures or

images. The researcher walked around observing the participation of the learners and also recording their contributions, difficulties and their experiences of imaging. Each session was concluded with a reflection in order to find out the successes and the difficulties encountered in order to plan for the next session. Each session is reported in terms of (a) objectives (b) preparation, (c) process of imaging and (d) reflection.

(2) Session One (2001-05-23) (Refer Appendix F for the content details of the sessions)

(a) Objective: To introduce the use of the imaging technique.

(b) Preparation: Word cards and verbal narratives.

(c) Process of imaging: (Attendance: 20) The session began with relaxation exercises, systematically addressing various body parts. The importance of relaxation was emphasized in order to help L[1] to relax so that they could enhance the free flow of the mind which is crucial in the creation of mental pictures. Concentration, paying attention and being focused was stressed. Not all Ls succeeded in relaxing. Ls 1, 4 and 6 folded their arms in spite of the instruction to let them hang loosely and L 7 seemed tense and watched the researcher (R) intently. There was also a fairly constant hum of Ls asking one another curiously what this could be about.

Ls were next told to close their eyes and R did the first verbal narrative in English, instructing them to form a mental picture as it proceeded. All were quiet and the majority appeared to follow the narrative, but Ls 1, 4, 5 and 6 appeared to simply sit with their eyes closed expressionlessly, as if not attempting to visualize the content of the narrative.

Ls were told to open their eyes and a full group discussion was held about the pictures they had formed in their minds. The discussion was started in English and Ls 3, 8, 11 and 15 tried (and succeeded in fairly simple factual form) to describe their pictures in English. Upon being given an opportunity to speak N. Sotho[2] (that is commonly used in the research school when learners from different language groups are in one group) also participated, and their content was markedly more detailed and graphic than the contributions in English, even describing some feelings. In addition to the four Ls who had not appeared to visualize the narrative, a further three (Ls 2, 10 and 14) were also unable to describe what they had seen.

[1] Learner L, Learners Ls, Researcher R.
[2] Most Ls were Tsonga speaking, but discussions other than English were conducted in N.Sotho (Sepedi).

Because of the difficulties observed, R explained the technique of forming mental pictures to Ls and gave an example. Then the second narrative description was given. This narrative was adapted on the spot by emphasizing the sensory qualities of the experience (e.g. the heat of the day and the coldness of the drink), to integrate affective elements of experience into the images, in this way to support their understanding and the process of imaging.

A discussion was then held between Ls in twos and R moved around, listening. This time, Ls talked mainly in their home languages i.e. Tsonga, Zulu and N. Sotho. Most facts were covered and enriched with feelings. Ls appeared more confident, even Ls 5 and 6 who had been expressionless during the first narrative. However, Ls 1 and 4 [3] made no progress on imaging. R was satisfied that all excepting L1 and 4 now understood how to image. Participation was lively and the general atmosphere was positive, cheerful and proud. As homework Ls were instructed to draw [4] their images of the narrative.

(d) Reflection

Attendance: The attendance was good since it was the first day.

Learners: Ls were able to concentrate, pay attention to be focused during the process of imaging. Verbal narratives helped them in the mastery of the imaging technique. Ls were able to follow verbal descriptions in English (i.e. their language of learning and teaching). This technique awakened enthusiasm, a new way of learning; it integrated cognitive and affective meaning for them. Some Ls had difficulty in forming mental pictures and/or difficulty in understanding explanation in English; these needed examples.

Most Ls were able to draw holistic pictures (Refer to Appendix B) about the verbal narrative. The pictures showed that Ls generally understood how to use imaging. The first drawing of L 14 is the best picture, which indicated that L 14 understood the verbal narrative during the process of imaging. The picture shows L 14 walking alone on a hot sunny day when someone/ friend came and offered her a cold drink. The footsteps and clothing on the picture indicate that she correctly processed the verbal narrative.

The second drawing, of L 11, is less detailed with information, but L 11 was still able to image the verbal narrative correctly.

[3] Ls 1 and 4 displayed severe difficulty mastering skills throughout the learning support. As it will be contemplated in the final discussion of results, there is a strong possibility that intellectual disability and not language and reading difficulty was the cause of their overall low performance in all the school subjects.

[4] See App. B for sample of Ls' drawings. Discussion on Ls' drawings will form part of the reflection on the relevant session.

The third drawing, of L 10, is the least detailed with information. This indicates that though L 10 was able to image, he left some gaps of information on the drawing. The information is correct but not rich like the drawing of L 14.

Interpretation: The technique of imaging to verbal narratives seems appropriate and feasible for township secondary school learners in Grade 9, even when conducted through the medium of English. R was sensitive to Ls' needs and understanding hence the adaptation of the technique on the spot in order to enhance its mastery. The performance of Ls and their response to imaging was very encouraging to R. R and Ls ended the session on a good note and all are looking forward to the next session where imaging for reading is going to be introduced.

Next session: To introduce the imaging technique in a reading activity.

(3) Session Two (2001-05-28)

(a) Objective: To introduce the imaging technique in a reading activity.

(b) Preparation: Verbal narrative, word card and copies of reading text. (What happened to Jack).

(c) Process of imaging: (Attendance: 20) The principles of imaging e.g. concentration, relaxation, paying attention, being focused and processing information with conscious use of the senses were emphasized. The session began with relaxation exercises in order to put Ls at ease and processing information with conscious use of the senses. Ls cooperated very well during the relaxation exercises and followed the instructions in English adequately.

R showed the word "attractive". R asked if Ls knew the meaning of the word. Ls responded positively. R instructed Ls to picture something that was attractive. The appearance, colour, size of that particular object had to be added in their mental picture.

Ls indicated that they were able to form pictures about the word "attractive".

Ls were instructed to close their eyes and R gave a verbal narrative. At the end of the narrative Ls were instructed to open their eyes. R instructed Ls to discuss their mental pictures in twos while R was moving around listening. Ls 3, 6 and 15 were trying to communicate in English while the rest used their mother tongue. Most Ls understood the narrative and the discussion of mental pictures was correct and relevant. Ls 1 and 4 also tried to contribute in their discussions but had not yet mastered imaging.

After the verbal narrative, R guided Ls on how to transfer the use of imaging into the reading of a text. A short paragraph was read aloud by R, who guided Ls on how to form mental pictures while reading. R stopped the demonstration and asked Ls if they understood what they were supposed to do when reading. Ls generally agreed that they understood how to use imaging for reading, but some didn't respond, although nobody asked specifically for further clarification.

R now gave Ls copies of the same text (What happened to Jack?) Learners were instructed to read aloud in twos taking turns for each following sentence, while the other would follow on his/her text. R observed that Ls 6, 9, 13, and 14 struggled to read aloud. Ls 2, 3, 5, 7, 8, 12 and 15 read aloud fairly well while Ls 1 and 4 could hardly read aloud at all. Poor decoding where some Ls read word by word led to inability to make sense of the text and to form mental pictures in their minds. Ls took a long time to finish the text.

R instructed Ls to discuss the passage with each other and the mental pictures they had formed while reading. Only Ls 3 and 15 were able to discuss the content and their information was relevant but not rich in details. All other Ls were quiet and could not discuss either the passage or their mental pictures. Here Ls read aloud without understanding and could not form pictures.

(d) Reflection

Attendance: The full attendance suggests feelings of confidence, security and interest in the research group after their first experience on imaging.

Learners: Ls were able to use imaging when R gave the verbal narrative. Their participation was positive and facial expressions showed that they followed the description of the narrative during the imaging process. However, Ls 1 and 4 experienced severe problems with reading aloud as well as understanding of the text. Inability to read obstructed the Ls' ability to form mental pictures and to construct meaning about the text. Ls who read aloud fairly well still failed to form mental pictures and to construct meaning of the text, suggest that they read without understanding, hence they could not discuss the text or mental images even when encouraged to use their mother tongue. This indicates that decoding alone does not lead to meaningful reading hence learners failed to discuss what they had read. Ls were demotivated, discouraged and lost interest as some were just looking at the passage and making no effort to read. Their inability to read may be ascribed to unfamiliarity with reading and difficult words they encountered.

Interpretation: The use of the imaging technique with verbal narrative was simple for most of the Ls except for Ls 1 and 4. When the reading text was introduced the inability to read aloud with understanding hampered the formation of mental pictures and the construction of meaning about the text. Ls 3 and 15 had little difficulty with reading aloud and understanding, hence

imaging was much better with them. But Ls who struggled to read aloud and also with understanding had difficulty in forming mental pictures and comprehension of the text. These Ls lost interest, and stopped reading. The session ended on a low note.

Next session: To guide Ls step-by-step on how to master the imaging technique for reading using the same text. The same text will be read since learners are now familiar with it. R felt it would be easier to help learners to learn how to use imaging with that same text in order to enhance reading comprehension skills.

(4) Session Three (2001-06-04)

(a) Objective: To guide Ls step by step on how to master the imaging technique for reading and to enhance reading skills.

(b) Preparation: Copies of reading text (What happened to Jack?)

(c) Process of imaging: (Attendance: 14) The session began with relaxation exercises. Ls seemed to be able to relax and enjoyed the exercises.

R gave Ls copies of the reading text done in the previous session. The same text was used since Ls were familiar with the content even though they could not understand it properly. R thought it would be easier to show them how to use imaging with that text. Ls were divided into groups of threes. Ls were instructed to read the passage aloud sentence by sentence and to form a mental picture about that particular sentence. Ls read each sentence taking turns. Ls 2, 5, 6 and 13 read poorly, reading word by word and struggling with pronunciation. Ls 3, 11, 12, 14 and 15 read fairly well. Ls 7, Ea, Eb, Ec and Ed [5] had difficulty with decoding of certain words and L1 again could not read.

During the reading R walked around helping Ls with pronunciation and the meaning of difficult words. Ls then had to read the sentences again to make sense of what they were reading. After completing the first paragraph R instructed Ls to read the paragraph again since they were now familiar with it and to image about each sentence until the whole picture on the paragraph had been formed. The reading was now much better and Ls could follow what the text was all about.

R stopped Ls after the first paragraph and asked a few questions about the text. Most Ls gave correct answers and R was convinced that they had now understood the paragraph. Ls were instructed to continue to the second paragraph while imaging and R walked around assisting

[5] Ls who dropped out of the research group are numbered Ea ,Eb Ec, Ed and Ee.

with pronunciation, which was the reason for most difficulty. Ls read to the end of the passage. At the end of each paragraph R asked a few questions to assess their understanding. R also asked Ls to check whether their imaged pictures correlated with the information in the text. This helped Ls to reconstruct their mental pictures and meaning they had formed about the text.

R instructed Ls to discuss their mental pictures on the text as a whole. R moved around listening and observed that the Ls' discussion was much better. Their understanding of the text was better and they communicated more positively about the text and their mental pictures.

After the discussion R instructed Ls to draw their mental pictures in their groups so that they could help one another in filling in information that might be missing. Refer Appendix B to the drawings that were done.

(d) Reflection

Attendance: The poor attendance of Ls on this day may be attributed to difficulty in reading experienced by Ls in the previous session.

Learners: Ls were quiet, focused and attentive. They found it easier to relax. When the reading of text was introduced. Ls were guided on how to use imaging reading sentence by sentence. Questions asked by R at the end of each paragraph helped learners in the building of mental pictures and enhanced their understanding. Assistance with pronunciation also helped learners to read aloud correctly and with understanding. Ls gradually gained confidence after reading the first paragraph for the second time and continued to other paragraphs fairly well. Their discussion was more meaningful and relevant. Participation had improved and Ls were more positive than in the previous session when the same text was read. The drawing of mental pictures was good and Ls helped one another.

Interpretation: The use of the imaging technique for reading is difficult at first. The adaptation of imaging where Ls read sentence by sentence and the questions asked by R enabled Ls to understand and to form mental pictures much better. The use of the imaging technique with Ls experiencing reading difficulty demands sensitivity and creativity on the part of R. Close observation of Ls' feelings, difficulties and participation helped R to adapt the technique in order to enhance reading comprehension.

The implementation of the imaging technique was tedious and R at first felt that there would be no improvement. Innovative ability is the key to success as far as the implementation of this technique is concerned.

Next session: To instil reading skills and the mastery of the imaging technique.

(4) Session Four (2001-06-06)

(a) Objective: To stimulate the interest in reading and to demonstrate how to read for meaning and the use of imaging when reading.

(b) Preparation: Copies of reading text (Palesa's beautiful dress).

(c) Process of imaging: (Attendance: 14) Discussion about difficulties of reading aloud experienced in the previous session. The discussion concentrated on pronunciation, phrasing, intonation and the expression of meaning when reading. The discussion aimed at stimulating Ls on the joy of reading and also equipping them with reading skills.

Relaxation exercises were done and Ls were at ease.

R gave each learner a copy of the reading text. Ls were instructed to be quiet and to listen attentively as R read the passage to them, following on their copies and forming mental pictures. R read expressing meaning, phrasing, with correct intonation, to demonstrate how to read appropriately, pronounce words correctly and observe punctuation marks. R instructed Ls to image while reading.

Ls listened with interest and enthusiasm while imaging as R read the whole passage. R asked Ls questions on the content of the text after reading. Most learners gave correct answers and this indicated that they understood the passage. During the questioning time Ls showed feelings of sadness and happiness as reflected by the text and said they were looking forward to see how the story would end.

After the discussion of the passage with Ls, R instructed the learners to individually draw the mental pictures they had formed while R was reading. Ls were requested to draw any scene they liked most from the story and to use their creativity.

(d) Reflection

Attendance: The attendance was not so good, perhaps due to the difficulty experienced in the previous session and the fact that the sessions are conducted after school. Most learners stayed far away from school.

Learners: Ls were happy, quiet and attentive during the reading of the passage. Ls showed feelings of sadness and happiness in accordance with the passage. The reading of the passage by R stimulated the interest in reading in Ls and also supported the development of expressive reading skills. Ls enjoyed answering verbal comprehension questions. Though some learners answered poorly, the majority of learners had no problem in comprehension of the passage. The drawings of mental pictures were fascinating. Ls whose answers were poor also drew good

drawings that showed that they did use imaging appropriately and understood the text (Refer to Appendix B). The drawings indicated that Ls were able to cognitively and affectively process the text while imaging. Imaging is apparently easier when Ls are not reading.

Interpretation: Imaging seems easier if reading aloud is not required. Imaging did help in enhancing memory and the concretisation of the text. Inability to read aloud correctly with skills such as decoding, correct pronunciation, phrasing and intonation negatively affected imaging for the comprehension of the text. For imaging to take place with Ls with reading comprehension problems, development of reading interest, skills and familiarity with reading are all necessary. Adaptation of the imaging technique in a listening activity did yield positive results. This seems to indicate that the imaging technique has potential in developing reading comprehension skills but adaptation is necessary. R felt encouraged when Ls were able to use imaging after the text was read to them.

Next session: To emphasize the use of cognitive and affective processes as during imaging.

(6) Session Five (2001-06-11)

(a) Objective: To guide learners on the use of cognitive and affective processes when imaging. To guide learners on how to break through to meaning of unfamiliar words.

(b) Preparation: Copies of reading text (The end of winter).

(c) Process of imaging: (Attendance 16) Ls were divided into the groups of twos and threes. The session began with relaxation exercises to help Ls eliminate, tension and tiredness since they had come directly from attending classes. Ls 1, 10, Eb, Ec and 14 were urged to come to the reading session and the relaxation exercises helped them also to be more relaxed, and positive and to participate meaningfully during the reading session.

R then handed out copies of the reading text. R instructed Ls to read the first paragraph aloud in their groups taking turns per sentence while imaging. R walked around listening and observing their participation. Ls 1, 4, 9 Eb, Ec,10 and 13 still struggled with pronunciation of certain words while Ls 2, 3, 5, 6, 8, 11, 12, 14 and 15 read fairly well, though not expressing meaning in certain portions. R helped with the pronunciation and meaning of words. After completing the first paragraph, R asked Ls verbal comprehension questions to assess their understanding. Ls were able to answer the questions fairly well. Ls 1 and 4 made some progress in reading aloud, though not very much.

The asking of questions by R assisted Ls in reviewing the paragraph they had read and they were able to recall the text. It also assisted them in checking with their mental pictures, if they were in accordance with the text. The discussion of mental pictures in the groups indicated that

learners were progressing well on imaging. The cognitive and affective content was processed accordingly and learners managed to share their feelings of cold and sympathy for the boy in the story.

R instructed Ls to continue to the second paragraph, still reading sentence by sentence while imaging. R guided Ls on how to construct meaning out of text while imaging, in order to break through to the new meaning of words they didn't understand. R also stressed that Ls need not know the meaning of all words before they could understand the text, but only the words critical to imaging and such words R explained so that Ls could see how to break through on their own. The holistic view of the passage was emphasized so that Ls should not see the text as consisting of "parts" (words) but of full statements in order to construct meaning.

Ls read fairly well, improving gradually. Some Ls assisted others with pronunciation. Some Ls still read word by word and this made others impatient and annoyed. R encouraged the struggling Ls to try their best and told the better readers to be sympathetic of those who were struggling so that they may also gain confidence. R created a good learning atmosphere so that everybody would feel comfortable with reading even if he/she made mistakes.

Ls shared their understanding of the second paragraph and the imaged pictures. Discussion of mental pictures helped Ls who had difficulty with imaging such as L1 and 4. The discussions started in English and switched to the home languages once R observed that Ls got stuck. In this session, most Ls succeeded fairly well in using imaging while reading.

(d) Reflection

Attendance: Absence from the session was due to being absent from school.

Learners: Difficulty with reading aloud is still experienced by some Ls. The adaptation of the technique where Ls were assisted with pronunciation and the meaning of words did enhance imaging. Oral questions asked after a paragraph was read also helped with understanding of the text. Ls did not succeed in breaking through to the meaning of difficult words when reading. Ls are apparently becoming familiar with reading, but the development of the reading habit is progressing slowly since Ls are not doing any extra reading on their own.

Interpretation: The use of the imaging technique with reading needs adaptation time and again when progress is not achieved. R needs to be observant and sensitive to Ls' difficulties and problems with reading. Encouragement of poor readers and the creation of a conducive learning atmosphere seemed to give poor readers confidence to try even if they made mistakes. R is gaining confidence in assisting Ls and seeing some progress. The implementation of imaging

with Ls who experience a diversity of learning problems is challenging. Encouraging and motivating Ls is crucial during the process of imaging in order to inspire Ls such as Ls 1, 4, Ec, Ed, Ee, and 10 who have a history of failure, to experience success and see the value of acquiring reading skills.

Next session: To emphasize the use of imaging and to assess progress made in imaging in written comprehension questions.

(7) Session Six (2001-07-18)

(a) Objective: To enhance the mastery of the imaging technique and to assess the progress made in imaging in written comprehension questions.

(b) Preparation: Copies of reading text (The end of winter) and comprehension questions.

(c) Process of imaging: (Attendance: 14) R had a discussion with learners about how they felt about relaxation exercises. Ls indicated that they felt as if they were asleep and dreaming. R pointed out that this helped them to clear their minds from anything that might disturb them during imaging.

R gave Ls brief background information on the text read in the previous session, with an aim of assisting Ls to recall what was done in the previous session more than a month earlier. Questions focused on mental pictures about the text.

R handed out copies of the reading text. Ls were divided into groups of fours and were instructed to read from the first paragraphs, taking turns as per two sentences. R stressed that Ls should form mental pictures while reading.

Ls read fairly well since they were still familiar with the text. Some Ls 3, 5, 8, 11, 12, 13 and 15 were able to construct meaning on the new vocabulary using the information from the text. Ls 1, 2, 6, 7, 9, 10 and 14 still struggled with the construction of meaning of unfamiliar words.

R stopped Ls after reading the first three paragraphs and asked them a few verbal comprehension questions. Ls answered well. R instructed those Ls who had difficulty to repeat reading the second and the third paragraph. R guided Ls on how to perceive the text holistically and to use their background knowledge to construct meaning. The demonstration helped Ls to understand how to read for meaning even though they came across new words that were not critical to imaging in order to comprehend the passage generally.

R instructed Ls to discuss their mental pictures and the text in their groups. R moved around listening to the discussion. The discussions were informative and Ls communicated with understanding using both English and their home language. Participation was also good since Ls who were struggling were accommodated and accepted by Ls who read better so that they could also learn to develop confidence.

R handed out comprehension questions and answer sheets. Ls answered the comprehension questions individually.

(d) Reflection

Attendance: Ls who were absent were Ls Ea, Eb, Ec, Ed, Ee and L 4. These Ls are irregular attendees and the winter holidays also negatively affected their attendance.

Learners: Ls' performance is progressing gradually. The discussion of mental pictures and the content of the text indicated that Ls are progressing in the mastery of the imaging technique while reading. However, the answers to the written comprehension questions indicated that Ls have difficulty with questions that need interpretation, reasoning and insight. The scores of most Ls were generally above average while L 1's score was 0 and L4 was absent.

Interpretation: The use of the imaging technique appears to enhance understanding and the formation of mental pictures, though poor reading still occurs in some Ls. Progress seems better since Ls are becoming familiar with reading yet this text was read for the second time in this session. The June holidays seem to have had a negative impact on the performance of Ls since no reading was done during the holidays.

R had to encourage and to motivate Ls to work during the session. Giving Ls the background information on the text and reminding them how they could use their prior knowledge assisted in the process of imaging. The demonstration on how Ls could break through to the meaning of new words also helped them in constructing meaning though not all of them succeeded well. The poor reading of some of the Ls has a negative impact on the interpretation of the comprehension questions.

Next session: To enhance the mastery of the imaging technique and to assist Ls how to construct meaning when reading.

(8) Session Seven (2001-07-23)

(a) Objective: To enhance the mastery of the imaging technique.

(b) Preparation: Verbal narrative and copies of reading text (The wreck of the Zanzibar).

(c) Process of imaging: (Attendance: 15) Ls responded positively to relaxation exercises. The R did a verbal narrative on a hot delicious soup (it was a very cold day), and R observed that Ls were processing the narrative very well. They could smell the soup and the hot bread rolls with butter. The discussion of the mental pictures by Ls was interesting. They even mentioned that the narrative aroused hunger in them. Ls 1 and 4 also progressed gradually in the process, especially when a narrative was given.

Ls were divided into groups of threes and fours. R handed out copies of the reading text. Ls were instructed to read two sentences each taking turns in their groups. R walked around listening and assisting Ls with pronunciation of unfamiliar words.

Reading progressed fairly well. Some Ls who struggled with pronunciation were assisted by their fellow Ls. Ls 5, 6, 7, 8 and 9 were showing improvement. L 2, 3, 11, 12, 13, 14 and 15 read better than the rest of the group. Ls 1, 4, Ec, read word by word with a lot of difficulty. Ls only read three paragraphs. After reading each paragraph, discussion of mental pictures was done.

R observed that the ability to read aloud had gradually improved with some Ls, though not yet adequately. Ls had difficulty with the meaning of the following words: bay, storm, stump, massive, gulls and turtle. By means of questions R showed Ls how to construct meaning out of the text. After explanation of the difficult words, except turtle, they were instructed to read the whole passage at home as homework and to draw a turtle. The aim of reading at home was to give Ls an opportunity to figure out what was a turtle.

(d) Reflection

Attendance: Some of the Ls are now seeing the importance of attending the reading session, hence they are usually present. Other Ls are usually absent from school and some Ls who struggle in class with all their schoolwork do not see the importance of attending.

Learners: Ls read aloud quite well, though they have difficulty with the meanings of new vocabulary. Inability to figure out the meaning of words has a negative impact on their imaging. Explanation of new words aids their understanding of the text. Ls indicated that they were not familiar with the text. The text was not related to their every day life situation. The drawing of the turtle indicated that Ls have no clue at all as to the meaning of the word turtle. Ls drew fishes while others drew crocodiles (Refer to appendix B).

Interpretation: If difficult words that are critical to imaging are not explained, they hamper imaging and comprehension. Once the text contains information not related to their background experiences, imaging is almost impossible. Adaptation of the technique such as the giving of the

meanings of critical words and giving the background information on the text does yield positive results on imaging.

Next session: Adaptation of the technique by giving meanings of words that are critical to imaging.

(9) Session Eight (2001-07-30)

(a) Objective: To enhance the mastery of the imaging technique by giving meaning of words that are critical to imaging.

(b) Preparation: Copies of reading text (The wreck of the Zanzibar).

(c) Process of imaging: (Attendance: 14) Relaxation exercises. A short discussion about the verbal narrative done in the previous session. Ls had no difficulty in recalling the information about the hot delicious soup. R told Ls that they were able to recall the information because they had managed to form mental pictures and to use their senses when processing the narrative. R divided Ls into groups of threes. Ls were instructed to have a discussion about the text done in the previous session. Ls kept quiet and could not discuss. R asked them a few questions that prompted them to discuss. Ls answered the questions poorly due to their lack of comprehension and not knowing what the turtle was. Ls could not break through to the meaning of the word turtle when reading the text as homework. Some of Ls 10, 13;and 14 indicated that they had not read the text.

R gave them the meaning of the word turtle. Ls were amazed to find that the turtle was not a crocodile or fish as they had drawn.

Ls were instructed to read the text, taking turns with two sentences each while imaging. After reading each paragraph a short discussion was held.

This time, the discussion of mental pictures and the text as a whole was more fruitful. Ls could picture the turtle lying on the beach after being washed out of the sea after the rain and storm. The discussion was mainly in their mother tongue. The participation of Ls was positive and they were happy to comprehend the text. Imaging was possible because the critical word (turtle) to imaging had been explained.

(d) Reflection

Attendance: Ls Ea, Eb, Ec, Ee, 1 and 4 were absent. Most are those who struggle with their learning in almost all the subjects. These are irregular school attendees.

Learners: The explanation of critical words to imaging markedly enhances the process of imaging. Reading aloud is still a problem to some Ls, notably those who are reluctant to read at home. Ls who read the text at home participated better during the discussion than those who did not.

Interpretation: The use of imaging for reading needs adaptation such as the use of the mother tongue, explanation of critical words, oral comprehension questions and motivation. The process of imaging for reading progressed better on this day. Ls began to experience a sense of achievement and confidence. R is happy about the progress made. It is encouraging to see Ls beginning to master the technique.

Next session: To enhance the mastery of the imaging technique by using self-questioning.

(10) Session Nine (2001-08-01)

(a) Objective: To assist in the mastery of the imaging technique by using self-questioning.

(b) Preparation: Copies of reading text (Roald Dahl)

(c) Process of imaging: (Attendance: 14) R emphasized the importance of the use of the cognitive and affective processes when imaging. Relaxation exercises were done and Ls were calm and relaxed.

R demonstrated how Ls should use self-questioning in order to enhance the mastery of imaging.

R divided the Ls into groups of fours. Copies of reading text were handed out. R instructed Ls to read the first paragraph. One L had to read the first paragraph while others were following on their copies and imaging.

Ls read well generally without difficulty. R instructed them to read aloud the paragraph again while asking themselves questions on what was happening in order to form mental pictures. Then Ls read aloud the second paragraph once and stopped for discussion.

R observed that Ls understood the text and could form mental pictures of the boy who was standing by the window watching the snow falling outside. Self-questioning was used appropriately and did help Ls in the formation of mental pictures, which led to comprehension. R explained the words “flakes drifting” and “colour of steal”.

R instructed the Ls to continue reading up to the end of the fourth paragraph.

Ls read with more meaning and enthusiasm. They were becoming more familiar with reading and the pronunciation of words was even better. Regular attendees were improving much faster than those who were sometimes absent. The discussion of the third and the fourth paragraph was easier. Ls could describe the scene in the text with feelings and interest. The session ended on a good note.

(d) Reflection

Attendance: Ls who attend sessions irregularly continue to pick up problems with reading aloud and imaging hence the absenteeism. Those who attend regularly are apparently improving.

Learners: Ls' reading ability is improving and also the process of imaging. The use of self-questions notably improves the mastery of imaging which enhances comprehension and memory of the text. The participation of Ls during the discussion is also improving. Ls discuss with more interest and enthusiasm. The discussion is becoming more informative. Ls 1, 4, 6 and 9 also contributed during the discussions.

Interpretation: The use of imaging is becoming more established in Ls. Adaptation of the technique by using self-questions does enhance the mastery of imaging. R feels more grateful as Ls progress in their mastery of imaging. Close observation of Ls' needs and difficulties has enabled R to adapt the technique effectively. Group work seems to enhance imaging.

Next session: To continue with the same text and the use of metacognitive skills by means of self-questions as a strategy of enhancing the mastery of the imaging technique.

(11) Session Ten (2001-08-03)

(a) Objective: To enhance the use of metacognitive skills by means of self-questions and further mastery of the imaging technique.

(b) Preparation: Reading text (Roald Dahl).

(c) Process of imaging: (Attendance: 15) Session began with relaxation exercises, which went well. Ls were quiet and cooperative.

R demonstrated further to Ls how to use self-questions when reading in order to enhance imaging. R emphasized that self-questions help in the connection of prior knowledge and the new incoming information in order to make sense of what one is reading. During this process the Ls' cognitive and affective processes are interacting with one another with an aim of assisting the Ls to construct meaning out of the text.

Ls were then divided into groups of fours and fives. R handed out copies of the reading text. Ls were instructed to read a paragraph at a time while others follow in their copies. R moved around listening and observing the participation of Ls and how they interacted with the text.

Reading progressed very well with most Ls in the different groups. Words that were difficult to pronounce were done with the help of R. Most Ls tried their best to read the text with interpretation and observing the punctuation marks. Where Ls experienced problems in making sense of the text, R assisted them by asking a few questions e.g. “Can you picture the snow falling? How deep was the snow?” etc. R stressed that Ls should question themselves on the content of text in order to enhance imaging and comprehension.

After reading the first four paragraphs an open discussion was conducted. By means of questions R guided Ls on their discussion of their mental pictures and their comprehension of the text.

Ls’ discussions were good and informative. They expressed their feelings and understanding of the text. Continuous guidance on the use of questions helped them to position themselves within the text and to concretise it with meaning. English and the mother tongue were used.

(d) Reflection

Attendance: Attendance is still fluctuating. Ls whose performance is progressing attend more regularly than those whose performance is progressing slowly.

Learners: Ls’ imaging process seems to improve well with reading. Adaptation of the technique by means of self-questioning has helped Ls in the mastery of imaging. Ls who are progressing slowly are those who attend irregularly and this hampers their mastery of imaging. Helping Ls who were absent in the previous session is time consuming and wastes time of those who always attend.

Interpretation: The use of self-questioning does enhance the mastery of the imaging technique. Reading skills such as pronunciation and the observation of punctuation marks and the expression of textual meaning seem to be improving very well with most Ls, though some still lag behind due to absenteeism. The imaging technique seems good in group work because Ls who find it difficult to understand and to use the process of imaging usually learn from other Ls. Imaging also helps Ls to concentrate and position themselves within the text. Monitoring and motivation of Ls by R is very important in enhancing meaningful participation of Ls. R’s observation is important in identifying Ls who struggle so that adaptations can be made. R needs to be creative and sensitive to Ls’ needs during the process of imaging. Grouping Ls in

different groups has assisted R to know Ls better and to see how they work with different Ls.
Next session: Assessment of the development of reading comprehension skills.

(12) Session Eleven (2001-08-08)

(a) Objectives: To assess the development of reading comprehension skills through the use of the imaging technique.

(b) Preparation: Reading text (Roald Dahl) and comprehension questions.

(c) Process of imaging: (Attendance: 14) Relaxation exercises, Ls divided into groups of fours and fives. R handed out copies of reading text and instructed Ls to read the same text of the previous session paragraph by paragraph. Reading of the first part was a revision and Ls had to continue with the text since the passage was long.

Reading was adequate. R gave the meaning of the following words enormous, ravenously, desperate and trudging as they were critical to imaging.

A short overall discussion was done on the passage and R was happy that Ls showed signs of understanding the text. R handed out answer sheets and question papers. Ls were urged to use imaging when reading the questions.

(d) Reflection

Attendance: Attendance was 14. Five, Ls (Ea, Eb, Ec, Ed and Ee) have been absent for 4 consecutive sessions. L4 is also an irregular attendee.

Learners: Ls' performance on the comprehension questions is average to above average. L 1 again has a score of 0. She copied information from the text without understanding. This suggets that she did not understand the questions due to her inability to read with meaning. Most Ls had difficulty answering questions that challenged their cognition.

Interpretation: The use of the imaging technique needs patience and courage on the part of the R. Sometimes R thought that Ls were improving very well in previous sessions, but their performance in the comprehension questions is not as it was hoped. Problems experienced by Ls in the comprehension questions have to be identified in order to be addressed. Motivation and encouragement of Ls who generally perform poorly in class is difficult since these Ls do not experience success in most of their learning and they have already developed a negative self-concept.

Next session: To practice the use of metacognitive skills when imaging.

(13) Session Twelve (2001-08-13)

(a) Objective: To practice the use of metacognitive skills when imaging.

(b) Preparation: Reading text (Roald Dahl) continued.

(c) Process of imaging: (Attendance: 15) Relaxation exercises. Ls were divided into groups of threes in order to enhance meaningful participation. R emphasized Ls' involvement, intentionally, the use of prior knowledge and use of metacognition during imaging.

R gave Ls copies of reading text and instructed them to read aloud per sentence while imaging. Self-questioning was stressed as one of the components that enhanced the use of metacognitive skills when reading. After reading a paragraph Ls had to stop and discuss the text and their mental pictures. Only three paragraphs were read.

Reading was still improving. R walked around during the discussion and listened to Ls' contributions. Where Ls had difficulty R asked them questions about the text. Ls indicated that they understood and the formation of mental pictures was improved. The asking of questions by R helped Ls to review their mental pictures and they were able to see whether they were relevant or not. During that process Ls were continuously using their prior knowledge and connecting it with the new written information while forming mental pictures.

(d) Reflection

Attendance: Some Ls are attending regularly. Ls 4 is sometimes absent and this hampers her improvement. Other Ls are absent due to family commitments where they have to fetch their younger brother or sister from the day care centre.

Learners: The participation of Ls was adequate. Ls are showing positive improvement in the quality of reading activities and their discussions. Involvement of L 2, 5, 6 and 14 during their participation was pleasing. This also encouraged Ls who are still struggling with reading aloud and the use of metacognitive skills when interacting with the text. Most Ls are trying their best to discuss in English though sometimes they use their mother tongue.

Interpretation: The use of metacognitive skills does enhance the mastery of imaging. Ls' use of prior knowledge added to the new written information from the text help in the formation of mental pictures and also improved comprehension. Questions asked by R assisted Ls in their formation of mental pictures. R is pleased that the mastery of imaging is progressing well with many Ls though progress is not on the same level with all Ls.

Next session: To use the process of imaging for the learning of other learning areas. Ls requested that they want to begin with Physical Science.

(14) Session Thirteen (2001-08-15)

(a) Objective: To use the process of imaging for the learning of other learning areas. Flexible transfer of imaging to new topics.

(b) Preparation: Text from Physical Science, a brick and a sponge.

(c) Process of imaging: (Attendance: 13) Relaxation exercises to stimulate and put Ls at ease.

Activation of prior knowledge on pressure, force and area; R instructed Ls to form mental pictures on pressure and what happens when one exerts pressure on an object. Ls were guided on how to use imaging when visualizing a situation where pressure is exerted on a particular area of an object. Ls were having their eyes closed, visualizing the pressure that was exerted.

R demonstrated how pressure is exerted by using a brick and a piece of sponge. Different examples were given, e.g. standing and lying on the mattress bed. Ls read a brief passage on force and pressure. Ls were instructed to form mental pictures about how pressure is exerted. They were then instructed to draw their mental pictures. R showed Ls how pressure was calculated. Different examples were done in class where Ls did exercises on the calculation of pressure and unit of pressure was also given.

d) Reflection

Attendance: Ls 11 and 13 were ill and could not attend. L 10 Ea, Eb, Ec,and Ed were absent from school.

Learners: Ls' participation was adequate and showed interest and enthusiasm in their learning activities. Demonstration, activation of prior knowledge and examples given helped Ls to see how they could transfer the use of imaging to other subjects. Ls appeared fascinated about the use of the imaging technique when learning other subjects. This promotes involvement, concentration, attention and meaningful participation. Flexible transfer of imaging to another subject was done appropriately, though not up to the optimum level since Ls had to image on a small amount of work.

Interpretation: The use of the imaging technique for the learning of other subjects promoted meaningful participation of Ls and also promoted meaningful learning. Passive learning which Ls were used to did not seem to occur during the imaging process. Communication amongst Ls and with R was promoted. Language use in English was promoted as more vocabulary words were gained by Ls.

Next session: To enhance the understanding and learning of Biology through imaging.

(15) Session Fourteen (2001-08-20)

(a) Objective: To enhance the understanding and learning of Biology through imaging.

(b) Preparation: Verbal narrative and Biology (Plant cell).

(c) Process of imaging: (Attendance: 14) Relaxation exercises. A short verbal narrative was done by R while Ls were closing their eyes. Ls were instructed to form mental pictures on the narrative.

R gave each L a copy on Biology text about the plant cell. Activation of prior knowledge on the plant cell was done by asking questions. Most Ls had no understanding or knowledge of the plant cell. R had to explain the plant cell, its function and how to identify it.

Ls were divided into groups of threes and were instructed to read the text on the plant cell. As the Ls read the text, R guided them on how to form a mental picture on the plant cell. Ls read the text for the second time for clarity.

Reading was relatively simple since it was a short text and was mostly written in point form. R explained terms like transparent, cellulose and permeable. Questions asked by R also aided in the understanding of the text by means of forming mental pictures. Ls were instructed to draw a plant cell as homework.

(d) Reflection

Attendance: The attendance of the sessions is stabilising since Ls are already used to one another. Ls also help in calling or urging other Ls to attend.

Learners: The participation of Ls was positive and they processed the narrative without any difficulty. They read the passage with little difficulty. New terms were explained by R and that enhanced the use of imaging and comprehension. Guided imaging while Ls read the Biology text seemed helpful and Ls appeared to realize that it helped them to remember the information.

Interpretation: The use of imaging for the learning of other subjects is progressing well. R still has to play a key role when facilitating learning through imaging. Observation and timeous identification of problems experienced by Ls is vitally important in enabling R to adapt the technique. Preparation and developing interest in Ls have been crucial in developing the mastery of imaging.

Next session: To enhance the learning of Biology through imaging.

(16) Session Fifteen (2001-08-22)

(a) Objective: To enhance the learning of Biology through the use of imaging.

(b) Preparation: Biology text (Animal cell).

(c) Process of imaging: (Attendance 15) Discussion on the previous session. Relaxation exercises. Activation of prior knowledge on the animal cell.

Ls were guided by means of questions to activate their prior knowledge on the animal cell. Information gained on the plant cell was also used in the learning of the animal cell. R explained the difference between the plant cell and the animal cell. The function of the animal cell in the body was also explained since Ls appeared to have little information about the animal cell too.

R handed out copies on the plant and animal cells. Ls worked in groups of threes and fours. Ls were instructed to read the text while forming mental pictures on the text. R demonstrated that Ls should construct mind maps on the animal cell by writing the key words. Mind maps helped Ls to construct holistic imaged picture of an animal cell.

Group participation during the reading was positive. The explanation of new terms enhance understanding. R instructed Ls to read about the cell membrane. Comparison between the plant cell and animal cell was done in groups. Ls were instructed to identify the similarities and the differences in the plant cell and the animal cell. Ls were instructed to form mental pictures on the plant cell and the animal cell. By means of mind maps after imaging Ls were able to show the differences and similarities of the cell wall and the cell membrane.
R stopped the discussion and gave Ls comprehension questions on the plant and an animal cell. Ls were instructed to work individually in order to assess their ability to use imaging for the learning of other subjects.

(d) Reflection

Attendance: Absenteeism from the fifteen Ls who remain is no longer a problem.

Learners: The participation of Ls during the process of imaging was good. Ls were more involved and asked questions freely where they did not understand. The explanation of animal cell helped Ls to form mental pictures. The use of mind maps also made the learning of Biology simpler and interesting. Ls mentioned that they understood the plant and animal cell clearly for the first time. More Ls managed to identify the difference between the cell wall and cell membrane.

Interpretation: The use of imaging for the learning of other subjects has demanded hard work from R. If Ls lack a lot of information about the content, imaging is difficult. The use of imaging by constructing mind maps help Ls to form a gestalt about the learning content. Once Ls were able to visualize the learning task, then they were able to connect new information with their prior knowledge, which then led to comprehension. The use of mind maps about the learning content as a whole has enhanced comprehension and memory. The use of imaging is challenging when helping Ls who are experiencing a diversity of learning problems. Perseverance and thorough planning of R have promoted active learning in Ls.
Next session: To anchor the mastery of imaging for reading.

(17) Session Sixteen (2001-08-27)

(a) Objective: To anchor the mastery of the imaging technique for reading.

(b) Preparation: Reading text (Berverly Cleary)

(c) Process of imaging: (Attendance: 14) Relaxation exercises.

R emphasized the following to be done during the process of imaging: formation of a holistic picture on the text while reading, continuous use of self-questioning while filling in gaps about the picture one is forming during imaging and awareness of the metacognitive skills during the processing of information and the use of the senses.

R gave Ls reading copies and divided them into groups of threes and fours. Ls were instructed to take turns reading paragraph by paragraph while the others followed in their copies. Concentration, paying attention and being focused while forming mental pictures was stressed. After reading each paragraph Ls had a discussion about their mental pictures.

Reading progressed adequately with little difficulty though Ls experienced difficulty with the pronunciation of a few unfamiliar words such as careworn, scarcely bear, lobby and contagious. By means of a few questions R showed Ls how they should continue reading even though they could not understand certain words that might not be critical to imaging. R instructed Ls to try to construct meaning of such words using their own prior knowledge. Activation of metacognitive skills by means of questions helped Ls to think and to process the text with more meaning. For example “The little girl was requested to go down and wait in a lobby”. Ls were asked as to “where do people wait in a hospital? What was that place called?” Ls then realized that a lobby was a waiting area.

The discussion of each paragraph was productive and meaningful. Ls were able to express the feelings of the characters. They were able to form mental pictures about the hospital, the man, the girl and the nurse. The use of imaging made it possible for Ls to position themselves within the text.

Only a small section of the text was read since R was facilitating the mastery of the imaging technique especially with the weaker Ls such as 1, 4, 6, 7, 9, and 10. Other Ls were progressing very well. Ls were instructed to draw their mental pictures.

(d) Reflection

Attendance: Attendance is now fair and stable.

Learners: Ls' reading and participation seems promising. Each paragraph was read with more expression and the formation of mental picture is improving. The drawings show that Ls understand how to use imagery and are able to recall the events in the text. Communication among Ls has improved very well. They are no longer afraid to talk since they are encouraged to use their mother tongue when they cannot express themselves in English. The use of the mother tongue enhances the use of metacognitive skills and comprehension of the text.

Interpretation: The use of imaging is being anchored in Ls. Positive participation of Ls is encouraging to R. Small groups of Ls are easily manageable and group participation is becoming more meaningful. Ls are showing much improvement in reading comprehension skills. Positive feedback given is encouraging to Ls. It makes them feel that they have been able to master some learning during these sessions. Ls are more motivated than before. Regular attendees find these sessions more relevant and also encourage dodgers to attend too. R is happy about the progress achieved. It is rewarding to see how Ls are improving their reading skills. R has communicated with the English teachers especially to observe the progress of these Ls in their schoolwork, if there is also some improvement.

Next session: To continue to instil the use of imaging technique and how to use inferences when reading.

(18) Session Seventeen (2001-09-03)

(a) Objective: To instil the use of the imaging technique.

(b) Preparation: Reading text (Berverly Cleary) continued.

(c) Process of imaging: (Attendance: 14) Relaxation exercises. Ls were divided into groups of fours. R gave each L a copy of the reading text. Ls were instructed to read the passage. Ls who still experience problems with decoding were instructed to read sentence by sentence while those who read better read a paragraph at a time. Ls discussed the text and their mental

pictures per paragraph. The use of self-questions was emphasized while forming mental pictures and for the clarification of the text.

R paid more attention to the struggling readers since their inability to read also hampered the process of imaging. After reading each sentence, R demonstrated to the Ls how to ask themselves questions so that they could form mental pictures that would lead to comprehension. This process went on with all Ls who had difficulty with reading.

R observed some improvement with the Ls, 2, 9, 10, 13 and 14 who had difficulty reading. They managed to understand the text and were able to form mental pictures. Ls 1 and 4 were still struggling with the pronunciation of words. The exercise was time-consuming, however. Other Ls such as Ls 3, 5, 6, 7, 8, 12, and 15 were left to continue with reading while R helped the slow ones. Ls were then instructed to draw mental pictures about the text.

(d) Reflection

Attendance: L 11 who is a regular attendee is in hospital due to food poisoning.

Learners: The participation of Ls in their groups was good. Discussion of mental pictures and the text was more spontaneous than before. There are Ls who have little difficulty with reading. Ls who have difficulty with reading have also made some progress since R concentrates on them, helping with pronunciation and use of self- questions. The drawings done by all Ls indicate that they have understood the text. Even the Ls who are struggling managed to draw relevant pictures about the text. The use of inferences was done fairly well.

Interpretation: The use of the imaging technique would be much simpler and faster if Ls were determined to practice reading in their free time and saw the need to improve. Intrinsic motivation plays an important role in helping Ls to acquire reading comprehension skills through imaging. The imaging technique enhances self-regulatory learning where Ls learn to monitor their reading and the progress they are making. Imaging also improves good quality involvement of Ls during the learning process. Group work which is usually done during imaging is vitally important for co-operative learning where Ls are able to help one another.

The use of imaging on the part of the researcher demands the ability to be creative, sensitive of Ls' difficulties and to motivate and encourage Ls who are struggling since they usually give up easily. The adaptation of the technique has been imperative in all sessions in order to enhance the mastery of its use during reading.

Next session: To identify and assess the barriers still obstructing Ls from the mastery of the imaging technique.

(19) Session Eighteen (2001-09-05)

(a) Objective: To identify and assess the barriers obstructing the mastery of the imaging technique.

(b) Preparation: Reading text and comprehension questions to be answered orally.

(c) Process of imaging: (Attendance: 14) Relaxation exercises. Oral comprehension questions on the text read in the previous session. R asked Ls questions to assess if they understood the text and to identify the difficulties that were still obstructing some of the Ls in mastering the imaging technique when reading.

Ls were instructed to continue with the reading of the text done in the previous session. R continued helping the struggling Ls. Ls I, 4, 10 and14 were put in amongst good readers so that they could be able to follow while others read. When it was their turn R assisted them with pronunciation and by means of questions helped them to use their metacognitive skills to make sense out of the text. Reading continued to the end of the passage. The discussion of the mental pictures and the text was more meaningful with most Ls.

(d) Reflection

Attendance: L 11 who was poisoned is still in hospital. Ls Ea, Eb, Ec, Ed and Ee have stopped attending the sessions altogether. Hence they are no longer regarded as part of the group.

Learners: Reading progressed well since most Ls could read adequately and had no difficulty with imaging. The discussion of mental pictures and the text was adequate to good. English was more frequently used than the mother tongue. The English language use is still full of grammatical mistakes. Their courage to use English has developed positively. Ls 1, 4,10 and 14 still need some guidance and practice with reading.

Interpretation: Ls who had difficulty in mastering imaging could not understand and interpret the oral comprehension questions correctly. Their difficulty is mostly the use of English as the language of learning and teaching. Ls fail to process the new written information from the text and to assimilate it into their existing cognitive structure-what they read makes no sense to them hence imaging is difficult. Their level of English knowledge is far below their age and grade level. Most of these Ls have been pushed from one grade to another due to age. Others have repeated one grade more than twice.

Ls who have improved in reading answered the question very well, but still have some difficulty with questions that need some reasoning. This suggests that they only have literal meaning of the text but they are unable to use inferences while reading to achieve comprehension.

Next session: To assist Ls in the development of reading comprehension skills through imaging.

(20) Session Nineteen (2001-09-10)

(a) Objective: To assist Ls in the development of reading comprehension skills through imaging.

(b) Preparation: Reading text (Berverly Cleary) and comprehension questions.

(c) Process of imaging: (Attendance: 11) Relaxation exercises. Ls were given reading copies and each L was instructed to read silently the whole passage while forming the overall picture of the story. Reading the passage individually was required since the text was being dealt with for the fourth time during this session.

R moved around observing how Ls interacted with the reading text. Some Ls read silently using their fingers to follow each sentence while others mumbled the words. R encouraged them to take time and not rush their reading so that they would have a clear picture in their minds about the whole text when they finish. If Ls did not understand meanings of certain words, R explained them. At the end of the reading R gave a short summary of the whole text. Ls were asked if they understood the text. All Ls said they understood.

R gave each L a copy of comprehension questions and an answer sheet. Ls were instructed to read the text once again before they answered. Ls were also instructed to form mental pictures about each question before they answered so that they could understand what the question required.

Some Ls read the text but some, especially L1, did not read the whole text again. Instead, these Ls rushed to answer, disregarding the instruction. R asked (L1) why she was already answering, she said she knew the text and was ready to answer. Ls who finished first were Ls 1, 2, 5, 6 and 7.

(d) Reflection

Attendance: Only 11 Ls attended the session. Ls 4, 10 and 13 were absent without any reason. L 11 is still in hospital.

Learners: Ls gave an impression that they understood the text and were ready for the comprehension questions. The general performance of Ls varied from poor to good. Their scores are as follows: Ls 1, 5, 6, and 7 ranged between 3-6 out of 17. Ls 8, 9 and 12 ranged between 8-8 1/2. Ls 3, 14 and 15 ranged between 11-17.

Interpretation: The performance of Ls in the comprehension questions indicated that progress was achieved by more than 50% of Ls who wrote the comprehension questions. Inability to understand English as the language of learning and teaching was the barrier which mostly had a negative impact. The text had been read in four sessions, explained, discussed and mental pictures formed and drawn, but Ls 1, 2, 5 6and 7 still could not read the questions with understanding. Ls whose scores were poor gave irrelevant answers which showed that they did not understand the questions. More support on the development of English language is necessary in order to enhance the development of question comprehension. The use of imaging was appropriate, however, and did yield positive results. On the other hand, time of attending sessions has a negative impact on Ls' performance since they are tired and hungry and have to remain while other Ls go home. R is comfortable but not pleased with the progress made. Time is not enough to help the struggling Ls since when such attention is given, the Ls who are progressing well get bored.

Next session: Discussion on the problems experienced during the comprehension questions, and success and difficulties experienced during the use of the imaging technique.

(21) Session Twenty (2001-09-12)

(a) Objective: To find out from Ls their difficulties in the comprehension questions and review the use of the imaging technique as a whole.

(b) Preparation: Prepared topics for discussion.

(c) Process of imaging: (Attendance: 15) R instructed Ls to be relaxed and calm. R informed Ls that an open discussion was going to be conducted to look at their difficulties and success in comprehension questions of the previous week and the use of the imaging technique as a whole. The discussion was under the following topics:

- Problems experienced in answering the questions.
- Sessions that were difficult and easy.
- Difficulties with the mastery of the imaging technique.
- Barriers obstructing the development of reading comprehension skills.
- Support received from parents.

(d) Reflection

Attendance: All the Ls who have remained in the experimental group were present.

Learners: Ls expressed satisfaction with the use of the imaging technique. They did mention that at first it was difficult for them to participate in the group activities since they were not used to that. As the sessions continued they began to see that participation helped them to be active

Ls and it was not easy for them to forget some of the information especially if they drew pictures. Unfamiliar text was a problem since they could not figure out what they were reading about. Their inability to read aloud with understanding and expression was also mentioned by Ls. Ls did complain that having to stay after school, being hungry and also having to walk long distances were reasons which made them absent on certain days.

Ls indicated that English language was a great barrier to their mastery of imaging when reading. Unfamiliar words made it difficult for them to form mental pictures but after they were explained it was simpler. Ls also mentioned that it was difficult for them to concentrate if the text was difficult hence they lost interest quickly. Some Ls mentioned that perseverance and eagerness to improve their reading skills drove them to attend regularly.

Interpretation: The imaging technique is a feasible technique that can be used in township schools since it enhances group learning. The training of metacognitive skills is vitally important in order to help Ls to be aware how to use their metacognitive skills during reading. A group of five to six Ls would have been more appropriate in helping Ls who experience a diversity of learning problems. R found that it was difficult to assist so many Ls in each session. When a few Ls were present it was much better since R was able to give undivided attention to Ls who experienced more difficulty than others. It was also difficult to continue with Ls who improved faster than others while some lagged behind. More support on the development of English language is crucial in the development of reading habits and in developing reading comprehension skills through the use of the imaging technique. Ls indicated that their parents were only involved when they asked about their progress in the reading support.

Learners who attended most sessions performed better than those who were often absent. The use of group discussion encouraged active learning. The imaging technique enhanced the use of metacognitive skills and affective process. The activation of prior knowledge, use of self-questioning and the discussion of text enhanced the development of reading comprehension skills. The imaging technique helped learners to be meaningfully involved during reading and enhanced memory.

The development of the reading comprehension skills is negatively affected by lack of reading books at home and at school, lack of parental support, inadequate reading ability and lack of basic communication skills in English. Learning problems experienced by some Ls have a negative impact in the development of the reading comprehension skills of township secondary school learners.

3.3.3 Control group treatment: Dictionary method

The control group used the dictionary method where support in the development of reading comprehension skills was done through the explanation of the unfamiliar words. This group used all the same texts and wrote all the same comprehension questions as the experimental group. The researcher guided learners on reading with comprehension by reading sentence by sentence. The researcher gave learners the meaning of unfamiliar words since learners had no dictionaries. The meaning of words were only given when learners experienced difficulty with them.

Group participation was done where learners discussed each paragraph after reading aloud. Learners took turns reading the text. The researcher encouraged the learners to ask one another questions on the paragraph for more clarity. Learners were instructed to ask themselves questions while reading with an aim of constructing meaning. This helped learners to use their metacogntive skills. The researcher moved around listening and assisting learners with pronunciation of unfamiliar words. Some learners had difficulty reading aloud. Group participation helped learners to be attentive, to concentrate and to be focused. The comprehension of the text appeared easier with the control group since learners were given the meaning of unfamiliar words. This group was also guided on how to read with meaning, correct intonation and phrasing while observing punctuation marks.

Learners in the control group who progressed well in developing reading comprehension skills were those who came from the township than from the informal settlements. Some of the learners who obtained lower scores in the post-test than in the pre-test attended more sessions such as L8 and L10. L 10 who obtained a score of 9 in the pre-test drop, to 5 in the post-test due to family problems that he experienced just before he wrote the post-test.

As in the experimental group, lack of reading books at home and at school had a negative impact in the development of reading comprehension skills. Poor English language skills negatively affected their performance especially in answering of comprehension questions.

3.3.4 Interview with learners

(1) Introduction

Interviews were conducted with learners after the completion of the reading support. Three learners from each research group, that is, experimental, control and non-treatment groups, were selected: those learners whose improvement score in the post-test was the highest as well

as those whose improvement score was average and lower. A tape recorder was used to audiotape the interviews. The interviews contained open-ended questions and semi-structured questions.

(2) The learners' responses on the interviews (Experimental Group)

(a) Learner E3-H

Learner E3-H [6] (pre-test 4, post-test 15) mentioned she enjoyed the reading support and said that it helped her with reading and how to understand other subjects like English and Social Studies. She indicated that the session that had been difficult for her was on the text about the turtle (The wreck of the Zanzibar). She also mentioned that she enjoyed imaging when the narratives were done. She pointed out that when she answered the pre-test it was difficult and she did not understand the questions. When answering the post-test it was easier due to her ability to use imaging. She pointed out that she was now able to read with meaning. She said her parents were only involved in asking her about her progress during the reading support but no extra help was given. The learner said that she had no problem with the reading support sessions being conducted in the afternoon.

(b) Learner E5 A

Learner E5-A (pre-test 5 post-test 11) indicated that before he began with the reading support he had difficulty understanding what he read. After attending the reading support he was able to read with more comprehension. He mentioned that at first he did not know how to form mental images. Guided imagery and the discussion of mental pictures helped him how to use imaging for reading. He further pointed out that the desire to learn to read with comprehension motivated him to attend most of the sessions. He said that when he read the pre-test comprehension he had no clue what the text was all about. But when he answered the comprehension questions for the second time during the post-test it was simpler though he still could not understand certain questions. He mentioned that his parents did ask him about his performance during the reading support but no support as far as reading was given.

(c) Learner E6-L

Learner E6-L (pre-test-5 post-test 7) indicated that the reading support had helped him with the comprehension of text when reading. He said that at first he had had difficulty understanding what he read. He mentioned that some sessions were more difficult than others. Concerning the answering of the pre-test and the post-test, he said that he had had difficulty in understanding

[6] Learner with the highest score has a symbol E 3-H, average score E 5-A and the lowest score E 6-L.

the comprehension questions. He mentioned that English was his difficulty. He pointed out that attending the reading support helped him in improving his English subject, especially during the September test. He also mentioned that he had been motivated to attend because he wanted to improve his reading comprehension skills. He indicated that his parents asked him about his performance time and again. He said that after school was at an appropriate time for the reading support programme. He also highlighted that lack of English language was still his difficulty hence he could not interpret the comprehension questions correctly when he answered the post-test.

(3) Learners' responses on the interviews (Control Group)

(a) Learner C-6H

Learner C 6-H (pre-test 7, post-test 16) mentioned that at first she did not like reading since she experienced difficulty with comprehension. She pointed out that she did not understand certain words. Attending reading support sessions helped her to read with understanding. She mentioned that she enjoyed most of the sessions because she received attention and the fact that they were fewer in the group than when she was in class. She highlighted that her motivation to attend the reading support was due to her eagerness to improve her English performance. She said her performance in September tests improved in English and History. Her parents were always inquiring about her progress in the reading support.

(b) Learner C-13A

Learner C-13A (pre-test 12, post-test 16) pointed out that attending reading support helped her because she was struggling in English. She said she was not interested in reading since it was difficult for her to understand what she read. Her major problem was her inability to understand unfamiliar words and she had no dictionary. Reading support helped her to read with comprehension and to participate during the discussions. She mentioned that another problem was her difficulty to understand questions. After attending reading support she was able to understand questions more than before. She said she improved in English and Science because she was able to read with comprehension. She said her parents always asked her about her performance during the reading support. She mentioned that she had no problem with the afternoon time for reading support.

(c) Learner C-10L

Learner C-10L (pre-test 9, post-test 5) mentioned that he had difficulty with reading before he attended the reading support. He said that he did not understand what he read hence he did not like reading. By attending the reading support it helped him with reading comprehension

and he was able to enjoy reading more than before. He mentioned that he was motivated to attend because he wanted to improve his English performance and also in the other subjects. He pointed out that he used to get zero in comprehension tests but now he was better. He mentioned that his mother did check his reading texts to see how he was progressing. He said his performance in the post-test was negatively affected by his family problems that occurred just before he wrote the test. He mentioned that understanding questions was still difficult for him.

(4) Learners' responses on the interviews (Non-treatment Group)

(a) Learner NT-5H

Learner NT-5A (pre-test 6, post-test 9) mentioned that he liked reading newspapers. He said that he is not performing well in English. He indicated that he has difficulty understanding what he reads. He mentioned that it was difficult to answer the comprehension because he did not comprehend and the questions were also difficult. When he answered the comprehension for the second time he felt it was better than the first time. He believed that he would have improved his reading comprehension if he could have attended the reading support.

(b) Learner NT-14A

Learner NT-14H (pre-test 10, post-test 11) indicated that she generally liked reading. She said she was performing well in English. She mentioned that the comprehension test she wrote was difficult. She said she could not understand certain paragraphs and the questions. She mentioned that she has difficulty with unfamiliar words. She pointed out that her second attempt of the comprehension was better because she remembered the text. She said that if she had attended the reading support it would have helped her with vocabulary.

(c) Learner NT-9L

Learner NT-9L (pre-test 8, post-test 3) indicated that she does not like reading. She said her difficulty was comprehension hence she had no interest in reading. When answering the comprehension test for the first and the second time she said it was difficult. She mentioned that she did not understand the questions. She also pointed out that her poor performance in the post-test was due to her behavioural problems such as dodging of periods and not doing her work in class. She said that if she had attended the reading support her performance in English could have improved.

3.3.5 Results and findings

Table 3.4 contains the pre-test and post-test scores of the research groups.

Learners	Experimental Group		Control Group		Non-Treatment Group	
Learners	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
1	2	2	1	1	2	*
2	3	11	4	8	3	7
3	4	15	6	8	4	6
4	5	4	6	9	6	*
5	5	11	7	10	6	9
6	5	7	7	16	6	*
7	6	7	7	4	7	5
8	7	8	8	4	7	7
9	8	*	8	11	8	3
10	8	5	9	5	8	7
11	8	10	9	13	9	7
12	9	10	10	9	9	*
13	9	10	12	16	10	4
14	10	7	12	14	10	11
15	15	16	14	11	15	*
Mean	6.9 (17.3%)	8.2 (21.9%)	8 0 (20.0%)	9.2 (23.1%)	7.3 (18.3%)	4.4 (16.5%)

* Learners did not write the post-test.

(1) Overview

Table 3.4 indicates the overall performance of learners in the three groups. The quantitative results of the post-test indicate that the experimental group improved more than the control as well as the non-treatment group. The experimental group improved by an average percentage of 4.6%, the control group by 3.1% while the non-treatment group dropped by –1.8%. There was a movement of improvement in learners who obtained lower scores in the pre-test. L2, and L3 in the experimental group improved by more than 20%. In the control group L2 improved by 10% and L6 improved by 22.5%. In the non-treatment group L2 improved by 10%. These learners improved with higher percentage when compared with the learners who obtained higher scores in the pre-test.

(a) Experimental Group

The Table 3.4(a) compares the pre-test and post-test scores of the experimental group.

Table 3.4(a) Post-test results: Experimental Group

Learners	Age on 2001/06/01	Years in Sec. School	Home	Sessions attended	Pre-test Scores		Post-test Scores	
					/40	%	/40	%
L1	18yrs.6ms	3	Township	13	2	5	2	5
L2	16yrs.4ms	3	Informal Settlement	19	3	7.5	11	27.5
L3	15yrs.7ms	4	Township	20	4	10	15	37.5
L4	17yrs.11ms	4	Informal Settlement	12	5	12.5	4	10
L5	16yrs.0m	3	Township	18	5	12.5	11	27.5
L6	16yrs.8ms	3	Township	20	5	12.5	7	17.5
L7	15yrs.6ms	3	Township	20	6	15	7	17.5
L8	15yrs.11ms	3	Township	19	7	17.5	8	20
L9	17yrs.7ms	4	Informal Settlement	12	8	20	*	*
L10	18yrs.11ms	4	Township	11	8	20	5	12.5
L11	16yrs.7ms	3	Township	17	8	20	10	25
L12	13yrs.9ms	2	Township	17	9	22.5	10	25
L13	14yrs.5ms	3	Township	14	9	22.5	10	25
L14	15yrs2ms	3	Township	20	10	25	7	17.5
L15	17yrs.11ms	3	Township	18	15	37.5	16	40

Only 14 learners wrote the post-test. One learner had left the school during the reading support programme. There are 5 learners who are overage and 1 learner is under age. Only 4 learners attended all the 20 sessions: L3, L6, L7, and L14.

Learners who had obtained low scores in the pre-test generally improved more than the learners who had obtained higher scores in the post-test. L 3 obtained a score of 4 in the pre-test and a score of 15 in the post-test, improving by 27.5%. L15 who had obtained a score of 15 in the pre-test, improved by only 2.5%.

Learners who obtained scores of 3, 4 and 5 in the pre-test improved by more than 20% in the post-test. Learners whose scores ranged between 7-15 in the pre-test improved slightly in the post-test. L1 and L4 who appeared to be experiencing intellectual disabilities did not improve in their performance-instead, L4 obtained a lower score in the post-test. These learners are both overage and L1 was absent in 7 sessions and L4 in 8 sessions. The two learners struggled throughout the reading support. Out of the fourteen learners who wrote the post-test, three learners obtained lower scores as compared with the pre-test.

The poor attendance by some learners, especially those who appeared to be experiencing learning difficulty, seemed to have a negative impact in their performance (or vice versa). Afternoon reading support was an appropriate time but the long distances some learners had to walk, hunger which some learners suffered, and family commitments like fetching children from day care centres had a negative effect on attendance and thus on the development of their reading comprehension skills.

(b) Control Group

Table 3.4(b) Post-test results: Control Group

Learners	Age on 2001/06/05	Years in Sec. School	Home	Sessions attended	Pre-test Scores		Post-test Scores	
					/40	%	/40	%
L1	17yrs.8ms	3	Township	15	1	2.5	1	2.5
L2	14yrs6ms	3	Township	15	4	10	8	20
L3	16yrs.1m	3	Township	16	6	15	8	20
L4	19yrs.2ms	3	Township	17	6	15	9	22.5
L5	18yrs.1m	4	Township	16	7	17.5	10	25
L6	16yrs2ms	3	Township	18	7	17.5	16	40
L7	16yrs1m	3	Informal Settlement	16	7	17.5	4	10
L8	16yrs11ms	3	Informal Settlement	20	8	20	4	10
L9	15yrs1m	2	Township	18	8	20	11	27.5
L10	16yrs11ms	3	Informal Settlement	18	9	22.5	5	12.5
L11	16yrs1m	4	Township	15	9	22.5	13	32.5
L12	15yrs6ms	2	Informal Settlement	15	10	25	9	22.5
L13	14yrs8ms	3	Informal Settlement	15	12	30	16	40
L14	15yrs.11ms	3	Township	17	12	30	14	35
L15	16yrs.7ms	3	Informal Settlement	17	14	35	11	27.5

Table 3.4(b) indicates the post-test results of the control group. The control group used the dictionary method as a support in the development of the reading comprehension skills. At first learners were given a text to read in their respective groups. Each learner was instructed to read a sentence taking turns while others followed in their texts. At the end of the paragraph learners had a discussion on the paragraph. The researcher walked around listening and verifying whether learners understood what they read. During the discussion other learners were instructed to ask the leaner who was discussing questions for more clarification. Learners were encouraged to assist one another in their groups in giving relevant information when irrelevant information was given. This enhanced group participation.

During the reading process the researcher found that most learners had difficulty reading aloud. They had problems with the pronunciation of unfamiliar words as well as their meanings. The researcher gave learners the meanings of unfamiliar words and assisted them with pronunciation. In order to enhance the comprehension of the text, the researcher wrote down all the meanings of words that were unfamiliar to the learners every time when a new text was read. All learners had no dictionaries hence the meanings of words had to be written down. The researcher first gave a general overview on the text before it was read to help the learners to have a picture on what they were going to read about.

During the discussion of the text learners had difficulty expressing themselves in English. The researcher allowed the learners to use their mother tongue. The use of mother tongue enhanced the meaningful participation of the learners in their groups and the researcher was able to see if learners understood the text or not. The explanation of the meanings of the unfamiliar words and the group discussions had a positive effect in the development of the reading comprehension skills. When comprehension questions were asked most learners managed to give relevant answers.

The use of the dictionary method appeared to be helpful in understanding the text but only when the meanings were given. When learners were given a text to read and comprehension questions to answer, they still experienced difficulty with comprehension of the text. Lack of vocabulary, poor decoding skills, inability to interpret the questions and poor English language development, negatively affected the development of the reading comprehension skills even though the dictionary method was used. L1 who appeared to be experiencing intellectual disability had difficulty in improving his reading comprehension skills.

Out of the fifteen learners who wrote the post-test, four learners obtained lower scores than in the pre-test. L1 maintained the same score in both tests. L2 improved by 10% while L2 in the experimental group improved by 20%, L6 improved by 22,5% and L9 by 7.5%% in. The overall performance of the control group indicate that it was lower when compared with the experimental group and the non-treatment group even though they obtained high scores in pre-test. The results indicate that the improvement that occurred cannot be absolutely ascribed to the dictionary method. Hawthorn Effect, the explanation of the background of the text, the motivation of learners and their willingness to learn had a positive impact in the improvement of their performance in the post-test.

(c) Non-treatment Group

Table 3.4(c) contains the post-test results of the non-treatment group. Only ten learners wrote the post-test. The other five learners did not turn up due to absenteeism.

Table 3.4(c) Post-test results: Non-treatment Group

Learners	Age on 2001/06/01	Years in Secondary School	Home	Pre-test Scores		Post-test Scores	
%				/40	%	/40	
L1	18yrs.0m	3	Township	2	5	*	*
L2	17yrs.7ms	4	Informal Settlement	3	7.5	7	17.5
L3	18yrs.0m	3	Township	4	10	6	15
L4	18yrs4ms	4	Township	6	15	*	*
L5	18yrs3ms	3	Informal Settlement	6	15	9	22.5
L6	14yrs.5ms	2	Informal Settlement	6	15	*	*
L7	14yrs.8ms	2	Township	7	17.5	5	12.5
L8	17yrs.1m	4	Township	7	17.5	7	17.5
L9	15yrs.9ms	3	Township	8	20	3	7.5
L10	16yrs.11ms	4	Township	8	20	7	17.5
L11	19yrs.9ms	4	Informal Settlement	9	22.5	7	17.5
L12	15yrs.0m	2	Informal Settlement	9	22.5	*	*
L13	18yrs.2ms	3	Informal Settlement	10	25	4	10
L14	16yrs.2ms	3	Township	10	25	11	27.5
L15	17yrs.3ms	4	Township	15	37.5	*	*

The non-treatment group did not receive reading support. The results indicate that two learners (L2 and L5) improved by more than 10% while L3 by 5%. L8 maintained the same score in both pre-test and post-test. Five learners obtained lower scores in the post-test. The improvement that occurred in this group may be attributed to the Hawthorn Effect since some of the learners did mention that they remembered the comprehension test they answered during the pre-test though it was written after six months. Lack of support in the development of reading comprehension skills of these learners had a negative impact in their performance in the post-test.

3.4 DISCUSSION

3.4.1 Orientation

The discussion in this section will look at the reading comprehension performance results shown on Table 3.5.

Table 3.5 Analysis of the pretest and posttest results

	Experimental Group			**Control Group**			**Non-treatment Group**		
Items	**Diff. in Perfor-Mance**	**Diff. in Method %**	**Base of Error %**	**Diff. in Perfor-mance**	**Diff. in Method %**	**Base of Error %**	**Diff. in Perfor-mance %**	**Diff. in Method %**	**Base of Error %**
1.1(0)	+51.43	+41.67	-8.33	-6.67	-11.11	+37.78	-3.64	-12.5	+49.21
1.2(a)(o)	-19.53	+15.38	-20.0	0	0	-53.85	+2.42	-7.14	+11.43
1.2(b)(o)	0	-100	-100	-0.47	0	0	0	0	0
1.3(o)	+7.62	-7.14	-10.39	+20.0	+12.31	+6.15	+2.42	-9.1	+15.0
1.4(o)	-3.44	-2.78	-23.21	+13.33	-8.33	+15.91	-15.38	-5.88	+30.56
1.5(o)	+0.47	0	+7.7	+40.0	+17.86	+8.93	+6.67	0	+36.37
1.6(o)	-7.14	-10.0	-4.55	-20.0	-2.5	-17.5	-15.38	0	-28.57
1.7(o)	+11.79	+47.73	+15.59	+20.0	-11.11	+14.0	-3.64	-23.08	+2.5
2.1(m)	-4.76	0	0(1) 0(3)	+26.67	-12.50	-3.41(1) +12.5(2) -9.09(3)	-15.15	+10.0	+6.67(1) -6.67(2)
2.2(m)	+19 o4	+20.0	0(1)	+13.33	0	-33.33(1) +33.33(2)	+17.58	-50.0	-66.67(1) +66.67(2)
2.3(m)	-10.47	+16.67	0(1)	+13.33	-13.33	+33.33(1)	+15.15	-43.86	-66.67
2.4(m)	+15.71	+14.29	-3.57(1) +3.57(2)	+13.34	-4.17	-12.5(1) +20.83(2)	-44.24	+17.64	-30.0(1) +30.0(2)
2.5(m)	+7.14	+8.33	-22.22(1 +22.22(2)	-6.66	-13.9	+5.56(1) -5.56(2)	+12.12	-20.0	+6.67(1) -6.67(2)
3.1(o)	+7.14	+1.02	-10.77	-6.67	-8.24	+45.45	-15.38	-9.1	-6.67
O=Open questions; m=Multiple-choice questions									

	Experimental Group			Control Group			Non-treatment Group		
Items	**Diff .in Perfor-mance (%)**	**Diff. in Method (%)**	**Base f Error (%)**	**Diff. in Perfor-mance (%)**	**Diff. in Method (%)**	**Base of Error (%)**	**Diff. in Perfor-mance (%)**	**Diff. in Method (%)**	**Base of Error (%)**
3.2(o)	-3.44	-8.34	+6.99	-6.67	-20.13	-3.25	+9.09	-20.0	-51.47
3.3(o)	-3.44	0	-8.33	0	+7.69	+10.9	-6.67	0	+9.09
3.4(o)	+7.14	+1.66	-11.12	-13.34	0	+30.0.	-15.38	+7.69	+27.35
3.5(o)	+7.14	-7.14	+34.08	+6.67	-21.43	-11.43	+9.09	-21.74	-19.04
4.1(o)	+7.14	-22.44	-44.76	+6.67	+2.23	+1.82	+11.51	-10.0	+28.0
4.2(o)	-14.28	+8.33	-15.91	+20.0	+3.41	+3.41	-4.24	-12.5	-33.33
4.3(o)	-3.44	+25.25	+14.14	0	-2.27	-20.45	-6.67	-14.28	+20.83
4.4(o)	-3.44	+2.31	-3.08	0	-10.71	-10.71	-15.38	0	+33.33
4.5(o)	-3.44	+18.18	+27.27	+40.0	-3.89	+33.77	+11.51	0	+37.5
5.1(m)	+9.53	+10.0	-15.91(1) +15.91(2	-2.0.0	-10.0	-30.0(1) +30.0(20	+7.88	-7.7	+14.29(10 -14.29(2)
5.2(m)	+10.47	+12.50	-12.50(1) +12.50(2	-24.76	0	-66.67(1) +66.67(2)	+16.36	-26.32	-27.38(1) +27.38(2)
5.3(m)	+0.47	-.0.59	+4.94(1) +8.24(2) -20.88(3)	-6.67	0	+21.22(1) +3.78(2) -25.03(3)	-15.38	-15.38	-0.6(1) -8.49(2)
5.4(m)	+3.33	+12.50	-1.79(1) +1.79(2)	-6.67	0	-15.0(1) +15.0(2)	+10.31	-0.28	+17.86(1) -17.86(2)
5.5(m)	+3.33	+12.50	-37.50(1) -8.93(2) +46.43(3	-13.33	+12.5	-12.50(1) -15.0(2) +27.5(3)	-35.15	+12.5	-6.35(2) +6.35(3)
Total	**+91.98**	**+109.89**	**-162.38**	**+101.43**	**-97.62**	**+132.56**	**-92.91**	**-261.03**	**+86.33**
Mean	**+3.28**	**+3.92**	**-4.27**	**+3.62**	**-3.48**	**+3.31**	**-3.31**	**-9.32**	**+0.42**

Table 3.5 indicates the statistical analysis of the items of the pre-test and the post-test. The difference in mean performance per item in the pre-test and the post-test results was calculated. The research group was too small to determine whether the statistical difference between the pre-test and the post-test is significant or not, but the educational value of the difference should also be considered. The positive sign figures indicate the amount of increase in the percentage of learners who answered the particular item correctly. The negative sign figures indicate the amount of decrease of learners who answered the item correctly.

The method the learners used when answering the items was analysed. For open questions (o) the method used was coded for whether learners formulated their own answers (1) or simply copied the answers from the text (0). For multiple-choice questions (m) the method used was coded for whether learners gave one response (1) or more than one response (0). The positive sign figures in the open questions indicate the amount of increase in the percentage of learners who formulated their own answers, while the negative sign figures indicate the amount of decrease in the percentage of learners who formulated their own answers. The positive sign figures for multiple-choice questions indicate the increase in the percentage of learners who gave only one response, while the negative sign figures indicate the decrease in the percentage of learners who gave only one response.

The base of error in the answering of items was analysed. This indicates what type of error learners made when answering incorrectly. For open questions, the errors committed by learners were coded for whether the statements are related (1) or unrelated (0) to the questions. For open questions the positive sign figures indicate the amount of increase in the percentage of learners who gave related though incorrect answers. The negative sign figures indicate the amount of decrease in the percentage of learners who gave related but incorrect answers. For multiple-choice questions, errors were coded for whether the choice of statement is due to guessing (1), reasoning error (2), half fact or incomplete reading of the questions (3) and whether the option selected has any reference to the text though unrelated to the question (4). The positive sign figures for code (1) indicate the amount of increase in the percentage of learners who guessed answers, for code (2) the amount of increase in the percentage of learners whose answers are due to reasoning error, for code (3) the amount of increase in the percentage of learners who gave half fact or due to incomplete reading of the question and for code (4) the amount of increase in the percentage of learners who gave incorrect answers with reference to the text though unrelated to the question.

The negative sign figures for each code indicate the amount of decrease in the percentage of learners who gave an incorrect answer due to the specific base of error.

3.4.2 Discussion

(1) Experimental Group

According to the quantitative analysis of the results in Table 3.5 the experimental group improved well (by more than 10%) in Questions: 1.1(o)+51.43, 1.7(o) +11.79, as well as in Questions: 2.2(m) +19.04) 2.4(m) +15.71 and 5.2(m) +10.47. Overall, they showed improvement in Questions: 1.3(o), 1.5(o), 2.5(m), 3.1(o), 3.4(o), 3.5(o), 4.1(o), 5.1(m), 5.3(m), 5.4(m) and 5.5(m). The drop in performance occurred in Questions: 1.2(a)(o), 1.2(b)(o), 1.4(o), 1.6(o), 2.1(m), 2.3(m), 3.2(o), 3.3(o), 4.2(o), 4.3(o), 4.4(o), and 4.5(o).

The analysis of the method used indicates that there was a dramatic increase of +41.67, +47.73 in Questions: 1.1(o) and 1.7(o) in the number of learners who formulated their own answers instead of copying text. In Questions: 2.2(m) and 2.4(m) there was an increase of +20.0, +14.29 in the number of learners who gave one response instead of more than one response.

The analysis of the errors indicate that there was an increase of more than 10% in Questions: 1.7) (o)+15.59, 3.5(o) +34.08, 4.3(o) +14.14, 4.5(o) +27.27 in the number of learners who gave related statements rather than unrelated statements even though they were incorrect.

The results indicate that the experimental group improved in Questions 1 and 2 in comparison with Question 3 and 4. Question 3 appeared to be more difficult for most learners who answered it. Learners were required to explain the statements but lack of language and vocabulary made it difficult for them to answer the questions correctly. Question 4 on the other hand contained questions which challenged their cognition such as why, how and what. Such questions seemed to be problematic to them. Learners could not use imaging to understand and to interpret the questions since the questions contained unfamiliar words they did not know.

The use of imaging technique such as the formulation of mental images while reading, the use of metacognitive skills, affective processes, the use of mother tongue, group participation such as the discussions and the drawing of images appear to have benefited learners who improved

their reading skills. Educationally the use of the imaging technique had positive results since the entire experimental group improved their English examination results at the end of the year. The English teachers pointed out that they had noticed some improvement in these learners.

The English language as the language of learning and teaching seemed to be the biggest barrier in the development of reading comprehension skills. Lack of vocabulary had a negative impact in the use of imaging since learners could not image about something they did not know. Learners also had difficulty in assimilating new information with their own existing information due to lack of language.

The general improvement that occurred showed that support had a positive impact in the development of reading comprehension skills of township secondary schools learners. Development of English language however, appears to be a prerequisite in the development of the reading comprehension skills when using the imaging technique for township secondary school learners. It was mentioned earlier that that this group consisted of weaker learners as compared with the other two research groups. Thus the results obtained should be understood against this background.

(2) Control Group

According to Table 3.5 the analysis of the results indicate that the control group improved well (by more than 10%) in Questions 1.3(o)+20.0, 1.4(o)+13.33, 1.5(o)+40.0) 1.7(o)+20.0, 4.2(o)(+20.0) and 4.5(o) (+27.27) as well as in Questions 2.1(m)(+26.67), 2.2(m)(+13.33), 2.3(m)+13.33, 2.4(m)+13.33. Overall, they showed improvement in Questions 3.5(o) and 4.1(o). The drop in performance occurred in Questions 1.1(o), 1.2(b)(o), 1.3(o), 1.4(o), 1.6(o), 2.5(m) 3.1(o), 3.2(o), 3.4(o), 5.1(m), 5.2(m), 5.3(m), 5.4(m) and 5.5(m).

Questions 1.3(o) and 1.5(o) show that there was an increase of +12.31 and +17.86 in the number of learners who formulated their own answers instead of copying text. In most multiple-choice questions there was a decrease in the number of learners who gave one response with an exception of Question 5.5(m) where there was an increase in the number of learners who gave one response.

The analysis of errors indicates that in Questions 1.1+ 37.78, 1.4+15.91 and 1.7+14.0, 3.3 +10.9, 3.4 +30.0, 4.5 +33.77 there was an increase in the number of learners who gave related answers rather than unrelated answers.

The control group improved in Question 4 when compared with the experimental group. This improvement seems to be related to the use of the dictionary that helped the learners with the meaning of unfamiliar words.

The control group experienced English language as problematic. The ability to read aloud such as pronunciation, intonation and phrasing was also a problem as in the experimental group. The development of reading interest, reading aloud, group discussions on the text and the use of dictionary helped them in the development of reading comprehension skills. The control group consisted of stronger learners when compared with the other two groups. This factor should be taken into consideration when looking at the results.

(3) Non-treatment Group

Only ten learners wrote the post-test. According to Table 3.5 this group improved well, (by more than 10%), in Questions: 4.1(o) +11.51, 4.5(o) +11.51 as well as Questions 2.2(m) +17.58, 2.3(m) +15.15, 2.5(m) +12.12, 5 2(m) +16.36 and 5.4(m) +10.31. Overall, they improved in Questions 1.2(a)(o), 1.3(o), 3.2(o), 3.5(o) and 5.1(m). There was a drop in performance in Questions: 1.1(o), 1.4(o), 1.5(o), 1.6(o), 1.7(o), 2.1(m), 2.4(m), 3.1(o), 3.3(o), 3.4(o), 4.2(o), 4.3(o), 5.1(m), 5.3(m) and 5.5(m).

The analysis of Questions 1, 3 and 4 (open questions) indicates that there was a drop in the number of learners who formulated their own answers. Question 2.1(m)(+10.0), 2.4(m)(+17.64) and 5.5(m)(+12.12) indicate an increase in the number of learners who gave one response instead of more than one response.

The analysis of errors indicate that there was an increase of more than 10% in Questions: 1.1(o)(+49.21), 1.2(a)(o)(+11.43), 1.3(o)(15.0), 1.4(o)(+30.56), 1.5(o)(+36.37), 3.4(0)(27.35), 4.1(o)(+28.0), 4.3(o)(+20.83), 4.4(o)(+33.33) and 4.5(o)(+37.5) in the number of learners who gave related answers rather than unrelated answers though they were incorrect.

The overall improvement was lower when compared with the experimental group and the control group. No reading support was given to these learners. The improvement in the post-test may be attributed to the Hawthorn Effect that occurred though it was written after six months. These results indicate that lack of support in this group had a negative effect on the performance of these learners.

3.5 CONCLUSION

This chapter has reported the practical investigation of the imaging technique and the analysis of the results. The quantitative and the qualitative results were analysed and discussed. Chapter Four will present the summary, conclusions, limitations of the research, and recommendations for further research and the enhancement of the reading comprehension skills of learners in township secondary schools.

CHAPTER FOUR

SUMMARY, CONCLUSIONS, LIMITATIONS OF RESEARCH AND RECOMMENDATIONS

CHAPTER FOUR

SUMMARY, CONCLUSIONS, LIMITATIONS OF RESEARCH AND RECOMMENDATIONS

4.1 INTRODUCTION

Reading is one of the basic skills for learning. If learners were taught in their early school years how to read with comprehension, reading difficulties experienced by most learners would be minimized at the secondary school level. The purpose of this research study is to examine the use of the imaging technique as a support in developing the reading comprehension skills of township secondary school learners.

The literature study has shown that the imaging technique makes use of the formation of mental pictures when reading, which is crucial in the construction of meaning. The creation of mental pictures enable learners to connect new incoming information with their existing knowledge in order to construct meaning on the reading text. The use of the imaging technique promotes active learning, group participation and retention. The imaging technique advocates a holistic approach in the development of reading comprehension skills but its technique should be adapted to suit the particular needs of the learners.

4.2 SUMMARY

Township secondary school learners generally come from a disadvantaged environment. They often experience a diversity of learning problems of which one is reading comprehension. The research study looked at the use of the imaging technique as a support in the development of the reading comprehension skills of township secondary school learners. The imaging technique was selected since it is seen as a simple, feasible, as well as less taxing, technique as far as time and money are concerned.

The research was conducted with the Grade 9 learners. The participants were selected after a pre-test was administered, to comprise the 60 weakest readers in the grade. The learners, whose scores ranged between 1 and 15, were randomly assigned to three different groups, namely, experimental group, control group and non-treatment group. During the course of the research attrition occurred where 5 learners from each of the experimental and the control group dropped out of the reading support. In the non-treatment group, 5 learners left the school (an additional 5

did not report for the post-test). Each group remained with 15 learners.

The experimental group used the imaging technique while the control group used the dictionary method in the development of reading comprehension skills. The non-treatment group did not get reading support. The experimental and the control groups had two sessions per week for one hour per session, for a period of ten weeks (20 sessions). The same reading texts and the same comprehension questions were used for both groups. Both groups experienced difficulties with reading aloud, meanings of unfamiliar words as well as the use of English as the language of learning and teaching.

The use of the imaging technique was introduced by means of relaxation exercises and verbal narratives. Learners were guided how to relax and to form mental pictures on narratives while closing their eyes. Discussion of mental pictures was done and the researcher checked that learners mastered the imaging technique. Once learners had mastered the technique, then imaging for reading was done. Learners were provided with reading texts in each session. The researcher guided the learners how to form mental pictures while reading in order to construct meaning. Imaging for reading began with word cards followed by sentence, paragraph and then the whole text.

During the use of the imaging technique problems experienced by learners were identified and addressed. The adaptation of the imaging technique was done with an aim of addressing these problems in order to enhance the mastery of the imaging technique. The researcher adapted the technique by assisting learners with the pronunciation of unfamiliar words, meanings of some unfamiliar words, the use of the mother tongue, the use of self-questions and the use of metacognitive and affective processes. Some learners mastered the imaging technique faster than others. Learners who seemed to be experiencing an intellectual disability had difficulty in mastering the imaging technique.

The control group used the dictionary method in developing reading comprehension skills. This group also experienced problems such as reading aloud, lack of vocabulary and the use of English as the language of learning and teaching. The use of the dictionary method assisted the learners with the meaning of unfamiliar words but still could not accelerate the development of reading comprehension skills. This suggests that only giving learners the meaning of unfamiliar words does not lead to reading comprehension. The development of English language is, however, seen as a critical issue in enhancing the development of reading comprehension skills when reading support is being given especially with township secondary school learners.

The research results indicate that the use of the imaging technique improved the development of reading comprehension skills more than the use of the dictionary method. The statistical difference of the results of the experimental and the control group could not be calculated as to whether it was significant or not since the research group was too small. The improvement that occurred in the experimental and the control group cannot be absolutely ascribed to the imaging technique or the dictionary method. Factors such as learner effect, motivation, learners' willingness to learn and the previous knowledge they have already acquired may have contributed to a positive effect in the improvement of their reading comprehension skills.

The conclusions discussed in 4.3 will look at the research results from three orthodidactic angles: Learning content (development of reading comprehension skills), the role of the educator (in enhancing the development of reading comprehension skills) and the participation of the learner (in improving his/her comprehension of written text).

4.3 CONCLUSIONS

4.3.1 Content: reading comprehension and the imaging technique

The use of the imaging technique in the development of the reading comprehension skills was investigated by means of the following research questions:

(a) What extrinsic barriers are obstructing the development of reading comprehension skills in English as the language of learning and teaching of Grade 9 learners in a township school?

The research findings indicate that poor English language development and the use of English as the language of learning and teaching in the township school are seen as major extrinsic barriers in the development of reading comprehension skills of learners in the township secondary school. Lack of reading books, dictionaries, encyclopaedias and lack of parental support as far as reading is concerned are other barriers obstructing the development of reading comprehension skills of township secondary school learners.

(b) What extrinsic barriers are obstructing the mastery of the imaging technique as learning support to improve the reading comprehension skills of learners in township secondary school?

Poor attendance during the reading support due to dodging and the duty of fetching younger siblings, e. g. from day care centres or primary schools, afternoon sessions, the hunger factor, and the reading texts that learners were not within their language level and experiential world had a negative impact on the mastery of the imaging technique. Lack of parental involvement during the period of reading support was one of the barriers that obstructed the mastery of the imaging

technique, since no follow-up was facilitated.

(c) How should the imaging technique be adapted for learners in a township secondary school to master the technique and thus their reading comprehension skills?

The free use of the mother tongue, explanation of unfamiliar words, discussion of mental pictures, use of self-questions, as well as the use of metacognitive skills and affective processes were profitably used in adapting the imaging technique when the text was read.

4.3.2 Educator

(a) What are the difficulties experienced by the educator in the use of the imaging technique in learning support for reading comprehension in a township secondary school?

The difficulty experienced by the researcher was the shift from the conventional teaching style to that of being the facilitator. The role of being the facilitator was challenging since learners too were used to the conventional way of teaching that puts less demands on their participation during learning. This tempted the researcher to use the teacher directed way of learning which fails to benefit learners when using the imaging technique in developing reading comprehension skills. Another difficulty was the lack of planned procedure to be followed when using the imaging technique. The researcher had to think strategies to be used in order to overcome the problems encountered during the use of imaging.

The researcher found that some of the learners were functioning far below their age and grade level than what was expected. Learners who appeared to be experiencing intellectual disability were difficult to assist to master the imaging technique, while others were progressing much faster. Some of the reading texts were unfamiliar to the learners and that hampered the mastery of the imaging technique. Absenteeism and dodging of sessions slowed the progress in the mastery of imaging which negatively affected the development of the reading comprehension skills.

(b) How should the imaging technique be adapted to enable the educator successfully to use the technique in learning support and across the curriculum in the township secondary school?

The use of verbal narratives was one of the ways used to adapt the imaging technique when learners experienced difficulty with imaging. Once learners had mastered the imaging technique they were guided how to transfer the imaging skills for reading and the learning of other subjects.

Learners with pronunciation problems were assisted and those who had difficulty expressing themselves in English during the discussion of mental pictures were allowed to use their mother tongue. Poor readers were put amongst learners who read better in order to listen while following in their texts. Group participation such as the discussion of text, helped learners to share their ideas about the reading text and about the mental pictures they had formed when reading.

4.3.3 Learners

(a) What intrinsic barriers are obstructing Grade 9 learners in a township secondary school in developing their English reading comprehension skills?

Lack of basic communication skills in English, poor scholastic performance, passive learning styles, poor English language development, lack of meaning of unfamiliar words and lack of interest in reading and negative self-concept were recognised as barriers obstructing the development of reading comprehension skills of Grade 9 learners from the township secondary school. Learners who had a history of failure, are overage and displayed poor scholastic performance, tend to believe that they may never achieve any progress and this was detrimental to the support that they were getting.

(b) What intrinsic barriers are obstructing Grade 9 learners in a township secondary school in mastering the imaging technique in learning support to improve their reading comprehension skills?

Poor English language development, poor vocabulary, lack of meaning of unfamiliar words and lack of interest in reading were some of the barriers that obstructed learners in mastering the imaging technique. When learners failed to understand the meaning of unfamiliar word(s) especially word(s) that was critical to imaging, imaging was almost impossible. When the unfamiliar words were explained imaging was enhanced which intern enhanced reading comprehension.

(c) How should the imaging technique be adapted to enable the learners in a township secondary school to master the technique and improve their reading comprehension skills?

The free use of mother tongue, explanation of unfamiliar words, assisting learners with the pronunciation of unfamiliar words as well as the strategy of asking themselves specific questions with an aim of constructing meaning were used in adapting the imaging technique in order to improve the reading comprehension skills of township secondary school learners. The discussion of mental pictures the active participation of learners enhanced the mastery of the imaging technique.

4.4 LIMITATIONS OF RESEARCH

- The problem of English as the LoLT which is experienced by township secondary school learners was under-estimated in planning the research. Many township secondary school learners experience extreme language difficulty such as a serious lack of vocabulary, difficulty with decoding of unfamiliar words and overall lack of English language proficiency. These problems impacted heavily on their progress in utilising imaging for comprehension, often causing an insurmountable barrier.

- Lack of English vocabulary negatively affected the use of the imaging technique since learners had difficulty forming mental pictures because they could not access the content and association of words they did not understand. Most of the learners lacked even basic vocabulary, hence imaging became almost impossible.

- Failure to identify learners with specific learning problems or disability prior to reading support introduced a strong, confounding variable in the research. When learners with a diversity of learning difficulties were included in the sessions, they failed to cope with the work to be done since they lagged behind while others progressed. Special measures seem indicated, to include learners with intellectual disabilities in instruction on imaging for reading comprehension.

- Some of the texts used during the sessions were not at the learner's level of English proficiency and some of the texts were not within their experiential world. Learners lacked background knowledge about the text, which affected their use of imaging to understand the text.

- The time (afternoon sessions) for research had a negative effect on the results, since most learners were tired and hungry and they had to remain at school while other learners went home. Other learners could not attend regularly since they had to fetch their younger brothers or sisters from the day care centres or primary schools.

- The results obtained cannot be generalised to other township secondary schools due to the small number of learners involved in the research and the unequal assignment of learners to the research groups that occurred. The results can perhaps be generalized to Grade 9 (Senior phase) learners of the research school, and for learners with severe English reading and language problems.

- Disruptions such as the afternoon activities (like cleaning of the classrooms) and school holidays had a negative effect on the development of the participant's reading comprehension skills.

- The passive learning style that most township secondary school learners are used to hampered the development of the use of metacognitive processes which are crucial during imaging. Learners took a lot of time before they could get used to active learning where they were required to think and to participate meaningfully during the sessions.

- A general lack of exposure to reading material, a lack of interest in reading and, a lack of dictionaries and encyclopaedias both at home and at school had a negative impact on the development of reading comprehension skills.

- Inability to establish a relationship with the learner's parents during the period of reading support in order to involve them in helping their children with reading at home had a negative effect on the development of reading comprehension skills since some of the learners did not read at all at home and during the holidays. Absenteeism could not be prevented due to lack of support from the parents in motivating their children and in monitoring their progress regularly.

4.5 RECOMMENDATIONS

4.5.1 Recommendations for practice

When the implementation of the imaging technique for the development of reading comprehension in the township secondary school is done the following should be taken into account.

- The possibility of implementing the imaging technique within the school curriculum should be considered when learners who experience reading comprehension problems if they may be assisted during the normal school periods.

- The learning atmosphere, the learning conditions as well as the school activities during and after school should be controlled so that they should not hamper the use of special techniques in developing the reading comprehension skills. The development of English language should receive serious attention concurrent with the use of the imaging technique when developing the reading comprehension skills of township secondary school learners.

- The time as to when to implement a special reading support programme utilising, amongst others, the imaging technique should be considered before the reading support is given. The reading material should be at the level of the learners' language of development and also within their experiential world. This will help learners in using their prior knowledge when reading new information. If learners have no clue about what they are reading then it becomes difficult for them to assimilate new information with their existing knowledge in order to construct meaning on what they are reading.

- Parental involvement should be established in order to form a partnership with the school and educators with an aim of helping their children with reading at home and to monitor their progress as well as giving them emotional support.

- The possibility of having planned guidelines to be followed by the educator on how to use the imaging technique as a form of reading support.

- The possibility of the training of educators in the use of the imaging technique in developing reading comprehension skills and the learning of the other subjects before implementing the technique.

It is recommended that one should not rely on the imaging technique exclusively when developing reading comprehension skills of township secondary school learners. There is an urgent need

where special efforts in the development of the English language should be taken in order to enhance the development of reading comprehension skills.

4.5.2 Recommendations for further research

- The development of a measuring instrument that can be used to determine the baseline of English development which learners should possess before implementing the reading support.

- The method to be used in the screening of learners who need intensive development of their English language proficiency before they could use the imaging technique as well as those who can develop their English language while using the imaging technique.

- The development of strategies to be used in the development of the metacognitive skills of township secondary school learners in order to enhance the use of the imaging technique in developing reading comprehension.

- It is recommended that one should not rely on the imaging technique exclusively when developing reading comprehension skills of township secondary school learners. There is an urgent need where special efforts in the development of the English language should be taken into account in order to enhance the development of reading comprehension skills.

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APPENDIXES

Appendix A

Pre-test and post-test comprehension

READING COMPREHENSION NAME _____

CLASS _____

Total: [40]

QUESTION 1 (10 points)

1. The word salary originally came from the word _____

2. Along which roads was salt carried from Rome to the Sabines?

_____

3. Why is salt important to human beings? _____

_____

4. What is the function of salt in the body? _____

_____

5. Name the main source of salt. _____

6. What are the other three natural sources of salt mentioned in the passage? _____

_____

7. Where did the Arab lands get their salt? _____

QUESTION 2 (5 points)

Choose the correct answer by underlining it.

1. **The salt road came into being in Italy around .....**
   a. 80 centuries before Christ.
   b. 4 centuries before Christ.
   c. the 5th century.
   d. 4 centuries ago.

3.4 The sea has always been the main source of supply. _____

_____

3.5 The salt trade flourished in Europe. _____

_____

QUESTION 4 (10 points)

4.1 How were the people paid in the olden days? _____

_____

4.2 How does the author of this passage prove his point that salt is "the stuff of history"? _____

_____

4.3 Why, according to the author, is there a danger when salt pans are near the coast? _____

_____

4.4 What did the Arab lands trade for salt? _____

_____

4.5 Explain why England has many lakes on its east coast. _____

_____

QUESTION 5 (5 points)

Choose the correct answer by underlining it.

5.1 How did Van Riebeeck look for salt after he landed in the Cape?

a. He dug holes.
b. He travelled through the country.
c. He asked the people where to find salt.
d. He tested rock samples.

2. **Man realised that salt is important for the body, ...**

   a. to make the body strong.

   b. to get enough mineral salts.

   c. to balance the water in the body.

   d. to cool the body.

3. **Chinese salt pans were near the ...**

   a. Mount Sodom

   b. Yellow River

   c. Jordan Valley

   d. Dead Sea

4. **In Europe, the salt trade grew stronger for ten centuries around the ...**

   a. Europeans.

   b. Moselle region of France.

   c. Cape.

   d. Mediterranean and the Atlantic.

5. **In the future, people will probably get salt from ...**

   a. rocks.

   b. mountains.

   c. land beneath the sea.

   d. rivers.

QUESTION 3 (10 points)

Explain the meaning of the following sentences:

3.1 Salt is vital to human survival. _____

_____

3.2 Death occurs through dehydration. _____

_____

3.3 Eventually they discovered a new salt supply. _____

_____

5.2. What picture would describe the main source of South African salt?

a. Salt pans

b. A packet of salt

c. The Soutpansberg

d. The sea

5.3 What would you expect to see at a salt production plant in South Africa?

a. A factory with high chimneys

b. Metal pans

c. Channels leading from a beach into square, shallow dams

d. Big dams of all shapes

5.4 What power is used to produce the salt in South Africa?

a. Electric power

b. Natural power

c. Huge fans

d. Fire

5.5 When is the salt ready to be used?

a. When it is in the dam.

b. When it has crystallised.

c. When it is wet.

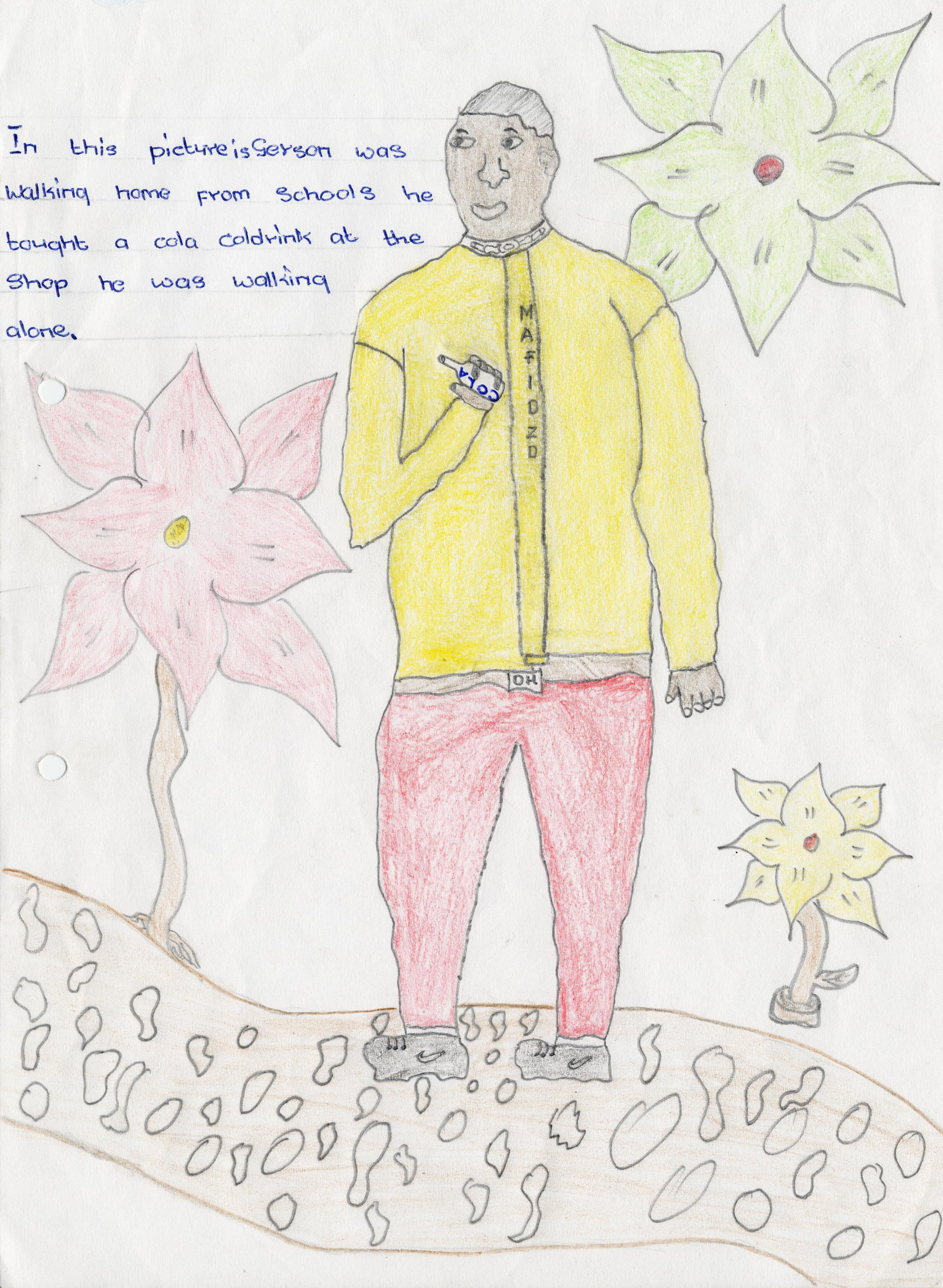
d. When it is in the channel processing.

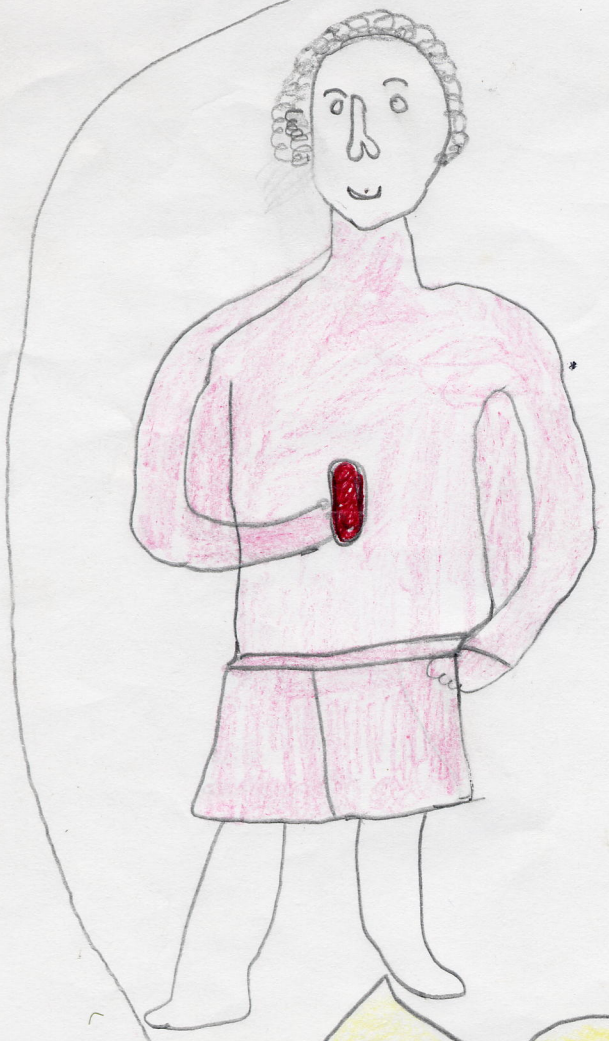
Appendix B

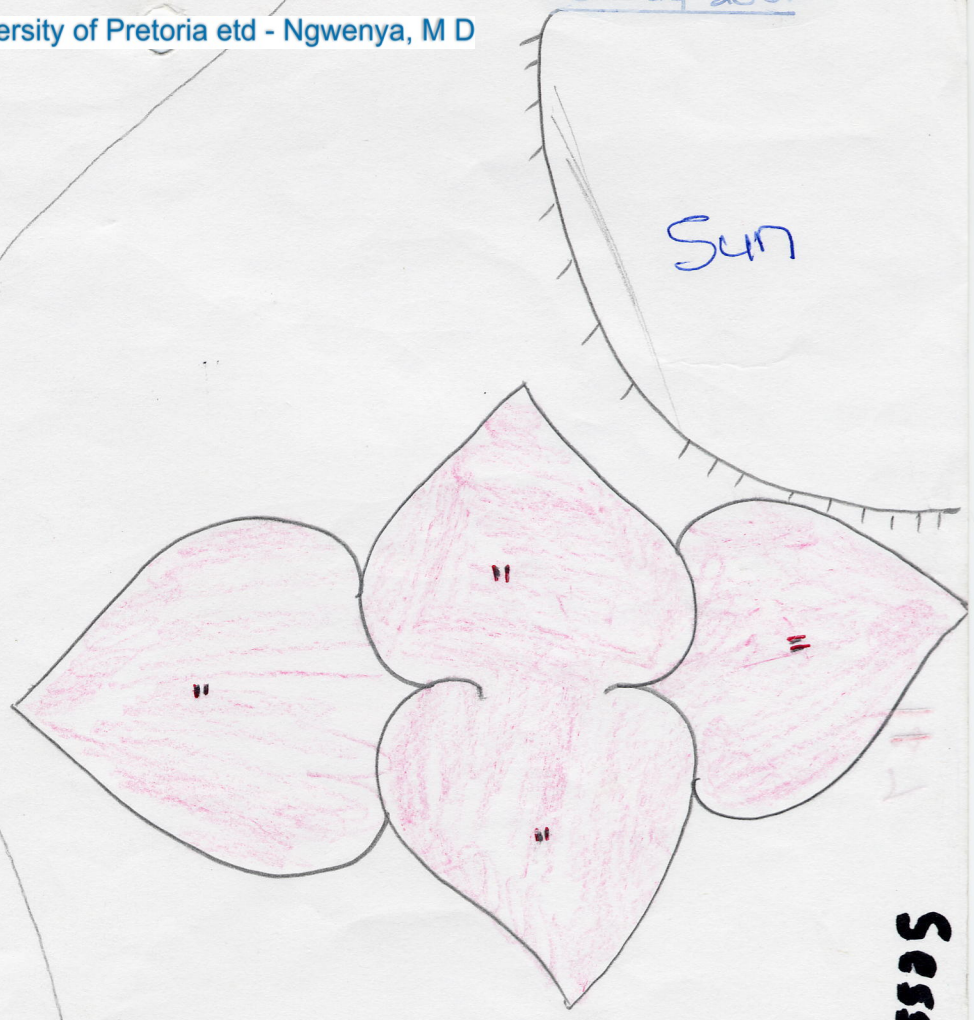
Drawings done after imaging

L10 Session1

In this picture is Gerson was walking home from schools he tought a cola coldrink at the shop he was walking alone.







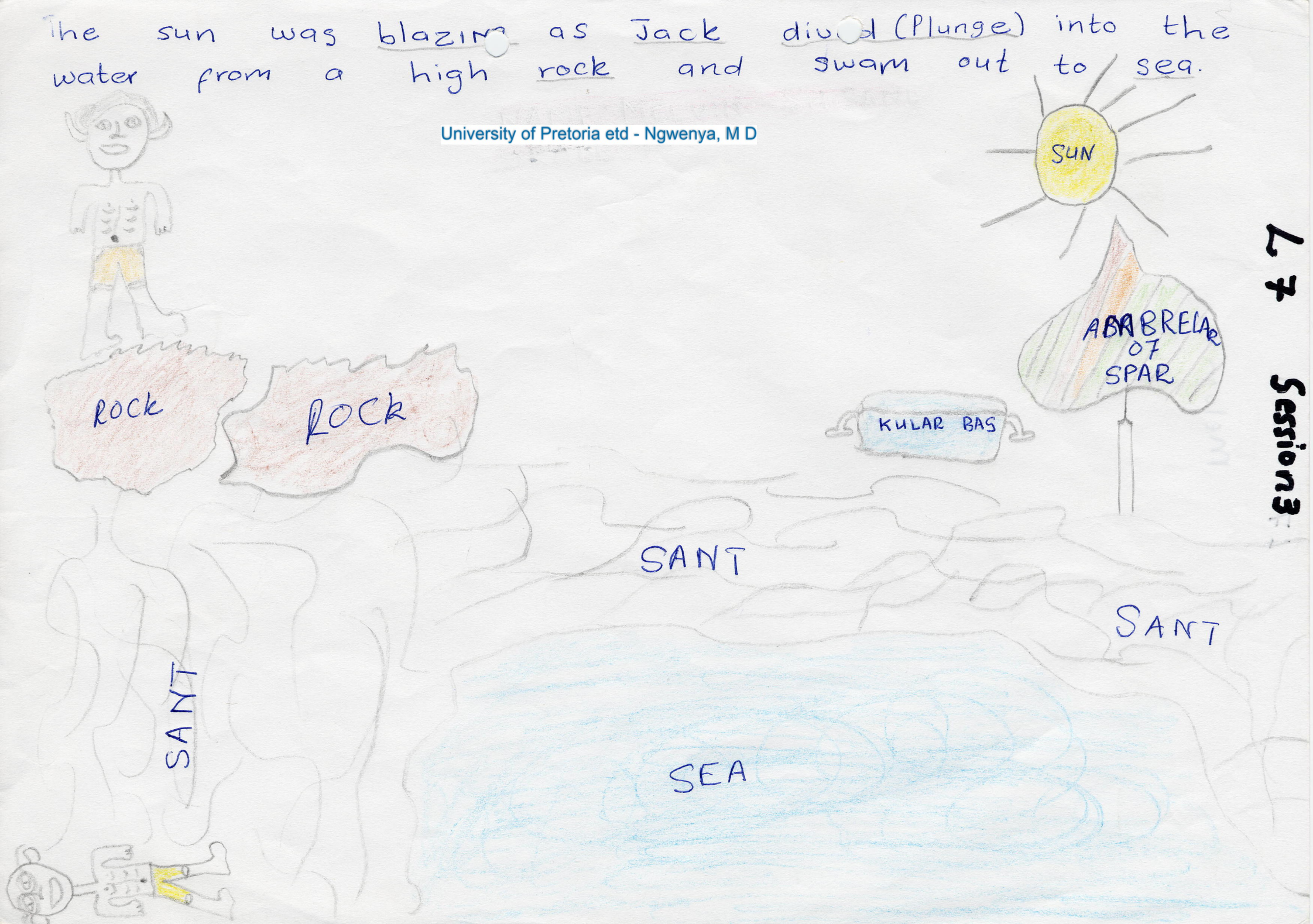
Session 1 Visual 11


L2
Session 3

L 3 Session 3

The Sun was blazing as Jack ~~divided~~ dived into the water from a high rock and Swam Out to Sea.

The sun was blazing as Jack dived (Plunge) into the water from a high rock and swam out to sea.



Session 7

croco dile

Session 7 41

L 2 Session 17

← Dr Kalmenius

L 9

Session 17

PRINCESS MARIPOSA

Appendix C

Word card

Word card

Attractive, lonely

Appendix D

Comprehension questions from reading text

SESSION 11

ROALD DAHL

Reading comprehension questions

1. How many weeks did the weather remain very cold?
2. How deep did the snow lay on the ground?
3. How do you know that Charlie was feeling very cold?
4. Was Charlie's house well built? Give the reason for your answer.
5. During cold weather people usually think of two things, name them.
6. What kind of meals was Charlie having three times a day?
7. Name the factory Charlie used to pass on his way to school.
8. What did he use to do when passing that factory?
9. Who was the owner of the factory?
10. What did Charlie win?

SESSION 19

Clockwork! Or All Wound Up

Reading comprehension questions

1. Why were the people happy when Prince Otto married Princess Mariposa?
2. Name three things that people did to show their happiness?
3. What did the prince and the princess do in order to get a baby?
4. What happened when the princess gave birth to her baby?
5. Why did prince Otto take the baby to Dr Kalmenius?
6. Briefly describe how Dr Kalmenius healed the baby?
7. Name two things that show that prince Otto loved his child?
8. How old was the child when he started to show signs of illness?
9. Did prince Otto know that his child was a clock child?
10. What do you understand about this sentence? “I must have an her! The survival of the Royal Family depends on him.”

Appendix E

A letter to the parents

Solomon Mahlangu Freedom School
P.O. Box 79026
Mamelodi East
0122
Tel: 012-8019662
Fax: 012-8019662

PERMISSION LETTER TO THE PARENTS OF LEARNERS WHO WILL TAKE PART IN THE RESEARCH PROJECT

Dear Parent

In the high school no learner can make any progress without good reading skills. I am presently busy with a Research Project where I would be using new reading techniques in order to improve reading comprehension. This technique may enable your child to read with more understanding and to improve memory.

The research will be conducted in one-hour sessions from 14h00 to 15h00 every Monday to Thursday in the afternoon. This research won't take the school time. All activities will be communicated to the Principal and English language Educators. A temporary permission has already been obtained from the principal to continue with the research project.

I have been involved with Solomon Mahlangu Freedom School for eighteen years as an educator and I know the learners. I believe these reading activities will mean a lot to the learners of Solomon Mahlangu Freedom School with regard to their school marks as well as their future studies.

I would be pleased if you would allow me to involve your child in the research whereby he can benefit. Please give your support by encouraging your child toattend every day, and show your interest by asking what progress he/she is making.

If you have any questions may you please direct them in written form. A letter can be addressed to the school and I'll try my best to respond immediately. You may also contact me at telephone number.
(012) 801 9662 during office hours.

Thank you in advanced for your cooperation.

Mrs M. D. Ngwenya.....
Head of Department Guidance

Please fill in and send it before 4/ 05/ 2001

I ---------- parent/guardian of ----------
permit my child to take part in the Research Project. I would further like to have the following information ----------.

SIGNED (Parent/Guardian) ---------- Date ----------

Appendix F

Practical implementation of the imaging technique from Session One to Twenty

Appendix F

Session One to Twenty as implemented according to the continuous qualitative assessment

Session One (2001-05-23)

(a) Objective: To introduce the use of the imaging technique.

(b) Preparation: Word cards and verbal narratives.

(c) Process of imaging: (Attendance:20) Relaxation exercises. Ls were instructed to stretch their hands, fingers, arms and legs. After this they had to sit in a relaxed position letting their arms to hang loosely. "I am going to say a narrative. Listen carefully and visualize or form a mental picture about this narrative."

"Close your eyes. Think of a road. It is empty. Decide whether it is a gravel or tarred road. Imagine yourself walking. Feel the surface of the road under your feet. It is a hot summer day. Someone is with you. Decide who is this person. Are you talking or singing? Where are you going? See the distance you are heading to. See yourself coming closer to your destination. Now you have arrived. How do you feel? Open your eyes."

Ls were instructed to discuss in twos about their mental pictures. The listener must also ask questions for more clarification. "You may use your mother tongue when discussing." R walked around listening and observing the Ls' participation.

R asked Ls if they were able to form mental pictures about the narrative. Some Ls said they could not. R demonstrated to all Ls how to form mental pictures. R also gave examples to help Ls to understand e.g. "picture yourself at the FNB stadium. Two famous clubs are playing. You are with your friends. How do you feel?" R asked Ls if they were able to picture themselves at the FNB stadium. They all agreed. R pointed out to Ls that they were actually in class but they could see themselves at the stadium watching the match. Ls were told that the ability to transform themselves to be in another place mentally is imaging.

R gave a second narrative in order to enhance the mastery of the imaging technique. "Close your eyes. Think of a hot summer day. You are tired and thirsty. Someone offers you an ice cold drink. Decide what kind of a drink it is. He/She gives you a straw. Open

your drink and put in your straw. How does it smell? Take the first sip. How does it taste? Take another sip. Open your eyes."

Ls were instructed to discuss in twos their mental pictures about the narrative. R moved around listening. Ls were prompted to ask more questions from their fellow Ls for the clarification on the mental pictures. Each L shared his/her experiences as they discussed their mental pictures. Ls were allowed to use their mother tongue. The discussion was more fruitful and Ls also expressed their feelings. Two Ls who initially could not form mental pictures also succeeded.

Ls were instructed to draw the mental pictures about the second narrative as homework.

(d) Reflection

Most Ls did not experience difficulty with the use of imaging. During the relaxation exercises other Ls could not relax and to pay attention. Two Ls could not use imaging at first. R adapted the technique on the spot by giving examples and the second narrative. This helped Ls to understand how to use imaging. Ls enjoyed the first session and mentioned that it was an interesting way of learning. The first session ended on a good note.

Next session: To introduce the imaging technique in a reading activity.

Session Two (2001-05-28)

(a) Objective: To introduce the imaging technique in a reading activity.

(b) Preparation: Verbal narrative and copies of reading text (What happened to Jack?)

(c) Process of imaging: (Attendance :20) Session began with relaxation exercises. Relaxation exercises helped Ls to allow their minds to flow freely when imaging without any disturbance. Principles of imaging, that is, concentration, paying attention and being focused were stressed.

R showed Ls the word "attractive". Then they were asked if they knew the meaning of the word. Ls responded positively. R instructed Ls to picture something that was attractive. The appearance, colour and size of that particular thing had to be added in their mental pictures.

Ls were then instructed to discuss about their mental pictures. R moved around observing and listening. Most Ls managed to visualize something attractive.

R gave a verbal narrative. “Close your eyes. Picture someone coming to you. He/She is carrying a nice parcel. It is wrapped with an attractive paper. It has a beautiful ribbon on top. He/She gives you the parcel. It is your present. How do you feel? Unwrap the parcel. There is a small box inside. Open the box. Wow! What is it? Open your eyes.”

Ls were instructed to discuss their mental pictures and to mention the presents they got inside the box. R walked around listening. The presents mentioned ranged from watches, earrings, necklaces to bracelets. Ls were able to form imaged pictures about the narrative.

R demonstrated to Ls by reading a paragraph how to use imaging while reading. After the demonstration Ls were asked if they understood. Ls responded positively and no one asked for further clarification.

R gave Ls Copies of reading text. In group of twos Ls were instructed to read the text aloud taking turns following each sentence while the other followed in his/her text. After reading Ls were instructed to discuss the mental pictures they had formed while reading. Ls were encouraged to use their mother tongue during their discussions.

(d) Reflection

Ls had no problems with the use of imaging when the narrative was done. When Ls were instructed to read the text, their reading was poor. Some Ls read word by word while others experienced difficulty with the pronunciation of unfamiliar words. Ls could not make sense out of what they were reading. Hence they could not form mental pictures. Other Ls who read fairly well still could not form mental images since they were unable to form a holistic picture about the text. Lack of language comprehension had a negative impact on imaging. This session ended on a low note.

Next session: To guide Ls how to master the imaging technique for reading.

Session Three (2001-06-04)

(a) Objective: To guide Ls step by step on how to master the use of the imaging technique for reading and to enhance reading skills.

(b) Preparation: Reading text (What happened to Jack?)

(c) Process of imaging: (Attendance:14) Relaxation exercises were done like this, "stand up, stretch your arms, hands, fingers and legs. Stretch your neck by turning your head around. Walk around and sit down. Sit down in a relaxed position and clear your mind from anything that may disturb you".

R then gave learners copies of reading text done in the previous session. Ls were divided into groups of threes. Ls were instructed to read sentence by sentence while others were listening and forming mental pictures about each sentence they read. R demonstrated how Ls should form parental picture while they were reading. The first sentence read as follows: The sun was blazing as Jack dived into the water from a high rock and swan out to sea. "Now picture the weather on that day. Was it hot, cold or raining? Who dived into the water? Can you picture Jack diving from a high rocks". How did he feel when he dived into the water?"

Ls were guided like that until the first paragraph was read. After reading the first paragraph for the second time, Ls were stopped so that they could discuss about their mental pictures. R walked around listening. Ls were instructed to draw their mental pictures.

(d) Reflection

Ls' discussions were more detailed and informative. Ls managed to form mental pictures about the text after they were guided. The word blazing was explained to them and also made it easier for them to understand how hot was the sun on that day. Some Ls experienced problems with reading aloud while others read fairly well. When R asked questions most Ls were able to answer.

The drawing of the mental pictures indicated that Ls were able to use imaging when reading. Even Ls who struggled to answer the questions were able to draw relevant mental pictures about the text.

Next session: To instil reading skills and the mastery of the imaging technique.

Session Four (2001-06-06)

(a) Objective: To stimulate the interest in reading, to demonstrate how to read with meaning and the use of imaging when reading.
(b) Preparation: Reading text (Palesa's beautiful dress).

(c) Process of imaging: (Attendance:14) The session began with the discussion of the session. “Can you mention the difficulties you experienced with reading in the previous session? What was the most difficult thing for you?” …Ls mentioned that their inability to read aloud adequately was their most difficult experience and led to inability to make sense of out the text.

R then mentioned that Ls need to read a lot in order to get use to reading. Another thing was that Ls need to read with good intonation, phrasing, and meaning while observing the punctuation marks. R informed Ls that she was going to read a text about Palesa’s beautiful dress.

“Can you please stand up, stretch yourself, walk around and sit down quietly. Close your eyes and clear out everything in your mind. Open your eyes. I am going to read this text and please listen careful with concentration. While I’m reading please form mental pictures in your mind. As I read follow in your copies while picturing every event that is taking place in the story.”

R read the text expressing meaning, phrasing with correct intonation to demonstrate how to read appropriately, pronounce words correctly and observe punctuation marks. Ls followed in their copies until the end of the story.

R asked Ls a few comprehension questions to assess if they understood the story and were able to form mental pictures. Ls were then instructed to draw mental pictures on the scene they liked most.

(d) Reflection

Ls were attentive, quiet and relaxed. They listened to the story with interest and enthusiasm. When R asked them question they answered very well without any difficulty. The drawing of Ls were relevant and indicated that they were able to use imaging. The use of imaging was much simple for them since they were not reading.

Next session: To emphasized the use of cognitive and affective processes during the process of imaging.

Session Five (2001-06-11)

(a) Objective: To guide Ls on the use of the cognitive and affective processes when imaging. To guide them on how to break through to new meaning of unfamiliar words.

(b) Preparation: Reading text. (The end of winter).

(c) Process of imaging: (Attendance:16) Brief discussion on the previous session. Ls mentioned that they had enjoyed the story and had no difficulty in picturing what was happening. Relaxation exercises were done.

R divided the Ls into groups of twos and threes. Reading copies were handed out. Ls were instructed to read the first paragraph aloud taking turns per sentence in their groups while imaging.

Ls began reading aloud while the R moved around listening. When Ls experienced problems with pronunciation and meaning of words were assisted. Ls read aloud until the end of the first paragraph. R then guided Ls on how to use imaging when reading by asking the following questions.

“Where did Laura and her family live?

Can you picture their house?

How was it built?

Can you see the garden or fields where their food was grown?

What do people grow in the garden?

Where did they hunt?

By means of these questions Ls were guided on how to use their cognitive processes in order to form mental pictures. Ls were instructed to continue to the next paragraph while reading aloud per sentence. R informed Ls that as they read they should look the passage or text in a holistic manner. When they come across unfamiliar words they should figure out the meaning on their own. R stressed that they don’t need to know every word in order for them to know how to use imaging. But they only need to know the critical words that are critical to imaging. After reading Ls discussed their mental pictures and the text.

(d) Reflection

Reading progressed fairly well. Ls who read better and this indicated that the improvement of reading aloud was beginning to emerge though not with all Ls. Oral questions asked by R after a paragraph was read also helped Ls with the understanding of the text and the use of imaging. Most Ls did not succeed in breaking through to the meaning of unfamiliar words. The encouragement of poor readers was done in order to motivate them to try even if they make mistakes. Motivation also aimed at inspiring Ls who had a history of failure such as Ls 1, 4, Eb, Ec and 10.

Next session: To emphasize the use of the imaging and to assess progress made in imaging in written comprehension questions.

Session Six (2001-07-18)

(a) Objective: To enhance the mastery of the imaging technique and to assess progress made in imaging in written comprehension questions.

(b) Preparation: Reading text (The end of winter) and comprehension questions.

(c) Process of imaging: (Attendance:14) The session began with relaxation exercises. After the performance of relaxation exercises the R asked learners the following: “How do you feel after relaxation exercises?” Ls indicated that they felt relaxed as if they were asleep and dreaming. This also helped them to clear their minds from anything that might disturb them during imaging.

R gave back ground information on the text read in the previous session with an aim assisting Ls to recall what was done in the previous session more than a month.

R handed out copies of reading text and divided the Ls into groups of fours. Ls were instructed to read each paragraph where Ls had to read taking turns as per two sentences. R stressed that Ls should form mental pictures about the text while reading.

The discussion of mental pictures was held after the first paragraph while R moved around listening. After the discussion of the first paragraph Ls were instructed to continue with the reading while forming mental pictures.

After reading three paragraphs` Ls were stopped and R asked comprehension questions. Ls were urged to read the text with meaning and to perceive the text in a holistic manner in order to get an overall impression on the text. R also demonstrated to the Ls on how to read with meaning even though they came across words they did not understand that were not critical to imaging in order to enhance comprehension.

R instructed Ls to discuss the whole passage and their mental pictures. After the discussion Ls were stopped to work in groups and R gave each L an answer sheet and a copy of comprehension questions. Ls were instructed to answer the comprehension questions individually.

(d) Reflection

Ls were relaxed and participated positively. The reading of the text was done fairly well and the background R gave helped them to understand and to recall the text as it was

done before the June school holidays. The discussion of mental images indicated that Ls were mastering the imaging technique. The answering of the comprehension questions indicated that Ls still experienced difficulty with the interpretation of the questions. The performance of Ls in the comprehension questions was generally above average.

Next session: To enhance the mastery of the imaging technique and to assist Ls how to construct meaning when reading.

Session Seven (2001-07-23)

(a) Objective: To enhance the mastery of the imaging technique.

(b) Preparation: Verbal narrative and reading text. (The wreck of the Zanzibar)

(c) Process of imaging: (Attendance:15) Relaxation exercises.

"Close your eyes. Picture a bowl of hot soup. Decide what colour is that bowl. Can you smell the steaming soup? There are bread rolls near the soup and butter. Take a knife and slice the rolls open and spread butter. Put a few pieces of bread rolls into the soup. Take a spoon and scoop the soup. How does it taste? Open your eyes."

Ls were divided into groups of threes and fours and were instructed to share their experiences and mental pictures on the verbal narrative. R moved around listening and observing their participation. After the discussion R asked Ls if they were still experiencing problems with imaging. They responded that they had no difficulty.

R gave each L a copy of reading text (The Wreck of Zanzibar). R emphasized the importance of concentration paying attention and being focused during imaging. Again R emphasized the following points on imaging:

- Imaging helps one to form mental pictures about what one is reading.
- It helps one to concentrate and to pay attention.
- The text that is read is made alive through imaging.

Ls were instructed to read the text beginning by reading the first paragraph. Ls had to take turns after reading two sentences each. At the end of each paragraph, Ls had to stop to discuss their imaged pictures. R walked around listening and helping Ls with the pronunciation of words and the meaning of words. Ls had difficulty with the meaning of the following words: bay, storm, stump, massive, gulls, and turtle. R demonstrated how Ls should use their background knowledge and the text to break through to the meaning of unfamiliar words.

R gave the meaning of words except the word turtle. Ls were instructed to read the whole text at home and to figure out what a turtle was from the text. Ls were also instructed to draw the turtle in order to see if they understood what the turtle was. Another aim was to assess if Ls were able to break through to the new meaning of the unfamiliar words.

(d) Reflection

Ls read aloud well though they had difficulty with the meaning of unfamiliar words. Lack of meaning of certain words had a negative impact on imaging. The explanation of unfamiliar words aided their understanding of the text. During the discussion Ls showed that they were not familiar with the content of the text. The text was not related to their everyday life situation. The drawing of the turtle indicated that Ls had no clue as to what was a turtle. Some of the Ls drew fishes while others crocodiles. R observed that if critical words to imaging are not explained then imaging is almost impossible. Ls are unable to form a holistic picture about the text due to the presence of unfamiliar words.

Next session: Adaptation of the technique by giving meaning of words that are critical to imaging.

Session Eight (2001-07-30)

(a) Objective: To enhance the mastery of the imaging technique by giving meaning of words that are critical to imaging.

(b) Preparation: Reading text. (The wreck of the Zanzibar).

(c) Process of imaging: (Attendance:14) Relaxation exercises. R asked Ls about the verbal narrative done in the previous session. Ls answered correctly. R told the Ls that they were able to remember the information about the soup because they had formed mental pictures and also used their senses.

Ls were then divided into groups of threes. Ls were instructed to discuss about the text done in the previous week. Ls were quiet and shy. R asked them the following questions that prompted them to answer.

“Why did this person go to the Bushy Bay?

Who sent her there?

What was she going to do?

What did she see when she was there?

How big was that animal?

What gathered around the turtle?

Was the turtle alive or dead?"

After answering these questions during the discussion, Ls began to understand the text. R gave the meaning of the word turtle. Ls were amazed to find out that the turtle was not a crocodile or fish as they had drawn.

R instructed Ls to read the text again in groups while imaging. The reading proceeded well as Ls read the text for the second time. After reading Ls had discussion about the text and the mental pictures they had formed.

(d) Reflection

The explanation of the critical words to imaging did enhance the mastery of imaging. Ls who still struggled with reading did not read the text at home. Ls who read passage at home participated better during the discussion of the text. The use of comprehension questions helped Ls to use their cognitive and affective processes in processing and constructing the meaning on the text.

The process of imaging helped Ls to be attentive, focused and to participate meaningfully during the discussion.

Next session: To enhance the mastery of the imaging technique by means of self-questioning.

Session Nine (2001-08-01)

(a) Objective: To assist Ls in the mastery of the imaging technique by means of self-questioning.

(b) Preparation: Copies of reading text (Roald Dahl)

(c) Process of imaging: (Attendance:14) Relaxation exercises. R demonstrated how Ls should use self-questioning to enhance imaging. R handed out reading copies. The following questions were asked about the first paragraph. "How did the weather turn during the next two weeks?" R showed Ls how to asked themselves questions as they continue to read in order to enhance imaging. "Picture how the weather looked like? Can

you picture the snow falling? Where was Charlie when it was snowing?" By means of these questions Ls were guided how to form mental pictures in their minds which enhanced comprehension.

Ls were divided into groups of fours. Ls were instructed to read aloud the first paragraph while imaging. Other Ls had to follow on their copies while one L in the group read. Another L in the group was instructed to read the same paragraph and to ask themselves questions about the text. Ls took turns reading up to the end of the second paragraph. After reading a discussion of mental pictures was held. R walked around listening and observing the participation of Ls.

R found that Ls did not understand the words such as flakes drifting and colour of steel. R gave the meaning of the unfamiliar words and instructed Ls to continue reading up to the fourth paragraph. Discussion on imaged pictures was held.

(d) Reflection

Most Ls read aloud adequately though others still struggled with the pronunciation of certain words. The use of self-questioning did enhance the mastery of imaging as Ls' discussion of mental pictures were rich and were able to describe the events in the text. The participation of Ls was also adequate. Ls who were absent in the previous session find it hard to cope and needed extra attention.

Next session: To continue with the same text and the use of metacognitive skills by means of self-questions as a strategy in enhancing the mastery of the imaging technique.

Session Ten (2001 08-03)

(a) Objective: To enhance the use of metacogntive skills by means of self-questions and further mastery of the imaging technique.

(b) Preparation: Copies of reading text (Roald Dahl).

(c) Process of imaging: (Attendance:15) Relaxation exercises. Ls were quiet, attentive and cooperative.

R gave Ls copies of reading text and were divided into groups of fours and fives. Ls were instructed to read paragraph by paragraph while others followed in their copies. R moved around listening, observing the participation of Ls and how they interacted with the text.

The use of self-questioning was stressed (learners were urged to ask themselves questions while reading) since it enhanced the use of metacognitive skills. The use of metacognitive skills helped Ls to form mental pictures much easier. Reading aloud was improving adequately.

(d) Reflection

The adaptation of the technique was necessary in order to enhance the mastery of the imaging technique. Ls were getting use to reading and were becoming more interested in reading. Ls who were absent on certain days progressed slowly. Assisting irregular attendees was time consuming.R had to go back to explain what was done in the previous session.

Next session: Assessment of the development of reading comprehension skills.

Session Eleven (2001-08-08)

(a) Objective: To assess the development of reading comprehension skills through the use of the imaging technique.

(b) Preparation: Reading text (Roald Dahl) and comprehension questions.

(c) Process of imaging: (Attendance: 14) Relaxation exercises. R divided the Ls in groups of fours and fives and handed copies of reading text.

R instructed the Ls to read the text while taking turns. R instructed the Ls to read with meaning and to form the overall picture about the text. After reading a discussion on the text was conducted. R gave the meaning of the following words enormous, ravenously, desperate and trudging as they were critical to imaging.

Ls were instructed to break away from their groups and comprehension questions were handed out. R instructed Ls to read the text individually once again before answering the comprehension questions. Ls were also encouraged to use imaging when reading the questions. Ls were motivated and encouraged to do their best.

(d) Reflection

The reading had improved adequately. The performance of learners in the comprehension questions was average to above average with most Ls. L 1 still got a score of 0. She copied information from the text without understanding and wrote them as answers. Most Ls had difficulty answering questions that challenged their cognition.

Next session: To practice the use of metacognitive skills when imaging.

Session Twelve (2001-08-13)

(a) Objective: To practice the use of metacognitive skills when imaging.

(b) Preparation: Reading text (Roald Dahl) continued.

(c) Process of imaging: (Attendance: 15) Relaxation exercises. Ls were then divided into groups of three in order to enhance meaningful participation in the groups. R emphasized the importance of Ls' involvement, intentionally, the use of prior knowledge and the use of metacognitive and affective processes when imaging.

R gave Ls copies of reading text and instructed them to read aloud per sentence while imaging. The use of self-questioning was emphasized as Ls continue to read and to process the information from the text. After the first paragraph was read Ls were stopped and the discussion of mental images was conducted. R moved around listening. The use of mother tongue was still encouraged when Ls could not express themselves.

As R moved around listening, comprehension oral questions were asked to assess if Ls understood the text.

"How did Charlie look as the days went by?

Can you picture his skin?

Why did he have to leave ten minutes before time when he went to school?

Can you picture Charlie in his classroom?

How did Charlie walk to school?

What did he see on his way back home?

How did he feel on that day?"

Ls read only three paragraphs.

(d) Reflection

Reading was progressing adequately. The discussion of mental pictures was becoming more rich and informative. The participation of Ls improved well and Ls were more involved. Ls who were still struggling with reading were encouraged by the participation of other Ls in the groups. Though mother tongue was allowed to be used during the discussion but Ls tried their best to use English.

Next session: To use the process of imaging for the learning of other subjects. Ls requested that they want to begin with Physical Science.

Session Thirteen (2001-08-15)

(a) Objective: To use the process of imaging for the learning of other learning areas. Flexible transfer of imaging to new topics.

(b) Preparation: Text from Physical Science, a brick and a sponge.

(c) Process of imaging: (Attendance: 13) Relaxation exercises to stimulate and to put Ls at ease.

R began by asking Ls questions to activate their prior knowledge on pressure, force and area:

"What is pressure?

What happens when one puts pressure on an object?

What is force?

By means of a brick and a sponge R demonstrated to the Ls how pressure is exerted on an object. Ls were instructed to give their own examples where pressure could be exerted. R explained to Ls that pressure is force exerted on an area. The formulae of pressure is:

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$$

Unit of force is Newton

Unit of area is m^2

Unit of force is Pascal

How to calculate Pressure:

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}} \qquad \frac{30N}{3m^2}$$

$$= \frac{\text{Newton}}{M^2} \qquad 10\ Pa$$

$$= \text{Pascal}$$

Ls were instructed to picture someone standing on the mattress bed. They were instructed to draw their mental picture to see how pressure is exerted on the mattress.

(d) Reflection

The participation of Ls was encouraging and they showed interest and enthusiasm in their learning activities. Demonstration, activation of prior knowledge and examples given helped Ls to see how they could transfer the use of imaging to other subjects. Ls were fascinated about the use of the imaging technique when learning other subjects. The use of the imaging technique promoted involvement, concentration, attention and meaningful participation of Ls. Flexible transfer of the imaging technique for the learning of other subjects was done adequately though not up to the optimum level.

Next session: To enhance the learning and understanding of Biology through imaging.

Session Fourteen (2001-08-20)

(a) Objectives: To enhance the understanding and learning of Biology through imaging.

(b) Preparation: Verbal narrative and Biology text (Plant cell)

(c) Process of imaging: (Attendance: 14) Relaxation exercises. R gave a narrative to stimulate the process of imaging.

“Close your eyes. Picture a sunny day. It is hot and dry. You feel hot and tired. You see a big tree a distance far away. You begin to walk faster towards the tree. See yourself getting closer. You are sweating. You feel thirsty. You are now coming closer and closer. There you arrive. You throw yourself under the shade. It is cool and quiet. How do you feel? Open your eyes.”

“Discuss in pairs about mental picture you have formed about this narrative.” R moved around listening. Ls were able to form mental pictures and they had no problems with imaging.

R gave Ls copies of Biology text on a plant cell. The activation of prior knowledge was done by means questions.

“What is a cell?

What is a plant cell?

Can plant cell grow?

Ls were then divided into groups of threes and were instructed to read the text on the plant cell. Ls were instructed to form mental pictures about the plant cell as they read the text. Ls took turns reading sentence by sentence. After reading for the first time Ls were instructed to read the same part for the second time. The explanation of terms like transparent, cellulose and permeable were done. R had to explain what a cell was because Ls did not know what is a cell and its function.

R asked a few questions to assess the Ls’ understanding. The comprehension questions asked helped Ls to form a clear picture about the plant cell and they enhanced more understanding.

(d) Reflection

The participation of Ls was positive. The reading was done with little difficulty. The explanation of new terms by R and the use of imaging enhanced the understanding of the plant cell by Ls. Ls realized that when they read and formed pictures on the text, it helps them to understand and to remember it better. Imaging promoted active learning.

Next session: To enhance the learning of Biology through imaging.

Session Fifteen (2001-08-22)

(a) Objective: To enhance the learning of Biology through imaging.

(b) Preparation: Biology text (Animal cell)

(c) Process of imaging: (Attendance: 15) Discussion on the previous session. Relaxation exercises. Activation of prior knowledge on the animal cell.

What is an animal cell?

The animal cell is covered with a cell membrane.

What is the function of the cell?

R explained to the Ls the structure of an animal cell and the difference between the animal cell and the plant cell. The session was on the difference between the cell wall and the cell membrane.

Plant cell	Cell membrane
• It is non-living	A living membrane
• It is well developed and relatively strong	A very thin structure
• It is usually transparent so that you can see through	It is not transparent
• It is completely permeable which means it allows all molecules of gases and liquids to enter and leave the cell, even if they are harmful to enter the cell.	It is selectively permeable. It selects which molecules it would allow to enter or leave the cell.

The function of the cell in the body was discussed since Ls had little information about the animal cell too. R handed out copies on the animal cell and plant cell. Ls worked in groups of threes and fours. R instructed the Ls to read the text after it has been explained while forming mental pictures in their mind about an animal cell. R demonstrated how Ls should construct mind maps on the animal cell by writing the key words. Mind maps helped Ls to construct a holistic picture about the animal cell which also enhanced comprehension.

R gave Ls comprehension questions to assess if they were able to comprehend the content on both the plant cell and the animal cell.

(d) Reflection

The participation of Ls was good. Ls listened attentively and asked questions where they did not understand. The explanation of an animal cell helped Ls to form mental pictures. The use of mind maps also assisted Ls in gaining more understanding and they were able to form a holistic picture about the content. The learning was more interesting and simpler. The performance in the comprehension questions was average though other Ls still experienced problems with reading.

Next session: To anchor the mastery of the imaging technique for reading.

Session Sixteen (2001-08-27)

(a) Objective: To anchor the mastery of the imaging technique for reading.

(b) Preparation: Reading text (Berverly Cleary).

(c) Process of imaging: (Attendance 14) Relaxation exercises. R emphasized the following factors to be done during the process of imaging.

- Formation of a holistic picture on the text while reading.
- Continuous use of self-questions while filling in the gabs about the picture one is forming during imaging.
- Awareness of the metacognitive skills during the processing of information and the use of senses.

Ls were divided into groups of threes and fours. R gave Ls copies of reading text and instructed them to read paragraph by paragraph while other followed in their copies. Concentration, paying attention and being focused was stressed during imaging. After reading each paragraph Ls had a discussion on their mental pictures while R moved around listening.

R paid more attention to the Ls who were still struggling with reading. Other Ls were instructed to continue with their reading. Ls were instructed to draw their mental pictures. The use of mother tongue was still encouraged.

(d) Reflection

The reading and participation of Ls was good. Each paragraph was read with more meaning and the formation of mental pictures was improving. The drawing of mental pictures showed that Ls understood the text. The use of mother tongue helped Ls to communicate freely during their discussion and it enhanced comprehension.

Next session: To continue to instill the use of the imaging technique.

Session Seventeen (2001-09-03)

(a) Objective: To instil the use of the imaging technique.

(b) Preparation: Reading text (Berverly Cleary) continued.

(c) Process of imaging: (Attendance: 14) Relaxation exercises. Ls were then divided into groups of fours. Reading copies were handed to each L. Ls were instructed to read the passage.

Ls who were still struggling with decoding were instructed to read sentence by sentence while those who read better, read paragraph by paragraph. After reading each paragraph Ls discussed their mental pictures. The use of self-questions was emphasized while forming mental pictures and for the clarification of the text.

R walked around listening to the discussions and observing the manner of participation. R paid more attention to the struggling readers. R demonstrated to Ls how to ask themselves questions when reading in order to enhance the formation of mental pictures and comprehension.

"Read the first sentence and then ask yourself this question. Why the whole city rejoiced? What did they do to show their joy? Can you picture the whole city performing the activities?"

Ls who read well were shown how to use inferences "Prince Otto snatched the baby and ran down to the stable and ordered the grooms to saddle his fastest horse with the dead child clasped in his breast, he galloped away. Where do you think Prince Otto was running to? What was he going to do there?" After reading Ls were instructed to draw any scene they liked most.

(d) Reflection

Ls' participation was good. The discussion of mental pictures and the text were more spontaneous than before. Ls who were assisted with reading progressed fairly well and the use of imaging was also improving. Drawing of mental pictures showed that Ls were able to use imaging. The use of inferences was done fairly by some Ls.

Next session: To identify and assess the barriers still obstructing Ls from the mastery of the imaging technique.

Session Eighteen (2001-09-05)

(a) Objective: To identify and assess the barriers still obstructing the mastery of the imaging technique.

(b) Preparation: Reading text and oral comprehension questions.

(c) Process of imaging: (Attendance: 14) Relaxation exercises. Oral comprehension questions on the text read in the previous session. The aim of asking questions it was to identify the difficulty some Ls were still experiencing in the mastery of the imaging technique for reading.

The following questions were asked orally.

- Who was Prince Otto?
- Whom did he marry?
- Name three things that the people did when Prince Otto got married.

- Where did the Prince and the Princess go to seek help in order to get a baby?
- Did the Prince and the Princess go to seek help in order to get a baby?
- Did the Princess give birth to a baby?
- What happened to that baby? etc.

Ls were then instructed to continue with the reading of the text done in the previous session. R assisted Ls with the pronunciation of unfamiliar words like banners, pilgrimage, dynasty, cathedral, celestial. The reading continued until the whole passage was read. The discussion of mental pictures was done.

(d) Reflection

The reading progressed well with Ls who had improved with reading. The explanation of unfamiliar words enhanced the formation of mental pictures and comprehension. Ls who were still struggling still had difficulty with decoding and making sense out of the text. When Ls were helped they showed some improvement but they need more time and special attention which R could not give during the sessions. The overall performance of Ls was good and the process of imaging had been mastered.

Next session: To assist Ls in the development of reading comprehension skills through imaging.

Session Nineteen (2001-09-10)

(a) Objective: To assist Ls in the development of reading comprehension skills through imaging.

(b) Preparation: Reading text and comprehension questions.

(c) Process of imaging: (Attendance: 11) Relaxation exercises. Ls were instructed to read the whole passage individually since the text was being dealt with for the fourth time during this session.

R moved around observing how Ls were interacting with the text. R encouraged Ls to take their time not to rush their reading. At the end of reading the discussion on the summary of the whole passage was done. Important facts were stressed and most Ls showed that they understood the text.

R gave Ls comprehension questions and the answer sheets. All Ls were instructed to read the text while imaging once again before answering the question. Ls were also urged to form mental pictures about the questions before answering in order to understand what the questions required.

(d) Reflection

Ls appeared to understand the text and were ready for the comprehension questions. The performance of Ls on the comprehension questions varied from poor to good. The inability to understand English as the language of learning and teaching was a barrier which negatively affected their performance. More support in the development of English language is needed. Time to attend to the Ls who were struggling was not enough since when such attention was given, Ls who are progressing well get bored.

Next session: Discussion on the problems experienced during the comprehension questions and the review the use of the imaging technique.

Session Twenty (2001-09-12)

(a) Objective: To find out from Ls about their difficulties in comprehension questions and review on the use of the imaging technique as a whole.

(b) Preparation: Prepared topics for discussion.

(c) Process of imaging: (Attendance: 15) R instructed Ls to be relaxed and calm. Ls were informed that an open discussion would be conducted to look at their difficulties and success in comprehension questions and the whole process of imaging. The discussion was under the following topics.

- Problems experienced during the answering of comprehension questions.

“Name difficulties that you experienced when answering the comprehension questions. Did you understand the questions? Which questions were difficult? Which questions were easy?”

- Sessions that were difficult or easy.

"Which sessions were easy or interesting? Which sessions were difficult?"

- Difficulties with the mastery of the imaging technique.

"What did you like about imaging? Did the use of imaging help you to read with comprehension? What difficulty did you experience with imaging? Was it difficult to form mental pictures? Could you picture something about what you were reading? Was it difficult to visualize the text?"

- Barriers obstructing the development of reading comprehension.

"What intrinsic barriers hampered your development in reading comprehension? Were texts read difficult for you? Was the content difficult or easy? Which text did you like most?"

- Support received from parents.

"Did you get any support from your parents?"

(d) Reflection

The discussion was fruitful and informative. Ls were free to discuss all their difficulties and successes about the comprehension questions and the use of the imaging technique. They also mentioned reading sessions that were easy and difficult. Ls also discussed what motivated them to attend and why they could not attend other sessions. Most Ls mentioned that their parents only asked them about their progress once or twice. Except that no support was given.