

**EFFECTS OF PROMOTING READING
COMPREHENSION SKILLS AMONG FIRST-YEAR
UNIVERSITY STUDENTS**

by

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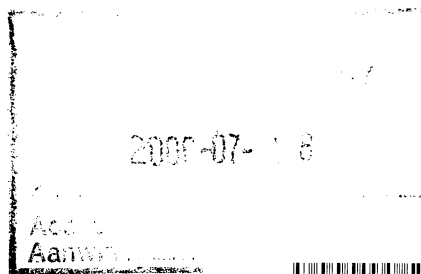
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“I declare that *Effects of promoting reading comprehension skills among first year university students* is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.”

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I am dedicating this dissertation to my children, Owen and Laelan who both took their first steps while mommy was busy studying and who frequently asked when my ‘work’ would be finished. Well, mommy is now finally done!!

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Abstract

Many L2 students in Namibia are not adequately prepared for the academic demands of university courses, mainly because of poor reading skills in the L2. University students reading below their maturational levels, can mainly be attributed to their print-impooverished backgrounds, as reading is a skill that develops mainly through reading. Without any assistance, poor readers at university will continue to read poorly and as a result perform weaker in their academic courses compared to their peers who are better readers. The overall aim of this study is to explore the effects of a reading intervention program on a group of university students in Namibia. A quasi-experimental method with a control and an intervention group was employed. The effect of reading ability on academic performance was also investigated. In addition, through a combination of quantitative and qualitative methods, the pre-literacy experiences of students, the differences between good and poor readers at university, their views about the reading intervention program as well as the attitudes and practices of university lecturers towards reading instruction at tertiary level were examined.

Key terms: ESL students, reading, reading intervention program, academic performance, intensive reading, extensive reading, anaphoric resolution, vocabulary development, text-semantic relations, reading strategies.

List of abbreviations

The following are abbreviations and terms that are used more than one once throughout the dissertation:

ESL	-	English as a second language
UNAM	-	University of Namibia
UCE	-	University Core English taught at the Language Center of UNAM
UCA	-	English for Academic Purposes taught at the Language Center of UNAM
L1	-	First Language
L2	-	Second Language
FL	-	Foreign Language
MOI	-	Medium of Instruction

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Chapter 1

Problem formulation and aims of dissertation

1.0 Introduction

The main objectives of this chapter are to provide background information as to what prompted the study, to identify objectives and research questions that form the focus of enquiry in this dissertation, to state the aims and hypotheses of the study and to outline the structure of the dissertation as a whole.

1.1 Background to study

Proficiency in the language of instruction is instrumental to academic achievement (Cummins 2000), yet many students exposed to bilingual education do not achieve optimum results as a result of not sufficiently understanding the language of instruction. This is reflected in their reading, listening, writing and speaking abilities in academic contexts.

Various researchers (Harlech-Jones 1998; Olivier 2002; Perkins 1991; Pretorius 2002; Rickerts 2000) concur that the majority of English second language (henceforth L2) undergraduate students in South Africa and Namibia find the academic demands of tertiary institutions challenging, mainly because they do not use their home language for learning during the primary, secondary and tertiary phases of education. In addition, they do not receive adequate support in developing their reading, listening, speaking and writing abilities in English, the language that is the medium of instruction (henceforth MOI) at the various educational institutions.

This is also true for the majority of students studying at the University of Namibia (henceforth UNAM). In other words, many received tuition in English, a language that is not their first language (henceforth L1) and were expected to acquire English and

learn academic content through it simultaneously throughout their school career, without adequate environmental support. This factor will be further discussed in §2.1.

This situation remains unchanged for their tertiary studies as English is also the MOI at UNAM. Researchers (Harlech-Jones 1998; Olivier 2002; Rickerts 2000) concur that this could be one of the most vital grounds for assuming that many of them will experience problems in various aspects of reading, writing and listening in the context of their studies.

Williams (2000) is of the opinion that “of all skills young children can acquire, reading is the one they will use most” (Williams 2000:1). Similarly, Jardine (1986) views reading as the most important skill required for academic success at a university, since information is, to a large extent, transmitted in print form via textbooks, the internet, study guides and notes from lecturers. This knowledge, acquired through the printed word, is then displayed by students in writing, when they submit assignments and write examinations. Since reading is evidently the vehicle of learning, the implication is that low reading levels can result in low academic performance. This issue will be taken up again in Chapter 2 (§2.5).

As students progress through the various stages of schooling, more complex academic and linguistic demands are made on them. In other words, in order to excel academically at academic institutions, they are required to have advanced knowledge of the language of instruction, know the high-frequency words as well as have an extensive academic vocabulary (cf. §2.7), be able to understand and use complex structures in the target language and have well-developed cognitive abilities. These capabilities are especially essential in the case of reading. For example, students arriving at UNAM are familiar with the genres of narrative texts through their schooling and everyday experiences. However, many are not equipped to read for their academic courses that require a solid understanding of the structure and demands of expository texts. The comprehension of such texts requires students to be able to use various cognitive skills in order to enumerate, perceive time order, compare and contrast, comprehend cause and effect, as well as to solve problems (Konopak 1987). Moreover, students require a fairly extensive vocabulary in order to carry out all these

tasks. As a result, many UNAM students who do not meet these required academic and linguistic demands may experience difficulties when they first enter the University and they may read without any purpose, especially since they do not know how to read in order to have full comprehension of what they read (Rickerts 2000).

Pretorius (2002) maintains that the assumptions that poor reading abilities are the result of poor proficiency in the MOI, and that poor proficiency in the MOI results in poor reading ability and poor academic performance, need to be questioned. It is further argued (Pretorius 2002) that reading ability and language proficiency are not the same. Although language is the medium that enables reading to occur, improved language proficiency does not necessarily lead to improved reading ability as these are two different competencies that are developed through different cognitive procedures, resulting in specific “conceptual and cognitive skills” (Pretorius 2002: 174). A more appropriate argument would be that “it is attention to reading that improves reading skill, and in the process language proficiency also improves” (Pretorius 2002: 175). Consequently, as a result of improved reading, academic success also increases. This matter will be discussed more fully in Chapter 2 (§2.3).

University students, especially those studying through an L2, need explicit instruction in reading in order to assist them to improve academically as well as to improve their abilities in the target language. This topic is the focus of attention in the current study. Reading is a complex process and a distinction is commonly made between decoding and comprehension, processes that will be discussed in more detail in §1.2. The former are acquired in the early years of schooling. It is commonly assumed that the acquisition of decoding skills is necessary for the development of comprehension skills. Consequently, it was assumed that participants in this current research have mastered these skills prior to coming to UNAM. As a result, the study focused on developing comprehension skills, with the aim to assist first-year students at UNAM in improving their reading abilities. In the process, it is also hoped that the study will contribute to ongoing research in the field of education in Namibia.

As mentioned previously, the majority of Namibian students receive instruction in a language that is not their L1. This, however, does not justify poor academic

performance (Cummins 2000) as many L2 students can perform as well as their English speaking peers. However, for that to occur L2 students need to be proficient in English, receive adequate instruction, and conditions for bilingual education need to be favourable (cf. §2.1).

According to Larson (1981), the following factors are commonly debated on by policy makers when deciding on a language in education:

- Psychological: Issues to be considered here include to what extent the language of choice would facilitate adjustment between home and school. Other considerations are whether it would assist in the formation of the child's concepts and thought, how emotionally attached people would be to the mother tongue (henceforth MT) and to what extent the use of the non-vernacular language would contribute to feelings of inferiority and alienation from the child's family.
- Educational: Issues to be considered here are how free children would feel to express themselves in the L2 which is to become the new MOI and how easy/difficult it would be for them to grasp new concepts in an unfamiliar language.
- Linguistic: An issue to consider here is how the MOI would affect reading ability since learning to read is easier if it takes place in the L1.
- Socio-economic: Arguments to consider here are to what extent the language of prestige (English in the Namibian context) would promise advancement and status. A counter-argument for a new MOI would be that vernacular languages could assist in learning the prestigious language and would promote better adjustment and less alienation.
- Political: Arguments to consider here would be that the MOI would create modernisation and integration at national level.
- Financial: Arguments in favour of the MOI would be that it would be cheaper and easier to use one official and one language of instruction. A counter-argument would be that it would be more productive in the long run to spend

money on developing vernacular languages in case pupils do not succeed in the language of prestige.

According to Harlech-Jones (1998), when English was introduced as MOI in Namibia, policy makers focused more on the socio-economic, political and financial advantages thereof and neglected the psychological, educational and linguistic advantages /disadvantages of using English. In other words, they mostly argued that introducing English as MOI would:

- advance national unity
- increase international communication
- be cheaper and more efficient
- increase the development of science and technology
- facilitate economic growth.

As a result, it seems as if the positive effects of receiving education in the L1 were overlooked.

The section that follows looks more closely at the ways in which conditions for bilingual education in Namibia were not favourable and as a result left many Namibian students unprepared for the academic demands of tertiary learning.

1.1.1 The language of learning in the Namibian context

Namibia is a multilingual and multicultural country. In fact, there are thirteen recognised national languages which are used in the educational setting. These are: Oshikwanyama, Oshindonga, Otjiherero, Rukwangali, Ruciriku, Thimbukushu, Silozi, Setswana, Khoekhoegowab, Ju/'hoan, Afrikaans, German and English (Maho 1998). Namibian citizens are free to speak and express their culture in their own languages, with Afrikaans the most widely used lingua franca. However, immediately after independence, English was adopted as the official language of communication, and therefore also the language of learning. Since then, educators were having the responsibility to “ensure proficiency in the official language and to make

pedagogically sound choices when it comes to skills and concept learning and formation, more so at the lower primary level” (Swarts 1995:14). With English being the first language of only 2,4% of the population in 1992 (Ministry of Education and Culture 1998), schools had the choice to opt straight for English as MOI or to opt for MT instruction for the first three grades of school with the introduction of English as MOI thereafter (Ministry of Education and Culture 1992). As a result, some primary schools in Namibia teach English as MOI from Grade 1 (straight choice) while others use the MT as MOI for the first three years of schooling and then either introduce English as MOI for all subjects in Grade 4 (deep-end) or gradually introduce English as subject during the rest of the primary school cycle (gradual immersion).

The positive effects of receiving education in one’s L1 have been widely researched and published (Alexander 2000; Cummins 2000; Harlech-Jones 1998; NEPI 1992; Macdonald 1990; Swarts 1995). Research showed that reading and writing skills acquired early in the L1 will provide a strong foundation to learn to read and write in an L2. In other words, it is argued that pupils will speak, read and write better in their L2 if they already have high proficiency levels in their L1. The L1 can assist in developing basic literacy as it is more meaningful to learn to read in a language one already understands. These abilities of basic literacy are then transferred to any additional language required, provided that high levels of proficiency in the L2 are acquired (Snow et al. 1991 in Cummins 2000). This transfer is known as the interdependence theory of Cummins (Cummins 2000; Aebersold & Field 1997). Furthermore, learners who have a solid foundation in their L1 appear to be more confident at school and experience more parental involvement in their education, something that occurs when parents and teachers can speak the same language. All these factors can contribute to “long term academic growth” (Cummins 2000:32).

Communities in Namibia failed to understand that for these pedagogical reasons, studying in one’s L1, particularly in the early years of school, will help the child acquire the basic skills of reading, writing and concept formation (Alexander 2000; Cummins 2000; Harlech-Jones 1998; NEPI 1992; Macdonald 1990; Swarts 1995).

Unfortunately, most parents and school communities opted for English as medium of instruction from the beginning since English was seen as the language of the elite, which would guarantee the future of children, especially in the world of employment. This type of schooling, where children with different first languages are taught through the target language right from the beginning of school is known as “Total Immersion” or “Straight Choice” (NEPI 1992; Macdonald 1990).

Due to English being the official language in Namibia, it seems understandable why most parents preferred to have their children instructed in English as MOI and consequently become bilingual. However, one needs to consider a number of factors when deciding on the best way to become a bilingual (Skutnabb-Kangas 1981). Consequently, bilingualism can be categorised as being additive or subtractive (Richards, Platt and Platt 1992). In *additive* bilingual programs, individuals receive instruction in the MT to such an extent that it supports the acquisition of the L2. As a result, the MT is not threatened by being replaced by the L2. Moreover, such programmes have positive support for the MT and are ideally implemented by L2 bilingual teachers. The positive results of additive bilingualism (Cummins 2000) are that such bilinguals have higher developed metalinguistic abilities, are able to learn additional languages faster and better and show increased academic, intellectual and linguistic development, compared to monolinguals (individuals who know only one language). *Subtractive* bilingualism on the other hand, refers to a form of bilingual education when the MOI is likely to replace the children’s L1.

Subtractive bilingualism refers to the absence of the L1 in the daily school programme. In such a language learning situation the mother tongue of learners is not being learned properly, becomes forgotten and does not develop because the children are forbidden to use it or are made to feel ashamed of it. On the other hand, the L2 is also not fully developed due to insufficient support from homes and schools. In the Namibian situation, the L1 is used as MOI in many rural schools up to Grade 3 and taught as a subject in many schools up to Grade 12 level. They are therefore not exposed to real subtractive bilingualism as the L1 is given some attention too.

Skutnabb-Kangas (1981:139) maintains that immersion should be “voluntary and ...enjoyable”. However, the reality is that many Namibian children are exposed to a “sink-or-swim situation” and are instructed in English, whether they can cope or not. This type of education is known as *submersion*, (NEPI 1992; Skutnabb-Kangas 1981), a term used to describe a situation where the goal of introducing English as MOI is to ensure that the students learn English as quickly as possible without considering the special needs students may have in the process (Richards, Platt and Platt 1992). Many Namibian learners have been exposed to this type of education since independence when English was introduced as MOI. Although many parents and children may have wanted English as MOI, many children struggle to cope as they had very little support from their parents and more particularly their schools and teachers. Submersion results in bilinguals with lesser abilities to understand instruction in the MOI, who receive fewer benefits from school and as a result show lower academic growth (Cummins 2000).

Research (Alexander 2000; Cummins 2000; Harlech-Jones 1998; NEPI 1992; Macdonald 1990; Swarts 1995) warns that in order for any kind of immersion program to be additive, the following conditions should be met:

- Children should have adequate exposure to the target language (in the case of Namibia, English) after school in the form of books, television, radio and opportunities to practice English.
- Teachers should be properly trained and be bilingual in order to assist learners in learning the L2 without the risk of neglecting the importance of the L1.
- Effective bilingual programs should be in place to assist children in becoming fluent in the MOI, without neglecting the development of their L1's
- Teachers should understand and respect the culture and L1 of the learners to have more empathy with and insight into learners' backgrounds in order to provide meaningful education. One way of accomplishing this is by making use of the learners' background knowledge in lessons.

As indicated earlier, one can deduce that many learners in Namibia did not and still do not receive enough environmental and educational support to make the transition from their L1 to English, when the latter becomes their language of learning. Due to this, “the level of competency in English, both as language and medium of instruction, is seriously wanting” (Pea 1996:14) and many students are not competent enough to study through the medium of English, especially in the senior secondary phases. As a result of this, they perform poorly in examinations.

The role that these conditions play in the successful acquisition of an L2, with particular reference to the Namibian situation will be examined in Chapter 2 (§ 2.1).

The following section will examine the difference between conversational and academic proficiency. The former is commonly referred to as BICS and the latter as CALP.

1.1.2 Conversational and academic language proficiency

Language proficiency refers to the “degree or skill with which a person can use the language, such as how well the person can read, write, speak or understand language” (Richards, Platt and Platt: 1992:200). *Academic* language proficiency, on the other hand, is the “language knowledge together with the associated knowledge of the world and the meta-cognitive strategies necessary to function effectively in the discourse domains of the school” (Chapelle 1988 in Cummins 2000: 67). L2 students, like L1 students, should not only be proficient in the MOI, but also have well-developed cognitive abilities in order to function at school and tertiary levels as well as in social contexts.

There is a common perception that being able to converse well in a language is an indication that all difficulties in proficiency in such a language have been overcome. However, research has shown (Cummins 2000) that it takes much quicker for L2 learners to reach native-like fluency levels (speaking and listening) in the target language than to read and write. Acquisition of conversational skills seem to reach a limit or a threshold, even for native speakers, so it is much easier for L2 speakers to

catch up with their native peers in terms of conversational competence. This explains why so many UNAM students appear to speak English fairly fluently, but do badly in more cognitively demanding tasks such as reading and writing in it, a phenomenon that was observed amongst teacher trainees at a Namibian College of Education (Olivier 2002). L2 students need a minimum of five years of exposure to the target language to catch up with native speakers in the academic aspects of language learning (Cummins 2000). The differences in acquisition rates between conversational and academic aspects of language learning is explained by the fact that reading and writing are skills that can be developed right through schooling and adulthood, so natives also gain more knowledge of their own written L1 as they become older.

In order to understand the reasons why oral proficiency in an L2 cannot be a reliable indicator of academic proficiency of the L2 in academic contexts, the concepts BICS (Basic Interpersonal Communication skills) and CALP (Cognitive Academic Language Proficiency) were developed to explain the nature of L2 acquisition in academic contexts. According to Cummins (2000), these concepts refer to the extent to which understanding of the language used depends on contextual clues or the absence thereof, hence the terms context-embedded and context-reduced. Contextual clues are present in situations where meaning is actively negotiated through feedback and responses, and the language is supported by meaningful contextual and interpersonal clues such as eye contact, facial expressions, gestures and intonation in order to construct the meaning of the conversation. Such situations are typical of daily oral, informal communication situations inside and outside the classroom. Central to these concepts is the understanding that as contextual clues decrease or become context-reduced in communication, the more cognitively demanding it becomes to comprehend the use of language in that particular context.

More contextually-reduced situations of communication rely on understanding language and linguistic clues to interpret meaning. In other words, context becomes lexicalised. For example, an individual has to rely on his/her understanding of words rather than gestures and other interpersonal clues to interpret meaning. Although contextual clues decrease, textual clues increase and the individual has to rely on

knowledge of the structure of the target language in order to interpret meaning successfully in context. In educational contexts, such situations are typical of classroom language that can take the form of listening to lectures, having academic discussions, reading academic texts as well as writing an academic text, for example.

It should further be noted that in an L2, BICS does not have to precede CALP, as both follow different patterns of development. Although CALP is displayed in context-reduced situations, these are developed from the individual's BICS, as support from these experiences make understanding of less cognitively challenging tasks easier (Cummins 2000). However, some individuals can have academic knowledge of a subject in a specific language without knowing how to have an informal conversation in that language. It should be noted though, that L2 instruction could only succeed if students develop their cognitive abilities and at the same time have access to contextual and linguistic support to complete tasks (environmental support). The conclusion is therefore that BICS and CALP skills complement each other.

In order to understand why apparently good conversational skills in English are not indications of academic language proficiency, Cummins (2000) explains that it takes L2 speakers between 3-5 years to develop oral proficiency in a language or to catch up with native speakers, compared to 5-10 years for academic reading, *provided* that they are involved in effective, additive bilingual programs. As outlined above, the reason for the difference in time to acquire BICS compared to CALP is because interpersonal or context-embedded situations require much less knowledge of the structures of language, compared to academic contexts that require a lot of knowledge of the target language in order to complete a task successfully. Cognisance should be taken of the fact that CALP is discernible in academic oral and written contexts (Cummins 2000). For example, the vocabulary used in informal conversations or texts is very different from that used in academic texts, as the latter is very specific and needs to be fully comprehended for such conversations or texts to make sense. It is interesting to note that the one component of language learning that younger learners seem to acquire better than older ones, is pronunciation (Oyama 1976 in Snow 1983). However, native-like pronunciation is not necessary for the development of CALP as it only

occurs if learners are exposed to native speakers of the L2 at a very young age. This is why it appears to be easier for young children to learn to speak a new language, compared to adults.

The BICS/CALP distinction can be used to explain the academic demands made on L2 children as they progress through schooling. As mentioned previously, conversational skills are usually the first to develop in an L2. These skills are context-embedded and are very important as fluency in everyday language is the basis for development of the unfamiliar registers at school that are more context reduced. As learners progress through schooling, the cognitive demands of their courses increase and students should be able to use more abstract and less context-embedded language (CALP) in order to construct meaning, an important result of effective teaching (Cummins 2000). It should be noted that increased oral language proficiency could lead to an increase in BICS, but not necessarily an increase in CALP (Pretorius 2002).

The reality for many L2 students, especially in the Namibian context, is that as a result of the type of schooling they were exposed to, they never had opportunities to develop CALP in their L1 nor in English, their L2. Given the poorer schools and resources in rural areas in Namibia, this is particularly problematic for rural children. It is important to note that in order for an individual to have CALP skills in an L2, academic skills acquired from the L1 can be transferred to the L2, or one can acquire CALP directly in the L2. A prerequisite for any of the above to occur is, however, a rich and meaningful teaching environment with extensive exposure to literate activities. Many Namibian students, especially from rural origin, have not had such schooling experiences and as a result, can neither transfer academic skills acquired in the L1 to the L2, nor can they develop CALP skills effectively in English, their L2. Consequently, they do not have adequate academic language proficiency to participate effectively at school or university, they remain academically behind their native English-speaking peers, and the gap between them widens over the years.

As mentioned earlier, in support of L1 instruction in the first few years of schooling, Cummins (2000) claims that there is considerable overlap between languages, and skills learnt in the L1 can be transferred to the L2 and will not have to be re-learnt.

This is known as his interdependence theory. Further research showed that bilingual children who do not do well at school are those whose home languages were not fully developed, and were replaced by their language of learning. This process is referred to as subtractive bilingualism, as discussed earlier. “All this clearly shows why home language maintenance is so important for learning”(Smyth 2002).

It seems that in L2 learners who have been exposed to submersion and subtractive bilingualism, BICS are better developed than CALP. As a result they are able to perform better in tasks that require lower-order skills but when they are faced with more cognitively challenging tasks their performance is less than satisfactory (Cummins 2000; Olivier 2002). Accordingly, educators should make deliberate efforts to increase CALP development among students in order to increase their academic performances.

Cummins (2000) concluded that “if L2 learners are to catch up with native speakers, they must engage in extensive reading of written text, because academic reading is reliably to be found only in written text” (Cummins 2000:79). The importance of extensive reading programs will be discussed in Chapter 2 (§2.10.2).

From the discussion above, it is clear that it takes longer for academic language skills to develop than conversational skills, and that it is important for students to develop the former if they want to succeed academically. Reading plays an important role in developing academic language skills. The next section explores the process of reading.

1.2 The reading process: a componential view

It is important to be aware of the skills, knowledge and practices required to become a proficient reader. In the context of this study, the question “What makes one a proficient reader” naturally arises. A simple definition of reading is that it is “the construction of meaning from a printed or written message” (Day & Bamford 1998:12). In addition to this, reading should be “rapid, purposeful, interactive, comprehending, flexible and gradually developing” (Grabe 1991). Clearly, reading is

a complex process as the mastery of a variety of reading skills is required in order to allow the reader to understand a written text in such a way as to extract information from it as competently as possible. These skills are processed simultaneously, in parallel processing mode, from processing individual letters and their sounds, to recognition of words, until sentences and paragraphs in much longer texts are understood. In order for skilled comprehension to occur, fluency in all these processes is acquired (Pressley 2000). In other words, readers should have well-developed decoding as well as comprehension skills.

1.2.1 Decoding skills

Decoding skills, also sometimes referred to as lower-order readings skills or bottom-up processes (Day & Bamford 1998; Coady 1993; Cook 1989) are the basic reading skills a reader acquires when learning to read in order to understand the meanings of words, phrases or sentences. These include, for example, learning the alphabet, sounding out letters, learning how letters combine to form words, learning to recognise words, as well as parsing the basic grammar and morphology of the target language. Although word recognition does not guarantee comprehension, automatic decoding skills are necessary in order to free the reader's cognitive capacity to understand what is being read (Pressley 2000). This is because the sounding out of words requires so much mental effort that, unless the process becomes automatic, very little other cognitive operations can occur during that process, resulting in an individual who can pronounce a word without attending to its meaning.

1.2.2 Comprehension skills

Many readers can decode written symbols in a text, but do not fully understand what these written symbols mean and may therefore create the false impression that they can read. In order to have full comprehension of a text, higher-order reading skills (Kaplan-Dolgoy 1998; Spingies 1993), comprehending (Pretorius 1996) or top-down processes (Day & Bamford 1998; Coady 1993; Cook 1989; Pretorius 1996) need to be developed. As mentioned previously, the reader uses decoding skills as a basis to

comprehend, but decoding skills do not necessarily imply comprehension proficiency (Pretorius 2002). Readers who can comprehend are able to interact actively with the text by activating background knowledge, asking questions, making predictions and assumptions about the text, recognising or inferring semantic relations, resolving anaphoric and cataphoric references, guessing the meaning of words in context and making inferences, perceiving the intended meaning of the author, responding critically to a text, and so on (Coady 1993; Cook 1989; Cummins 2000; Day & Bamford 1998; Eskey 1997; Grabe 1991; Kaplan-Dolgoy 1998; Mbise 1993; Perkins 1991; Pretorius 1996; Spingies 1993).

Reading for comprehension is therefore an active process in which meaning is constructed through the application of a combination of various reading skills and strategies. Reading teachers are responsible for modelling and explaining these comprehension strategies and should allow students to practice these in and outside the classroom for as long as it is required to get all readers using these strategies independently (Pressley 2000).

1.2.3 The interactive model of reading

Although a distinction is made between decoding and comprehension reading skills, these processes should take place simultaneously for effective comprehension to occur, hence an interactive model of reading has been proposed (Grabe 1991). A reader who can do this is generally regarded as a good reader. It is generally assumed that basic decoding skills are developed before comprehending, since the latter cannot evolve effectively until word recognition skills are “accurate, rapid and automatic” (Day & Bamford 1998).

The implication of this is that students studying at UNAM and other universities have to have well-developed decoding and comprehension skills in order to cope with the reading demands of their textbooks. Additionally, they have to be active readers with well developed CALP in order to apply various cognitive skills to understand all the ideas and arguments conveyed by words in the texts they read. These are often in abstract and conceptually dense, expository texts. In addition, students should be able

to read for main ideas, summarise, criticise, conceptualise, analyse and synthesise texts in order to excel academically.

Many Namibian learners do not receive adequate reading instruction and/or exposure to a variety of books in order to become independent readers. It has been observed, for example that they read aimlessly and as a result, do badly in examinations (Rickerts 2000). In the preceding sections in this chapter, it was established that the majority of students in Namibia may have been exposed to submersion, and as a result have poorly developed cognitive abilities in English, as well as in their L1, a prerequisite for development of CALP. It also transpired that they were instructed by teachers who were poorly qualified and not fluent in the MOI and, as a result, resorted to rote-teaching, a way of instruction that promotes passive learning and indirectly contributes to the inadequate development of CALP. Therefore, UNAM students who have been exposed to these learning conditions might be able to decode texts but may not be able to comprehend texts, a condition that can ultimately result in academic failure. Pretorius (2002) maintains that while decoding is the basis of reading, comprehension is the crux thereof.

Given the imperativeness of reading in the academic context, this research aimed to develop comprehension skills amongst a sample of first-year students at UNAM through a quasi-experimental design.

1.3 Reading: a tool for academic success

Research has established that there is a strong relationship between academic performance and reading ability. Better readers perform better academically (Pretorius 2002). Poor readers, if not taught how to improve their reading skills, will not overcome the “Matthew effect” in reading. This phenomenon is named after the Bible passage in the New Testament, Matthew 25:29, which states “for unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even which he hath”, in other words the phenomenon that the rich get

richer. The Matthew effect was identified by Stanovich (1986), and focuses on the gap between poor and good readers at school. It is argued that if reading ability increases vocabulary acquisition, grammar, background knowledge, knowledge of texts, genre conventions and also the reading skills of students at school, all powerful tools in reading comprehension, then those readers who are good readers will ultimately do better scholastically compared to their peers who are poor readers. As they progress through school, the good readers will read more and increase the abilities mentioned earlier, while the poor readers with inadequate vocabularies will read less and remain behind in their reading abilities and continue to perform worse academically.

The difference between good and poor readers can also be linked to the distinction that is made between meaningful and non-meaningful or generative and inert modes of learning (Daneman 1991). Generative readers have the ability to apply different cognitive skills in a flexible manner to assimilate, transfer and assemble new knowledge and schemata from new information. Inert readers, on the other hand, find it difficult to apply new knowledge to existing knowledge as they have rigid, compartmentalised knowledge bases (Pretorius 1996). University students are expected to be generative readers as they acquire new knowledge about their academic courses through reading. The further they progress academically, the more new information they gain through applying various cognitive skills while they are reading and listening to lectures. Likewise, they should be able to use the new knowledge they acquire to solve problems, make decisions and apply their knowledge in different contexts. Doing so demonstrates the ability to be in control of their learning process as well as the skill to select the appropriate information to add to their existing knowledge. Hence the conclusion that generative readers perform better academically (Pretorius 1996).

1.4 The research context of the current study

UNAM accommodates not only Namibian students, but also many students from other African countries, as well as from abroad. Many of these students face challenges that are similar and unique to L2 or FL readers elsewhere in the world. Additionally, many

of these L2 students have probably been exposed to submersion. This will be elaborated on in Chapter 2 (§2.1).

It is a well-known fact that students cannot only rely on their intelligence alone in order to perform academically. So far it has been established that reading has been singled out as perhaps the most important skill required in the learning context. In addition to attending lectures, all students have to read in order to supplement lectures, study for tests and examinations, be able to write academic essays and have academic conversations. In other words, proper learning cannot take place if texts are not accurately understood, as students have to 'read to learn'. Knowing how to write academic genres is also imperative, as students are required to submit assignments and write examinations for all courses in order to be evaluated, but reading skills need to be developed in order for intelligible academic essays/assignments to be produced.

UNAM established a Language Center in an attempt to assist students to cope with the academic demands of their content courses. The Language Centre employs 12 full time lecturers to assist in developing the students' academic needs. The aim of the Language Center is therefore *not* to teach students to speak English, but rather to assist them to improve in their academic courses by mainly teaching academic reading and writing skills. All students who enroll at UNAM have to spend between one and two semesters at the Language Center, depending on their school-leaving symbol in English. Students registered for a degree course have to enroll for University Core English (henceforth UCE), English for Academic purposes (henceforth UCA) or both. The UCE course is compulsory for all students who arrive at UNAM with a minimum of a C-symbol in English at the International General Certificate of Secondary Education (henceforth IGCSE). Students with A's and B's in English at the IGCSE level or who have passed on the Higher International General Certificate of Secondary Education (henceforth HIGCSE) level are exempted from UCE and enroll only for the UCA course.

On average, the Language Center accommodates 1000 students each year, of which the majority does UCE in the 1st semester and UCA in the 2nd semester. A pass in the

UCE course is a pre-requisite for enrolling for the UCA course. For each course, students have to attend 4 lectures per week. Attendance is strictly monitored and students have to attend a minimum of 80% of all classes in order to be permitted to write the examination, provided they have a continuous assessment mark of at least 40%. This is the accumulated semester mark students obtain by reading and writing tests, as well as doing a presentation. In this way, the Center monitors the progress of students throughout the semester. The continuous assessment mark contributes 60% towards the final mark and the examination 40%. Although the academic results of students are readily available, so far no attempts have been made to evaluate if their UCE or UCA scores can predict their academic performances.

The UCE course deals with dictionary skills, text mapping, basic reading skills such as skimming and scanning, guessing the meaning of vocabulary in context, text cohesion and the formulation of basic paragraphs with topic sentences and supporting ideas. The reading abilities of students are assessed through comprehensions of short texts, and their writing skills by requiring them to produce well-constructed paragraphs on given topics of an academic nature. Detailed content pertaining the UCE course is included in Appendix B.

The reading section in the UCA course focusses mainly on critical reading, inferencing and predicting of the content of journal articles and other academic texts. The main focus of this course is the production of an academic essay at the end of the semester. All writing lessons deal with the relevant processes such as understanding the topic, reading various sources, taking notes, referencing skills, drawing up essay plans, drafting and editing. Most students find this course very rewarding as it essentially teaches them how to write an assignment according to academic conventions.

The general view of the students and some lecturers too is that the UCE course is too easy, and to some extent, a waste of time. Many students are of the opinion that they know how to read and how to write paragraphs. The trend has also always been for students to pass UCE easily but to do badly in or even fail the UCA course. The extent

to which their UCE and/or UCA marks correlate with their academic results have so far not been monitored. It has been observed that UCE scores are not reliable predictors of their UCA results, a possible indicator that the reading component of the UCE course does not adequately prepare students sufficiently for the reading demands of the UCA level.

Although not much reading is done in the UCA course, students write two comprehension tests during the semester and one in the examination. The sections that students normally struggle with in these tests are those dealing with critical reading and inferential questions, reading abilities of which both require high levels of cognitive development.

I therefore decided to scrutinise the kinds of questions in UCE comprehension tests and realised that most questions were mostly of a literal nature. These are the kind of questions where the answers are obtained from the text, and that requires little cognitive demands from students to find the correct answers (Rubin 1991) (cf. §2.3).

Based on the fact that answers to these kinds of questions do not require much meaning construction, opposed to the critical and inferential questions asked in the UCA comprehension tests, the assumption was that the high scores students obtained in the reading section in UCE tests compared to the poor marks in the reading section in the UCA tests could be as a result of not including a variety of more cognitively challenging questions in UCE comprehension activities. A student does therefore not have to be a good comprehender or have well well-developed CALP in order to pass most of the reading tests in the UCE course and can rely largely on decoding skills in order to get the right answer. Chapter 2 (§2.2.3) deals with the various kinds of questions that can test meaningful comprehension of texts. In other words, the seemingly high UCE reading scores are not reliable indicators of the reading abilities of students and could explain why many students who pass UCE do not do well in the reading sections of the UCA course.

This finding made me realise that as lecturers responsible to equip students (some from very poor academic backgrounds) to cope better in their academic courses, we should become aware of the weaknesses of our students and try to address these in order to produce generative readers with well-developed comprehension skills. This finding is corroborated by Perkins (1991) who found that most first year students tested at the University of Transkei could not cope with first year textbooks without assistance, and Pretorius (1996) who points out that most students in different academic contexts still have to read in order to pass their courses.

This study was therefore carried out in order to see if deliberate efforts to increase comprehension skills (and indirectly their CALP skills) among a group of first-year students at UNAM could increase their reading abilities, and as a result improve their academic performances. These students were mostly from rural Namibia and experienced little support during their school years in studying through the medium of English, an L2 to most of them.

1.4.1 Aims of research

The *first aim* of the study was to find out more about the early literacy experiences and social background of my students. In order to do this, a questionnaire was administered to them to tap into their reading background and reading habits. More details on the questionnaire is given in Chapter 3 and in Appendix C.

The *second aim* was to establish if there were any differences between the students with regards to their reading habits according to their responses to the questionnaire.

The *third aim* of the study was to design and implement a reading programme to assist students to become better readers and to test the efficacy of this program.

With regard to this latter aim, a quasi experiment was carried out, with pre- and posttests, in order to test the effectiveness of the intervention programme. The reading abilities of all the students who attended my UCE classes at that stage were determined by assessing them on a number of reading abilities in the form of reading

tests. More details regarding the tests are given in Chapter 3 and Appendix D. The pretest was the test that was given to them in February 2004 before the reading intervention took place. Based on these results, students were assigned to three groups: competent readers (60% and above), moderate readers (50%-59%) and weak readers (below 50%). At this stage, the groups were divided according to their reading scores, as the pre-test was written at the beginning of the academic year, and at that stage, their academic performances were not yet known.

Volunteers from all three groups attended the reading intervention program and became the experimental group, while the control group also comprised of students from all three reading groups. The experimental group wrote the post-test in May 2004, three months after the pre-test was written, to see if they had made any significant improvements in their test scores. The reading intervention program lasted for 10-weeks and comprised an intensive as well as an extensive reading program. More about the rationale behind both intensive and extensive programs is given in Chapter 2.

The *fourth aim* was on the one hand, to explore the relationship between the reading scores of participants in both the experimental and control groups and their academic performances, as reflected in the **end-of year results** of the students' respective main subjects. During January 2005 (i.e. after the intervention programme) when the data were being analysed, the participants' exam performance was categorised into three groups. As a result participants were placed into three groups according to their academic results obtained in their final examinations during November 2004. These groups were as follows: fail (0 - 49%), at risk (50 - 59%), pass (60 - 100%). These groups were based on the UNAM criteria for pass and fail. Another objective of the fourth aim was to see if there was a significant difference in the mean posttest reading scores of the intervention group of students in terms of their academic performance, as reflected in the three academic groups. In other words, at the time when the pre-reading scores of participants were collected, they had not had any instruction in reading (at UNAM). At that stage they were divided into the different reading groups as described in *aim 3* above. By the time I collected their post reading results, participants in both the control and the experimental group had had reading instruction

of approximately three months. During that time participants in the experimental group had more exposure than those in the control group. More detail about this is provided in §3.4. Eventually, by the time the academic results of participants were collected in order to carry out the *fourth aim*, all participants had been students at the Language Center for one academic year during which they have been exposed to instruction in reading (cf. §1.4).

The *fifth aim* was to see if students perceived any benefits from attending the reading intervention program and to what extent the students in the control group gained from attending the UCE course. Regular, informal interviews were conducted with students who attended the intervention program as well as with those who formed the control group. Another reason was to collect qualitative data to see if the reading intervention achieved what it aimed to do (internal validity).

The *sixth aim* related to the lecturers at the Language Centre. Research has shown that reading teachers play a significant role in the instruction of comprehension skills (Anderson 1994; Coady 1993; Grabe 1991; Perkins 1991; Pretorius 1996; Spingies 1993) and that the type of readers produced at any institution is a direct product of the teaching environment and the quality of teaching they have been exposed to (Cummins 2000). Since all the lecturers at the Language Center are in essence teachers of reading, I was interested to find out more about the reading habits of my colleagues and their attitudes towards reading instruction. This aim was achieved through administering a questionnaire to my colleagues. The questionnaire contained questions about their attitudes towards reading, how much interest they take in the reading habits of their students, as well as what they do to improve the general reading abilities of their students (cf. § Appendix E).

These six aims formed the basis for formulating the following research questions and hypotheses that are presented below.

1.4.2 Research Questions and Hypotheses

In carrying out the research, answers were sought to the following questions:

1 Who are my students?

A student profile was drawn up to find out about the students' reading habits and earlier literacy experiences.

2 Were there any significant differences between the three reading groups with regards to their reading habits?

Based on the performance of all students who wrote the reading pretest, the students were also categorised into three groups, viz. competent, moderate and weak readers. The reading habits of the three reading groups (from both the control and experimental groups) were compared and statistically analysed in order to answer this question.

3 Did the intervention group benefit from attending the reading intervention program?

The pre- and posttest scores of the students were compared to see if the intervention group showed any significant improvement in their reading abilities compared to the control group.

4 Was there a relationship between their academic results and reading scores?

Firstly, the reading scores in the pre- and posttests and the end-of-year results of the major subjects of the three reading groups in both the intervention and control groups were correlated to answer this question. Then it was determined whether there were any differences between the three academic groups and the pre- and posttest reading scores of the participants in the intervention group.

5 Did students perceive any benefit from attending the reading intervention programme and did the students in the control group gain from attending the UCE course?

Regular informal interviews were held with students from both groups to obtain their views regarding the reading intervention program as well as the UCE course.

6 What are the reading habits of my colleagues and their attitudes towards reading instruction?

The questions were asked in the form of a questionnaire.

From the above, only research questions two, three and four could be formulated as testable hypotheses. These are:

Hypothesis 1 (H1)

There are significant differences in reading attitudes and practices between the competent and the weaker readers in the study.

Hypothesis 2 (H2)

There will be a significant difference in the mean reading scores of the intervention group compared to the control group, as reflected in the pre- and posttest reading scores.

Hypothesis 3 (H3)

The third hypothesis explored the relationship between reading ability and academic performance and was divided into the following two sub-hypotheses:

H 3(A)

There will be a significant relationship between the reading scores of participants in both control and intervention groups and their academic performance, as reflected in the end-of-year results of the students' respective main subjects.

H 3(B)

There will be a significant difference in the mean posttest reading scores of the intervention students in terms of the three academic groups (fail, at risk and pass).

1.5 Organisation of the remainder of the study.

In order to report on the relevant processes involved and findings of the current research reported on, the dissertation is divided into the following chapters:

Chapter 2 presents a review of the literature relevant to this study.

Chapter 3 provides an explanation of the methodology employed to carry out the study. The research type, research participants, materials, procedures and analysis are described and explained.

Chapter 4 presents a discussion of the findings and an interpretation of these results in the light of previous research. This is done through tabulation, analysis and discussion of the results. This chapter also outlines the statistical procedures used to analyse the data.

Chapter 5, which is the concluding chapter, gives general overviews of the study and its findings. It also identifies the limitations of the study and draws out the implications that follow from the findings. It concludes with possible suggestions to improve the reading performances of students at tertiary institutions in general and at UNAM in particular.

1.6 Conclusion

The purpose of this chapter was to identify the research problem that is the focus of this dissertation, to contextualise the problem within the broader social background and theoretical framework, to state the aims, objectives, hypotheses and research approach of the study as well as to indicate how the rest of the study is organised.

Chapter 2

Reading and the L2 tertiary student

2.0 Introduction

The aim of this chapter is to explore the literature relevant to the topic, as introduced in Chapter 1. In doing so, an exploration of how the learning environment in Namibia may contribute to poor academic performance is carried out. Thereafter, the relationship between reading and language proficiency is explored. Definitions of reading and the various processes involved are offered and factors that influence reading in an L2 are elaborated on. Thereafter, an attempt is made to explain the relationship between reading and academic performance. The chapter further defines the characteristics of good readers and reports on several intervention studies that were made in the past with the aim of improving the reading comprehension of tertiary students. It also discusses the requirements for successful reading intervention programs, before it finally deliberates on the role of the teacher in effective reading instruction. Throughout, reference is made to previous research.

Although individual reading ability is essentially a process depending on cognitive and linguistic development, it is directly influenced by readers' socio-economic origins (Buchorn-Stoll 2002; Smyth 2002; Solarsh 2002; Pretorius & Bohlmann 2003). It is for this reason that the current study explores the extent to which students at UNAM can attribute their reading abilities (or lack thereof) to possible events and circumstances beyond their control. The following section elaborates on some of these factors.

2.1 Factors required for successful immersion of an L2

For any bilingual immersion program to be successful, a number of requirements should be met to support the acquisition of the L2. As pointed out in, failure in this

kind of support may lead to submersion, a situation where the mother tongue of the target group is not being learned properly, does not develop and runs the risk of being forgotten (Alexander 2000; Cummins 2000; Harlech-Jones 2000). More details regarding this are provided in §1.1.1.1.

After independence in 1990, English, an L2 to most Namibians, became the MOI. Since then, very little effort has been made to maintain the L1 of children in Namibia. Currently, the Language Policy gets interpreted in various ways regarding the medium in which the first school years should take place. As a result, the choice of MOI for the early years of schooling is made on the demands of local communities close to specific schools. This leads to a situation where some schools offer an L1 as MOI of instruction in Grades 1-3 and at others schools, instruction in English is offered from Grade 1. Irrespective of which language children received instruction in from Grades 1-3, during their fourth year of schooling, English becomes the MOI from Grade 4 onwards, and the L1 is then only taught as a subject. Harlech-Jones (2000) and Swarts (1995) maintain that the general poor system of education that seems to exist in some Namibian schools is due to the fact that the choice of English as the only MOI was not made according to sound pedagogical principles, as described in Chapter 1.

Immersion programs can be successful, but on condition that certain conditions prevail (Cummins 2000). These requirements (also referred to as environmental factors) that need to be met to ensure the successful implementation of an immersion program, are examined below, with the aim of evaluating the extent to which these environmental conditions do or do not prevail in Namibia.

2.1.1 Trained teachers who are fluent in the L2

As learners spend most of their days at school, teachers not only play a crucial role in the development of their learners' cognitive skills, but also become role models for them, especially during the primary school phase. During the phase of implementing English as medium of instruction in Namibian schools, a study revealed that a large number of lower primary school teachers were not proficient in English (Swarts 2000). The statistics presented a worrying scenario. During my years spent teaching in

the north of Namibia where English is an L2 or FL for nearly everyone living there, I observed a tendency to place the lowest qualified teachers in the primary schools. Since these teachers are also not proficient in English, it is obvious that a teacher who is expected to teach in a language in which he/she is not proficient “assists in building a very shaky foundation” (Swarts 2000:41). The fact that teachers have a poor command of the MOI is especially worrying when one considers that many of their learners do not interact with the MOI after school. Ideally children should learn English from a teacher who is proficient in English, considering the fact that teachers are the most important vehicles of learning and are directly responsible for the quality of learning in any school. However, should this practice of placing teachers with low qualifications and poor English proficiencies at primary school continue, the primary school foundation will remain weak, and learners will continue to perform poorly in literacy and proficiency in the L2. This, in turn, will contribute to the exacerbation of poor educational practices and poor academic performance (Cummins 2000). Buchorn-Stoll (2002) maintains that investment in teacher training can ensure that learners are helped early in their school careers and assist them in performing at their optimum cognitive levels. This applies equally to L1 and L2 development.

Matjila & Pretorius (2004) substantiate the claim that investment in teacher training should be prioritised in any country. They argue that although many educational authorities attempt to improve the literacy abilities of students, certain factors such as the home backgrounds and socio-economic status of learners cannot be changed. This fact is also valid pertaining to the Namibian educational system. Consequently, the development of the teaching and literacy skills of teachers in Namibia and the upgrading of their qualifications could make a difference in the quality of the Namibian education system.

It should further be noted (Clegg 2000) that in an L2 medium of education situation, not only language teachers but also trained subject teachers have a great responsibility to prepare learners for the linguistic as well as cognitive demands of all schoolwork tasks. Language teaching across the curriculum (or the lack thereof) can be a causal factor in educational success or failure. All teachers should be aware of this as learners need to develop adequate vocabulary to express concepts and they need to

for learners in the L2, especially for those learners who have no encounters with the L2 outside school.

2.1.2 Choices underlying an immersion program

For any immersion program to be successful, all stakeholders, especially parents and children, should consent to it. However, consent alone is not enough.

Similar to their neighbours in South Africa (Buchorn-Stoll 2002), most Namibian parents are in favour of English as MOI. They associate English with high status that would ensure economic success and career advancement. However, Swarts (1995) argues that motivation from Namibians to have English as MOI should be based on sound pedagogical principles. Although parents do not always agree with such pedagogical arguments, it is the responsibility of educators in a country to make parents aware of the implications of their choices (Swarts 1995).

Many Namibians accept the belief that maximum proficiency in English is achieved through being instructed in the language from as early as possible and for as long as possible, hence the choice for their children to start with English as medium of instruction in Grade 1 already (Harlech-Jones 1998; Swarts 1995). Little or no consideration is given to strong research findings concerning the advantages of the learners' L1 in bilingual education. As language represents cultural values and norms of socialization, Harlech-Jones (1998) is of the opinion that "schools are probably more effective when they attempt to complement and reinforce rather than oppose the socialisation process of the home and neighbourhood" (Harlech-Jones 1998:3). In other words, children will cope better at schools where they hear and use the same language spoken at home when speaking to their peers and teachers. In such cases, the link between home and school will be apparent and result in a more meaningful education.

The claims for MT instruction as well as quality teaching were supported by research carried out in Nigeria (Bamgose 1984). He conducted three experiments to measure

the effects of mother-tongue education on learners. In the first experiment (The Rivers Readers Project), initial literacy was taught in a number of minority languages.

Individual schools could choose which language to use, which was also used as MOI for the first two years of schooling, except to teach English. Due to various problems regarding teacher training and material distribution, the researchers were unable to make any comparisons about scholastic performance of participants. This experiment did, however, show that mother-tongue instruction in Nigeria in the primary school years was possible as well as cost effective compared to using the L2 as MOI. In the second experiment (The Primary Education Improvement Project), the L1 was used as MOI in the linguistic homogenous states in Nigeria, and English in the heterogeneous states, for the first three years of schooling. In the fourth year of schooling English became the MOI at all schools, as is currently the case in Namibia. According to the researchers, learners who have acquired initial literacy and numeracy in the language they knew best were more aware of scientific concepts and showed more interaction with their teachers by the time they reached the second grade. No indication of their scholastic performance is given after the change to English was made, although the production of better instruction materials in the various subjects and improved teaching quality in the homogenous states were reported on. It seems as if teachers also benefited from teaching through a medium they knew best.

In the third experiment (The Six-Year-Primary Project), the use of L1 as MOI (except for English that was taught by a specialised English teacher) for the first six years was compared with the use of L1 for the first three years of schooling followed by an immediate change to L2 (English). Initially, concerns were raised that learners who received L1 instruction (the experimental group) would be in a disadvantaged position compared to their peers in the control group who received education in English, as all learners had to write an entrance examination in English at the end of Grade 7 to gain admission to secondary schools. The results of this experiment showed that those children who used the L1 as MOI and were taught English by a specialised English teacher, not only performed better in English and Yoruba (the L1), but also in all the other subjects. The results of this experiment indicate that not only is MT education

superior, but also that quality teaching plays a big role in promoting academic success among learners.

2.1.3 Teachers who understand the L1 of learners

Language is a representation of culture and various researchers (e.g. Clegg 2000; Harlech-Jones 2000) have indicated that teachers could use the culture of their learners as powerful teaching aids.

As indicated earlier, parental participation is more active when parents and teachers speak the same language. This fosters communication from the home to school, and learning becomes more meaningful to the learners. A common phenomenon among teachers in Namibia is to judge each other's command of English, since very few teachers are native speakers of the language. As a result many teachers completely shy away from using their home language in the classroom lest they be considered English 'deficient' by their colleagues. Contrary to popular belief, the L1 can successfully be used by both learners and teachers in constructive ways in content subject classrooms through code-switching. For example:

- *Learners* can successfully use their L1 to help develop their L2 through peer-teaching, planning and informal group discussions (Clegg 2000).
- *Teachers* can code-switch between the L1 and the L2. For example, they can use the L1 to clarify concepts not understood, to check for comprehension, for classroom management, for personal conversations with students or even for working out ground rules for classroom operations (Clegg 2000; Harlech-Jones 2000).

However, the use of an L1 in the classroom can only be used successfully if all learners speak the same L1, and if the teacher is fluent in the L2 and does not use the L1 to mask L2 inadequacies. In using the L1 as a teaching tool in the classroom, the importance and competent acquisition of the L1 can also be supported by the teacher.

A study carried out by Legere (2000) to establish the use of the official language (English) compared to other languages in offices in Namibia further emphasises the importance of an L1 in Namibia. It was found that although the linguistic requirements in most of the workplaces in Namibia require the command of English, the requirement for another language spoken in the country also applies. This clearly shows the value of an L1 in the Namibian context. It was further noted that although English is used for official purposes, it is not necessarily the language used for oral communication in offices by members of the same speech communities (Legere 2000). She therefore argued for a more flexible approach to the language policy to allow for the rich cultural heritage of the Namibian population. This is in line with the view of Harlech-Jones (1998) who called for a review of the language policy in Namibia in order for the L1 to play a more prominent role in bilingual education in an attempt to harmonise the country's language policy with the wider educational goals.

A direct consequence of such an action should be to make teachers, learners and parents more aware of the importance of the L1 at schools and also for future employment. Moreover the quality of teaching at all schools in Namibia should be improved so that teachers can be in positions to make informed decisions in their classrooms and use the L1 and culture of learners as effective teaching tools.

According to Allen & Rubin (1993:6), "the way people acquire literacy is inextricably bound up with their cultures". In other words, school and literacy acquisition become more meaningful if the teacher *understands* where the learner is coming from. This seems encouraging as many languages are spoken in Namibia, and it may not always be possible for teachers to speak or understand all L1's of their learners. But teachers can at least make an attempt to understand the cultural background of their learners. Therefore, teachers should be informed about the importance of culture in strengthening literacy acquisition and should also be innovative enough to create stimulating classroom environments to optimise the cultural aspect in order to create more meaningful education for their learners. Allen & Rubin (1993) reported on several successful examples of attempts made by teachers across the globe to incorporate the culture of their learners in their L2 classrooms. The truth is that, for any teacher to be able to be creative and resourceful, he/she needs to feel confident

and in control. In order to feel that way, one needs to be well trained and proficient in the MOI, two conditions that do not always prevail among Namibian teachers, especially those teaching in rural areas.

Once again the importance of teachers in education is apparent, this time in terms of promoting cultural values and encouraging learners to appreciate and use their L1's.

2.1.4 Adequate exposure to the L2 outside school

Ideally, the L2 should not only be heard in the classroom, but should also be a vehicle of communication in authentic situations in - and out - of the classroom (Alexander 2000; Clegg 2000; Cummins 2000; Harlech-Jones 1998 & 2000; Macdonald 1990; NEPI 1992; Swarts 1995). Such additional exposure can occur, for example, in the form of literature, the media (TV and radio) or opportunities for verbal communication in the L2.

The access to and availability of textbooks and other print material in both the L1 and the L2 is an important factor in L2 learning. One cannot become literate in a language if one is not adequately exposed to printed texts in the language and it is only through reading that reading develops (Pretorius 2002). Reading is also instrumental in developing CALP skills. Usually one would expect every learner to have access to his/her own books at school. However, from my own experience, the reality is that at most schools, especially in rural areas of Namibia, many learners have to share textbooks. Consequently, teachers either collect textbooks at the end of the day, or learners take turns to take them home.

Due to socio-economic factors very few rural children have exposure to literature (in both L1 and L2) or television sets at home (Willemse 2000). In addition to this, very little money or effort goes into producing reading materials for children in most Namibian languages, a situation described as "short-sighted" (Harlech-Jones 2000: 32).

Allen & Rubin (1993) refer to a study that showed that children who took books home from schools were better readers compared to those who did not. Among schools where learners did not take books home, “the highest child illiteracy and reading retardation rates” prevailed (Allen & Rubin 1993:13).

To conclude this section, three studies related to environmental support are described.

Willemse (2000) carried out a study by means of a questionnaire to measure the extent to which school children and students at a teachers college in a rural area of northern Namibia have environmental support in the medium of English, their L2 and MOI. It was found that none of the participants spoke English at home and the majority of them used their mother tongue for both formal and informal discussions, when talking to their peers or teachers. None of their teachers were reported to be native speakers of English, and either spoke or fully understood the L1 of the learners. It was reported that the majority of teachers made an attempt to speak English during formal lessons, but reverted to code-switching in order to explain concepts not fully understood in English. They used English for official purposes such as meetings, but used their L1 for informal conversations. Furthermore, it was reported that the majority of the learners (85%) understood the vocabulary used in textbooks only sometimes, and that they had very limited access to books written in either English or in their L1s (82%), as the library of the school was used as a storage room. Although the majority of the respondents had radios at home, only 47% of them had television sets at home. More than half of the fathers could speak English, but the majority of mothers, who are traditionally responsible for the education of children through, for example, homework assistance, could not. All of them reported to use English after school only sometimes.

A questionnaire is not always a reliable method of collecting data, and the one used in this mini-research was not very specific regarding the extent of parental literacy abilities as speaking is not really an indicator of literacy. Nonetheless, one does get

some idea that the findings concur with the claims made by Clegg (2000) and Harlech-Jones (2000) that Namibians in rural areas do not receive enough support to become fully competent in English. They are therefore in a sink-or-swim situation and do not have enough opportunities to develop their language and cognitive abilities fully, and those who do eventually make it to university level, tend to find themselves in seriously disadvantaged positions.

Based on his research, Clegg (2000) strongly believes that authorities in Namibia should see language as “the major causal factor” (Clegg 2000:212) for the failure of English-medium education and not other causes such as “poverty, a lack of resources...poor pupil-teacher ratios, under-qualified teachers or a history of oppression” (Clegg 2002:212). This position was challenged by a survey to establish the main reasons responsible for school drop-outs (Harlech-Jones 2000). It was interesting that contrary to common perception, language was not ranked as one of the main reasons. According to Harlech-Jones (2000:31), the main factors responsible for school drop-outs among the Namibian youth in this study were:

- parental and home factors (53.18%)
- school factors (22.70%)
- characteristics and attitudes of pupils (12.73%)
- other educational factors (11.82%).

Unfortunately the author did not elaborate on the subcategories of the categories listed above as the main factors responsible for school drop-outs among the Namibian youth.

Although language was not the causal factor for the drop-out rates, the fact that learners need adequate exposure to English cannot be denied. It is in this language that learners learn and read about new concepts and it is also via the same language that they have to do oral presentations and submit written assignments. Reading and writing were identified in Chapter 1 as the academic skills, with reading being “by far the most important of the four (language) skills” (Carell 1996:1): poor reading skills

as a result of inadequate exposure to written English outside school could be indirectly responsible for the underlying poor academic performance of Namibian students.

Similar conditions to those described by Willemsse (2000) were reported to be responsible for L2 literacy problems in Nigeria (Oyetunde 2002), namely poor methodology, an unsupportive out-of-school environment and neglect of the primary school system. Oyetunde (2002), however, believes that home background cannot be used as an excuse for reading failure, and he designed a reading programme to assist a primary school child who was labelled as a poor reader to improve his reading in the L2, which was English. The programme mainly focused on improvement of oral reading competence, print awareness, vocabulary development, and decoding and comprehension skills. After six months of teaching, the student was reported to still have a long way to go, but was making steady gains from the instruction, so much so that he performed better in reading than his peers, was more confident in his own reading abilities and convinced the researcher that he was taking control of his own learning by beginning to understand the process of reading (Oyetunde 2002).

This study by Oyetunde (2002) only reports on the progress of *one student* and is therefore not completely similar to the current study reported on, in terms of the number of participants in the intervention. However, the results yielded strongly suggests that reading problems can be remedied through effective instruction and that teachers have an important role to play in the literacy development of their learners. Additionally, the findings of this study (Oyetunde 2002) may also support a suggestion from Pilulski (2004) that intervention programmes are more successful when the pupil:teacher ratio is kept small. More details regarding this are provided in §2.9.

From the discussion above, it is clear that for any immersion program to be additive, certain conditions should prevail. Some of these are trained teachers who understand the L1 of learners and who are fluent in the L2. Other important conditions are motivated parents and children as well as adequate exposure to the L2 in and out of school. As the presence or absence of these conditions described above could directly influence the reading performance of UNAM students, a questionnaire was employed

to find out whether participants in the current research were assisted in receiving instruction through a MOI that is their L2. More details regarding the questionnaire are provided in §3.2 and the results are discussed in Chapter 4.

If language is the vehicle of learning, what then is the relationship between reading and academic success? This issue will be examined in the sections below, by first providing definitions of language competence and reading, then briefly describing the processes involved in reading and what it means to comprehend a text, as well as identifying the factors that influence reading in an L2. Finally, the relationship between reading and academic proficiency is examined.

2.2 Relationship between general language competence and reading

It is generally accepted (Elley 1991; Pretorius 2002) that there is a relationship between reading and proficiency in the L2, as improved reading can increase language proficiency.

However, although increased language proficiency may improve decoding skills in reading, it does not automatically guarantee improved comprehension skills in reading (Pretorius 2002; Matjila & Pretorius 2004).

In order to fully comprehend the relationship between general language competence and reading, various definitions of and processes in reading need to be understood. These are elaborated in the sections that follow.

2.2.1 Definition of reading proficiency

Language proficiency refers very broadly to an individual's ability to read, write, speak and understand the target language (Richards & Schmidt 2002). Since this research focuses on reading, it is important to have a clear definition of reading and to explore what it entails to be a good reader in order to establish the relationship between language competence and reading. In other words, does competence in a language make one a good reader? And also, does good reading competence ensure

better competence in a language? But first we need to ascertain what exactly the process of reading entails.

A succinct definition is that “reading is what happens when people look at a text and assign meaning to the written symbols in that text...it is the interaction between the text and the reader that constitutes actual reading” (Aebersold & Field 1997:15). In other words, readers perceive a written text in order to understand its contents (Richards & Schmidt 2002: 443). The two important processes involved in reading are *decoding* and *comprehension*, with the former referring to the translation of written signs into language and the latter to the absorption and understanding process whereby the aims of reading are met by giving meaning to the text. Someone who can decode well does not necessarily comprehend well (Pretorius 1996) and may engage with texts at a “superficial level” (Granville 2001:13).

Another aspect of reading is that it is not static (Aebersold & Field 1997). In other words, a text can have different meanings to different people, depending on their different interactions with the text and to a great extent, whether the reader is an L1 or an L2 reader. These two dimensions of reading, namely that there are two main processes involved in reading and that the reader interacts with the text in order to create meaning, are discussed below, with special reference to the L2 reader at tertiary level.

In many reading tests, distinctions are generally made between the decoding and comprehension abilities of readers. As a result, readers can be categorised in one of the following four categories (McCormick 1995):

- *The independent level:* Readers in this group are believed to be highly skilled readers who can read with 98% decoding accuracy and at least 90% comprehension. These readers should be able to access information from a text without any problems and simultaneously be able to learn from it.
- *The instructional level:* Readers in this group are believed not to have major reading problems as they read with 95% decoding accuracy and at least 75% comprehension. It is generally assumed that readers in this category can benefit from reading instruction.

- *The borderline:* Readers in this group attain between 90-94% decoding accuracy and 55-74% accuracy in comprehension. They are borderline cases that can benefit from intensive reading instruction.
- *The frustration level:* Readers in this group are believed to have major reading problems and read with less than 90% decoding accuracy and 50% or less comprehension. In order for them to overcome their difficulties in comprehension, they need intensive reading instruction.

The categories described above are not prescriptive and should be regarded as general guidelines. Additionally, they are useful for identifying students in need of intensive reading instruction.

In the process of reviewing the literature related to this study, no evidence was found of any previous studies conducted to establish the decoding and comprehending abilities of students at Namibian tertiary institutions. Nonetheless, there is good reason to expect similarities between findings from South African tertiary institutions and ours due to the fact that students from both countries are exposed to similar learning contexts (NEPI 1992). For example, Perkins (1991) reported of the reading abilities of students from previously disadvantaged communities at the University of Transkei. Only 13,8% had sufficient reading skills to cope with the demands of their textbooks, and 26% of all the students were unable to cope without assistance. Likewise, Pretorius (2002) established that many first year Psychology and Sociology students at UNISA were reading at frustration levels. The same poor reading levels were reported of first-year medical students at MEDUNSA (Pretorius 2002).

In a recent study (Mothibeli 2005) that compared the reading and numeracy levels of Grade 6 learners in 14 African countries, the reading (and mathematics) levels of Namibian students presented a worrying scenario. It was reported that only 18% of the Namibian learners were reading at the *minimum* desired level of mastery, and only 7% of them reached the desired levels of mastery in maths. In the current study, no attempt was made to determine the decoding levels of subjects as it was assumed that

by the time students reach university level, they would have already mastered basic decoding skills in English. However, with such low reading levels prevailing in our country, the assessment of decoding skills among UNAM students should perhaps be investigated.

2.2.2 Different models of reading

Over the years, various models of reading have been developed to describe the reading process. Four main models of reading are described in the sections that follow:

2.2.2.1 Bottom-up theory

The bottom-up theory of reading was developed in the 1960s when it was argued that readers use the smallest or most basic units to create meaning in a text (Aebersold & Field 1997; Coady 1993; Cook 1989; Grabe 1991; Perkins 1991; Pretorius 1996; Spingies 1993; Weir, Hughes & Porter 1990). This theory emphasised the decoding aspects of reading. The processes involved are the oculomotor, perceptual, lexical and various other linguistic processes. Through oculomotor processes, the eye is directed from one print element to the next, perceptual processes determine the visual patterns of a word, lexical processes create meaning to the word from previous memory and other linguistic processes consider the semantic and syntactic relationships among successive words, phrases and sentences.

In this model, it was assumed that readers automatically process texts from the smallest (bottom) to the largest (top) parts in order to recreate the author's intended meaning. Moreover, this model was text-driven. In other words, meaning was completely derived from the text.

Critics of this model argued that such a view of reading emphasises the reliance on understanding and scrutiny of every word and sentence, processes that do not promote full comprehension (Grellet 1999). Decoding is not automaticised and not enough attention is available for comprehension. The text-driven model of the 1960s focussed

too much on explaining decoding processes and paid little attention to explaining how comprehension occurs (Eskey & Grabe 1996:236).

2.2.2.2 Top-down theory

The top-down theory of reading was developed in the 1970s (Aebersold & Field 1997). It argues for the importance of cognition in the reading process and gives attention to analysing and processing new information (Richards & Schmidt 2002). The reader is being an active participant in the reading process by making and confirming predictions. These predictions are based on his/her prior knowledge about the world (content schemata), and knowledge of text structures (formal schemata).

Readers rapidly analyse information from texts (top-down) before moving to understanding different words, sounds or letters (Grabe 1991). For example, before reading, readers first skim and scan before reading texts in detail.

This model is reader-driven. In other words, meaning seems to be determined by the reader's content and formal schemata. It also describes the reading process as being more complex than the bottom-up approach and in addition, recognises the involvement of cognition in the process of reading. Goodman and Smith's "psycholinguistic guessing game" (Carell 1996: 3) is a major top-down model, but has since been criticised as being too vague in describing the reading process since it favours comprehension and ignores decoding in reading.

2.2.2.3 Schema theory

Many researchers (Anderson 1994; Coady 1993; Eskey 1997; Grabe 1991; Hui-lung 2001; Kitao & Kitao 2002,) emphasise the importance of background knowledge (schema) in the reading process. This is pre-existing knowledge about the world (content schema) or about the structure of texts (formal schema). A schema is culture-bound, so readers make guesses and predictions about the texts they interact with based on their cultural orientations. Comprehension is easier when guesses or

predictions are confirmed, and teachers are encouraged to select texts in the reading class that match the schemas of their learners (Anderson 1994; Coady 1993; Kitao & Kitao 2002). Readers can miscomprehend texts when the text assumes background knowledge that they do not possess, when a schema is insufficiently developed, when the text does not have enough cues to activate a schema or even when the reader chooses an inappropriate schema to interpret the text (Carrel 1984).

This view of reliance on schema to comprehend texts, however, does not explain how learners can comprehend new information if comprehension only occurs when they have background knowledge of a topic. It also does not account for the fact that good readers can understand texts dealing with topics about which they have little prior knowledge (Kaplan-Dolgoy 1998; Pretorius 1996). Tertiary students, especially, arrive at their various academic institutions with the sole aim to acquire new knowledge about their courses, mainly through reading. In other words, they have to be generative readers and be able to construct meaning from their texts in order to add new background knowledge to their existing schemas. If readers only confirmed what they already know, the purpose of learning would be defeated.

Two studies were carried out (Alderson & Urquart 1996) to see if L2 students reading texts in a familiar content area would outperform students who are unfamiliar with that particular subject. In order to ensure more or less equal reading abilities prior to the studies, participants were administered various written tests to establish their abilities in the target language. The researchers did not mention whether reading proficiency alone or also writing proficiency was taken into account. The researchers wanted to establish whether students from a particular discipline would perform better on comprehension tests based on texts taken from their own subject discipline compared to students who wrote the same comprehension tests, but were from different disciplines. The findings from the first test confirmed that students appeared to be advantaged by taking a test on a text in a familiar content area. In the second study, the same hypothesis was only partially confirmed. The superior comprehension performances of some L2 students were ascribed to linguistic (or reading) ability, and not to prior knowledge about the topic, but the researchers recognised the fact that

some “students may be disadvantaged by being tested on areas outside their academic fields” (Alderson & Urquart 1996).

To sum up, schema activation is important in reading, but schema alone does not explain how good readers can understand texts they know little about initially. In other words, schema does not explain how we read to learn and acquire new information through reading.

2.2.2.4 Interactive approach to reading

In the interactive approach to reading recognition is given to the importance of bottom-up and top-down processes, as well as to the role of schema in reading. These processes occur simultaneously when a reader is interacting with a text in an attempt to create meaning. The importance of these processes taking place simultaneously is explained by the fact that although many readers can decode texts, not all are able to understand what they have read. This is due to ineffective comprehension as a result of readers not actively engaging in meaning construction.

Similarly, while many students can pronounce words they have read, they may not understand their meanings (in other words, word recognition occurs without any lexical access) or else they may not understand individual lexical items but they have difficulty constructing overall meaning. For appropriate meaning construction, accurate decoding should occur simultaneously while the reader uses his/her experiences and background knowledge to make predictions to actively create meaning. In addition, the reader perceives links between and within sentences. It should be noted that effective top-down processing cannot occur if automaticity, i.e. the rapid decoding and recognition of words to allow for cognitive processing to take place, does not occur (Eskey & Grabe 1996). These processes modify and act on each other for full comprehension to occur (Richards & Schmidt 2002).

It is generally assumed (Cook 1989; Spingies 1993; Weir, Hughes & Porter 1990) that decoding skills need to be acquired first before higher-order skills can start operating. According to Weir et al., (1990) it is important to make a distinction between these

reading skills in order to understand the nature of reading and to construct valid tests of reading comprehension. A distinction between these skills is made in §2.3 below.

Having looked at language proficiency as well as the processes involved in reading above, one now has a clearer understanding of the relationship between reading and language proficiency. Here follows a description of a study that indirectly addressed this issue.

In order to compare reading skills in two languages, Matjila & Pretorius (2004) compared the reading skills of a group of Grade 8 learners in Setswana (their L1) and English (their L2). These readers were mother-tongue speakers of Setswana. The same text for the English reading test was translated into Setswana and used for the Setswana reading test (with a 3-week interval). The results showed that participants performed below 60% (i.e. at frustration levels) in all components of the tests, for both English and Setswana, with some displaying reading skills of Grade 3-4 levels. The researchers concluded that the reading performance of Setswana students in their own language was not better compared to their performances in English. Moreover, good Setswana readers were also good English readers and vice versa. Consequently, they concluded that “simply knowing a language does not guarantee that one can read effectively in that language” (Matjila & Pretorius 2004:16).

One could therefore argue that language proficiency is not an indicator of reading ability. According to Matjila & Pretorius (2004), reading only improves through exposure to books, i.e. reading improves reading.

According to Rubin (1991), reading comprehension can be categorised into four different types. These are described in the section below.

2.3 What it means to comprehend a text

Comprehension involves thinking. Since there are various types of thinking, some scholars (e.g. Richards & Schmidt 2002; Rubin 1991) have categorised comprehension into different levels, according to the readers’ purpose and amount of

cognitive challenge involved in understanding. These include literal comprehension, interpretation, critical reading and creative reading. Rubin's (1991) interpretation of these types are discussed below. Although it would appear as if some overlaps occur between some of the skills involved in certain levels occur (levels 3 & 4), it may be useful for teachers of reading to be aware of these various levels of reading (for example, when measuring progress in the reading levels of students). Additionally, when designing comprehension tests, one could use these as a guide to include questions that tap into various comprehension abilities of learners.

2.3.1 Literal comprehension

This category is the first level in the hierarchy of comprehension skills, and refers to the use of lower-level thinking and reading skills to understand, remember or recall those facts in the texts that are explicitly stated (Rubin 1991). Answers to literal questions require students to recognise and identify explicitly stated information from their texts. Literal questions form the foundation for the other types of comprehension, but is no indicator or predictor of reading ability (Pretorius 2000). Therefore, reading tests that contain too many literal comprehension questions do not really measure reading ability.

2.3.2 Interpretation or inferential comprehension

This category is the second level in the hierarchy of comprehension skills, and refers to reading in order to understand facts not directly stated in a text, but suggested or implied (Rubin 1991). Students use their experiences and knowledge of textual clues to construct meaning and to perceive links. To do this they rely on this skill of comprehension to determine word meanings from contexts, find main ideas, infer, draw conclusions, make generalisations, recognise cause and effect reasoning as well as to perceive similarities or differences.

2.3.3 Critical reading or evaluative comprehension

The third level of comprehension refers to the ability of readers to evaluate the truthfulness of what is read based on their personal opinion, knowledge and values (Rubin 1991). This requires readers to collect, interpret as well as to synthesise information from the text. Furthermore, readers need to differentiate between fact and opinion, fantasy and reality and recognise propaganda techniques.

2.3.4 Creative reading

At this level of reading, which is assumed to be the highest, the reader goes beyond all other levels in order to come up with new or alternative solutions to those suggested by the writer of the text, based on an emotional or other response to the text (Rubin 1991). All other types of reading are used in order to achieve this. Although not all readers are required to read at this level in their academic fields (for example science or mathematics students), everyone can benefit from being aware of this type of reading.

Based on this classification of the different levels of reading, comprehension can be divided according to two levels, namely the lower-levels (reading for literal meaning) and higher-order comprehension skills (interpretation, critical reading and creative reading) that are also known as inferential skills (Aebersold & Field 1997). For students at tertiary institutions, it is imperative to have well-developed higher-order reading comprehension skills in order to cope academically. These are the reading skills among UNAM students that the current study attempted to develop.

Having established the various levels of comprehension when reading, it is imperative to examine the various factors that influence reading in a L2 before one can adequately establish the relationship between reading and academic performance.

2.4 Factors that influence reading in an L2

It is very often the case that L2 learners struggle to learn through a language that is not their L1 (Cooper 1999; Harlech-Jones 1998; Kaplan-Dolgoy 1998; Olivier 2002;

Perkins 1991; Pretorius 2000; Rickerts 2000), but these students are intelligent and have the “underlying ability to study via a L2” (Kaplan-Dolgoy 1998:14).

Some of the challenges that FL¹ and L2 students face are discussed below. However, for ease of expression the term L2 will only be used henceforth. As we have already seen, there are a number of reasons why L2 students struggle to cope at tertiary institutions. These include factors such as cognitive development, proficiency in their first language, language proficiency in the L2 and how much the first and target language differ in terms of writing systems and rhetorical structures.

2.4.1 Cognitive development

Cognition is the process of thinking, learning, remembering, perceiving and recognising (Richards & Schmidt 2002), the very processes that students at tertiary institutions need to apply in their various academic courses. Metacognition refers to thoughts about cognition (Kaplan-Dolgoy 1998) and the ability to control cognition. As elaborated on in §1.3 , the ability of an individual to create meaning from context-embedded (BICS) to context-reduced contexts (CALP) is an indication of cognitive development. Abilities to construct meaning in context-reduced (CALP) situations signal a high level of cognitive development, a pre-requisite for academic success (Cummins 2000).

Today, 14 years after independence and consequently 14 years after the introduction of the current language policy in Namibia, its effects on the academic performances of our current school leavers are noticeable. Many first year students at UNAM are typical of those immersion students who learnt their L2 (English) in an environment with very little support in terms of educational practices, exposure to books and learning material and exposure to fluent speakers of the L2 to practice their English

¹ A FL is a language, which is taught at school but is not the MOI or a language used for official communication in a country, while a L2 is a language that is not a native language for everyone in a country, but is widely used for official purposes (Richards & Schmidt 2002).

abilities in- and out-of-school. They appear to be fluent in English (BICS), but lack the language proficiency needed to cope with the academic demands of their courses (Olivier 2002).

Cognitive style orientation, the way an individual learns, how he/she prefers to “perceive, organise and process” (Solarsh 2002) new information and approaches the learning task also plays a role in L2 acquisition. Although this topic was not applicable to the current research, it is worth noting that the use of various cognitive strategies to absorb and classify new information is seen as an important tool to excel academically, and L2 learners need to be made aware of these (Lerner 1985, in Kaplan-Dolgoy 1998).

For example, some students have a *reflective* style, and think about new information carefully before deciding what to do about it. In contrast, some learners are *risk takers* and do not reflect much on new information and are more impulsive (Day & Bamford 1998). Although both of these styles of learning have some positive as well as negative implications for the learner, an impulsive style of learning seems to be of greater disadvantage to academic performance (Solarsh 2002). The use of various cognitive strategies to understand and classify new information is seen as an important tool to excel academically, and impulsive L2 learners need to be made aware of these (Kaplan-Dolgoy 1998).

Another important style distinction is the difference between *field dependent* and *field independent* learners (Day & Bamford 1998). A learner in the former category would be able to see contexts and relationships better and view experiences as part thereof, compared to learners in the latter category who are able to pick out specific details within the larger context. Field independent students would be more analytical and would be concerned with the logical presentation of information, prefer individuality, use background-knowledge effectively and are more reflexive and in control. In addition, such learners pay more attention to detail (Solarsh 2002). A field independent learner is said to more typical of learners from an education system based on Western cultural practices, while a student favouring a field dependant style would prefer visual learning and demonstration, which is typical of African cultures.

Misunderstandings between teacher and student may appear in any classroom if they are from different cultures (Aebersold & Field 1997; Buchorn-Stoll 2002), a common scenario in Namibian schools.

From the above, it would seem as if field independent learners would be more equipped for academic success as the cognitive skills they display are characteristic of those required to cope with context-reduced situations. Based on this it is claimed that field-dependent and field-independent learners are not “equally equipped for education” (Solarsh 2002:78).

2.4.2 Proficiency in the L1

L1 proficiency can influence reading in an L2 in various ways. For example, if a student has already developed CALP abilities in the L1, these can be transferred to the L2, provided that minimum proficiency in the L2 is acquired (Cummins 2000). L1 is also directly linked to culture, an aspect that has been addressed in §2.1.3. This section will also briefly elaborate on how L1 is related to culture. Another aspect that will be dealt with in this section is the effect of parental involvement in the literacy development of children.

Smyth (2002) argues that the maintenance and development of the L1 of a learner is fundamental in successful bilingual programs. Similarly, Aebersold & Field (1997:25) claim that “the more a person has learned to be a flexible, adaptable, questioning, comprehension-monitoring reader in the L1, the more likely it is that the same person will be a flexible, adaptable, questioning, comprehension-monitoring reader in the L2”. As was explained in our earlier discussion in Chapter 1, many of the Namibian learners are not fully literate in the L2, neither in their L1, as a result of, inter alia, subtractive bilingualism (Alexander 2000; Harlech-Jones 1998; Swarts 1995). Because their L1 is not fully developed, no transfer of cognitive skills from the L1 to the L2 can take place. The interdependence theory of Cummins (Cummins 2000) attempts to explain this phenomenon (cf. §1.2.1).

Nonetheless, schools are not the only stakeholders in education responsible for the literacy of students. Literacy development is, to a large extent, also the responsibility of the family and everyone involved in the socialisation process of the individual (Machet 2002; Pretorius 2002). In other words, beliefs about the world, knowledge of words, conceptual knowledge of the individual, attitudes to reading and the basic ability of an individual to be able to read and to write and their willingness to do so are linked cultural factors. The culture of a particular society is contained in its L1 and includes the total set of ideas, morals, values, attitudes, customs, behaviour, social habits, knowledge, traditions, art, law and any other capabilities that characterise that society (Richard & Schmidt 2002). Culture can influence a reader by shaping various attitudes towards reading, determining knowledge and understanding of different reading skills, background knowledge (content schemata) and knowledge of different text types (formal schemata) (Aebersold & Field 1997; Kitao & Kitao 2002; Machet 2002).

Moreover, culture also determines the value students place on written texts, the reading strategies they employ, how much they know about the world as well as how much they know of the structure of different texts. In the same vein, how much a learner knows about the structure, grammar and syntax of the L1 depends mainly on the age of the learner as well as on culture (Aebersold & Field 1997). Allen & Rubin (1993:6) agree that the way people acquire literacy is “inextricably bound to their cultures”. For example, it is important to note that some educational cultures, especially from African origin, pay more attention to structure, grammar and syntax of L1, while others disregard these. Rural Namibians from a more traditional oral culture are more familiar with narratives, and they tend to accept printed text as conveying general truths. As a result of rote-learning practices, they are consequently not used to looking for any implied meaning in texts. Such practices may be disadvantageous to learners who are expected to apply higher-order cognitive skills at schools.

Another direct influence of culture on both L1 and L2 literacy development is parental involvement, especially in reading. Children learn about the culture of reading through observing their parents and peers and through active participation in reading (Machet 2002). In other words, through their parents, they observe the process of reading that

includes rituals such as turning pages, following print, sitting still and concentrating for often long periods of time. Furthermore, exposure to books allow children to understand that the purpose of reading written print and pictures is to create meaning and that reading is not only about decoding, but also about comprehending and enjoyment. A common criticism of Namibian students is that they seem to read aimlessly (Pea 1996), as a result of being too reliant on decoding skills when reading.

Compared to children from middle class families, children from disadvantaged families and rural areas have very low rates of literacy and may never have encountered a book before going to school. As a result, they do not know how to handle books or fail to understand the purpose of reading. Consequently they have difficulty understanding the value of reading. These conditions are exacerbated when parents and caregivers have little education and low literacy skills (Allen & Rubin 1993; Buchorn-Stoll 2002; Machet 2002; Solarsh 2002).

When parents read to their children, the latter receive individual attention, which fosters parent-child relationships (Buchorn-Stoll 2002; Lessing & Odendaal 2004). This was confirmed in a 7-week intervention study aimed at supporting and encouraging teenage mothers to read aloud to their young children for 15 minutes at least twice a week (Williams 2000). In all, 32 parents were assigned randomly to an active intervention group and a control group. The control group underwent the intervention afterwards to also receive the benefits from the intervention. The findings indicated no evidence to support more positive or negative parenting behaviours towards their children, but the results showed improved literacy gains for the children with low literacy skills at pre-test. Additionally, the parents reported to having enjoyed the shared reading activity as a result of reading to their children (Williams 2000).

Another important gain through parental participation is that children's cognitive and linguistic skills are enhanced (Vygotsky 1978 in Buchorn-Stoll 2002). In a 10-week intervention study to see the extent to which parent-child storybook reading fosters early language and literacy development (Kaderavek 2003), it was concluded that the rich language used during storybook reading to children resulted in increased

cognitive development. Furthermore, children became acquainted with decontextualised language by interacting with pictures and symbolic features in storybooks and they consequently started using more complex language. They gradually became active participators in the storybook reading routine and also learnt to create meaning from the written text (Kaderavek 2003).

It has to be noted, though, that the parents involved in this study were all educated and could easily be trained to participate in this study. In the African contexts, most parents, especially in the rural areas, are uneducated. It is therefore promising to note that Lemmer & Squelch (1993) observed “even marginally literate parents can be successfully trained to support their children’s language acquisition” (in Kaplan-Dolgoy 1998:17). The only requirements are “positive parental attitudes favouring education and their willingness to help their children” (Allen & Rubin 1993: 15).

Another impact of parents reading to their children is that the transition from home to school will be much easier for children with pre-literacy experiences compared to those not used to books or being read to. In studies carried out to measure the effects of reading to children at a young age (e.g. Elley 1991; Feitelson et al. 1993) it was found that children who have been exposed to reading at a young age have larger vocabularies, more background knowledge, better cognitive skills and better writing and reading skills in their L1 and L2. There will be a consistent gap between them and their peers who have not had pre-literacy experiences prior to coming to school, throughout their school career (Buchorn-Stoll 2002; Machet 2002). This clearly illustrates the Matthew effect that was mentioned earlier in §1.3.

2.4.3 Language proficiency in the L2

Language proficiency in an L2 is generally seen as how fluent or how well one can express oneself in the target language. Additionally, it also depends on how much one knows about the culture of the L2, how much the L1 and L2 differ in terms of rhetorical structures or communication strategies as well as knowledge of the structure of the L2. The effects of each of these factors on proficiency in the L2 are discussed below.

Researchers (e.g. Devine 1996; Grabe 1991) agree that L2 readers should attain a minimum level of proficiency in the L2 in order to read with full interaction. This minimum level of proficiency is also referred to as “the threshold of linguistic competence” (Devine 1996:272). It appears as if the more difficult the task, the higher the **linguistic threshold** is likely to be, a phenomenon that can be linked to an action taken by more competent readers: they adjust their reading strategies according to the text as well as their purposes of reading. Based on this, one can conclude that the type of reading material a reader can cope with depends on his/her command of the L2.

Devine (1996) calls upon teachers of reading to become aware of this and to explore ways how they can best assist their learners in the L2 reading classrooms.

Moreover, as the ability to comprehend texts relies on the development of CALP skills (cf.§1.1.2), L2 reading will be promoted if CALP skills in the L1 are already developed.

An understanding of the **culture** of the L2 will also enhance understanding and accurate interpretation of a text (Mbise 1993). As discussed in §2.4, each learner has cultural and genre schemata specific to his/her culture. These schemata provide a framework that is used to understand texts in the L2 classroom (Le Sourd 1988). If the culture of the target language is not well understood, or students do not have enough background knowledge, they distort the text in an attempt to understand texts. Readers rely on schema to make certain associations to comprehend texts by linking words with their cultural connotations (Mbise 1993; Kitao & Kitao 2002). If cultural representation in the text is in conflict with what a student believes, textual information may be rejected. Another important matter arising from cultural orientation is that written material, in some cultures, is regarded as conveying absolute truths that should not be challenged. This belief is also encouraged through pedagogical practices such as rote-learning (Aebersold & Field 1997; Grabe 1991), a common teaching practice in African schools for reasons discussed previously in §2.1.1.

Another factor related to how easy or how difficult readers will cope in the L2, concerns the **differences between the L1 and L2 in terms of writing systems, rhetorical structures or the kind of communication strategies that can be employed**. Readers who have the same alphabet or writing systems in their L1 as in their L2 find it easier to learn the L2 (Aebersold & Field 1997; Kitao & Kitao 2002). As most students who enrol at UNAM are Africans, the problem of a different alphabet or writing system does not apply to the current research as much as it does for Arabic or oriental students for example, as described in a study carried out by Kitao & Kitao (2002). The aim of that study was to find reasons for the poor reading abilities in English among Japanese students. The fact that the direction in reading in English is not the same as in Japanese was established to be one of the reasons for the poor reading performance of the Japanese students. Another reason relating to the differences in writing between the two languages was the fact that English paragraphs develop in a linear fashion while paragraphs written in oriental languages develop in a spiral fashion.

Such differences in rhetorical structure may contribute to the fact that many Japanese readers find it difficult to understand the logic in English (Kitao & Kitao 2002).

As a result of the growing number of residents from China in Namibia, there is an increased intake of Chinese students to the student body of UNAM. For them, this could be an added obstacle to reading in English, since they read Chinese symbols from the right to the left. Since the Chinese and Japanese share some similarities, one may expect them to experience similar difficulties to the students in the Japanese study mentioned above. Only one Chinese student participated in the current study reported on. More details are provided in Chapter 4.

Grammar is another factor that can influence reading in an L2. From the previous section in which the skills and processes involved in the processes of reading were discussed, it is clear that “reading requires a relatively high degree of grammatical control over structures that appear in whatever readings are given to students’ (Eskey & Grabe 1988:226). Devine (1996) reported on studies that showed that increased

knowledge of the syntax of the L2 enhanced reading ability (Devine 1996), and that low language competence may slow down the reading process. Other studies have shown that limited language proficiency restricts L2 readers from understanding particular types of texts, and results in readers employing poor reading strategies since they fail to see the relationship between information in texts (Devine 1996). This has led some researchers to believe that L2 readers will not be able to read effectively in their L2 until they have developed at least some proficiency in a L2, which is referred to as the “threshold of linguistic competence” that varies from reader to reader and from text to text (Cummins 2000) (cf. §1.1.2).

Pretorius (2002) questions this view that reading ability in a L2 depends primarily on competence in the target language as it implies that an improvement in language competence will automatically result in improved reading and indirectly improved academic results among students (This will be discussed later in this section). She argues that both skills develop conceptually as well as cognitively in different ways, and that “attention to reading develops reading skill, and in the process language proficiency also improves” (Pretorius 2002: 175). This view is supported by Elley (1991) who, after a study of second language learners in Fiji, concluded that the weaknesses these students had in the second language (English), was due to their lack of exposure to books at an early stage of L2 development. The conclusion seems therefore that “reading improves language competence and increased language competence enhances reading ability” (Devine 1996: 269). This view is substantiated by Matjila & Pretorius (2004) who concluded after their study reported in §2.2 that “although reading and language proficiency are related, simply knowing a language does not guarantee that one can read effectively in that language” (Matjila & Pretorius 2004:16).

Pretorius (2002) conducted a study to see how language proficiency in an L2 and reading ability in an L2 compare in relation to academic performance. Students from MEDUNSA, the Medical University of South Africa, completed a norm-referenced standardised language proficiency test as well as a series of expository reading tests.

These scores were compared with their academic performances, and it was found that their academic performances increased as their reading and language proficiency increased.

In another study, Devine (1996) compared the reading abilities in an L2 of two readers who were both good readers in their L1s, but had low proficiency in the L2. One was a sound-centred reader and the other was meaning-centred. The latter outperformed the former as the sound-centred reader mostly concentrated on decoding the text compared to the meaning-centred reader who applied comprehending strategies to interact with the text. As a result, the overall comprehension of the text for the meaning-centred reader was very good and indirectly contributed to an increase in proficiency in the L2. The reason for this difference was therefore not as a result of their reading abilities in the L1 (Devine 1996) but due to a difference in reading strategies applied by the two readers.

The findings of all the studies mentioned in this section imply that the instruction of reading should not be overlooked and that specific skills of reading should be taught in a meaningful way, to help L2 students overcome their specific reading handicaps and to improve their levels of proficiency in the L2. This is a point of particular importance in the Namibian contexts where many L2 children do not have enough exposure to books when they start with the acquisition of their L2, a factor that could result in them becoming poor readers in the L2 and therefore poor academic achievers.

In order to understand participants in the current research better in terms of possible reading problems, it was therefore deemed important to enquire about their pre-literacy experiences as well as problems they experience in reading in English, their L2. More details are provided in Chapter 3 and Chapter 4. Furthermore, since the importance of explicitly teaching various comprehension skills is established, another focus of the study was to see if participants would show any improvement in their reading performances after the introduction of an intensive reading programme. More details regarding this are provided in Chapter 3 and Chapter 4.

Having looked at the various reading processes, different levels of reading comprehension as well as factors that influence reading in a second language, I shall now examine the relationship between academic performance and reading in an L2 more closely.

2.5 The relationship between reading proficiency and academic performance

Research findings (Elley 1991; Kaplan-Dolgoy 1998; Mbise 1993; Pretorius 2002) indicate a strong relationship between reading and academic performance: “Reading is not simply an additional tool that students need at tertiary level - it constitutes the very process whereby learning occurs” (Pretorius 2002:169). In order for students to produce assignments or any written piece, they need to gain information through reading (Jardine 1986), in all phases of education. As children progress through primary, to secondary and finally to tertiary education, the demands on their cognitive abilities increase. In other words, they have to be able to create meaning in more context-reduced situations (Cummins 2000). Reading is a highly cognitive demanding activity and due to various reasons that are elaborated in §2.1, many L2 students arrive at university without the necessary reading skills to ensure academic success. Since reading gives access to sources of information, these learners are in a disadvantaged position and perform badly as they read and comprehend less than their peers who are better readers. Additionally, effective reading skills equip students for academic success, so the Matthew effect in reading (cf.§1.3) has a direct influence on their academic performance too, with better readers performing better in their academic courses compared to poor readers who remain behind due to poor comprehension.

In a study carried out by Perkins (1991) at the University of Transkei it was established that only 13.8% of the students who participated in the research had the reading skills necessary to comprehend their textbooks and 26% of all the students could not cope without assistance. In another study (Webb 1999 in Pretorius 2002) carried out at the University of Pretoria, it was found that many of the first-year students who were tested and were speakers of a language other than English, had

reading levels of Grade 7-8 students. Pretorius (2000b in Pretorius 2002) also determined that a small sample of students at UNISA were slow readers who read far below the recommended minimum speed of words per minute for speakers of other languages. In addition, she concluded (Pretorius 2002) that many first year Psychology and Sociology students at the same institution read at frustration level with an average comprehension level of only 53%. In another study carried out among students at the MEDUNSA, Pretorius (2002) came to the conclusion that there was a strong relationship between reading ability and academic performances, with students' ability to make inferences during reading seeming to be an important indicator of academic success.

In another study, this time to see if there was a relationship between the reading ability and academic performance in mathematics of a group of students enrolled for the Mathematics Access module at UNISA, Pretorius (2002) found that students who passed the mathematics examination were also those with higher reading scores. In other words, it was found that students who read better, especially those who could infer better, did better academically. Pretorius (2002) rightfully cautions against a view that reading ability alone guarantees academic success, as many other factors such as "motivation, perseverance and dedication to task"(Pretorius 2002:190) also play a role. She concurs with Olivier (2002) that language proficiency alone is not an indicator of academic success as there are distinct differences between spoken and written forms of discourse. Some students obtained high scores in the language proficiency test, but were still at risk, academically.

A similar observation was made by Olivier (2002) when she examined the oral proficiency of first year students at a teachers' college in Namibia. She established that students who took part in the research appeared to be fluent in spoken English in the English Communication classes and during social discourse. However, when they had to explain more content-related concepts to their students during their teaching practice, they did not perform well. Both Pretorius (2002) and Olivier (2002) ascribe this apparent contradiction to differences between BICS and CALP, where the former tends to be more context-embedded and the latter more context-reduced (cf.§1.3).

Pretorius (2002) established that the students in the MEDUNSA study who were in the pass group had a small gap between their reading and language proficiency scores, in other words, they had equally good BICS and CALP.

However, cognisance also needs to be taken of the strengths L2 learners can bring with them to the learning situation. Grabe (1991) maintains that L2 learners can be in an advantaged position in some ways since they may have more background knowledge or be highly motivated to learn in the L2.

If one can relatively confidently assume that increased reading ability can lead to increased scholastic success, certain criteria for establishing who in a student body would need assistance to improve their reading abilities need to be developed. Such students would probably benefit from attending a reading intervention program (cf. § 2.5).

Based on our discussion above, it is deemed important to establish what it is about some readers that make them better readers than others, hence the label a ‘good reader’ in order to encourage poor readers to develop these characteristics.

2.6 Definition of a good reader

Good readers are good comprehenders, they generally perform better scholastically and have well developed higher-order cognitive skills (Pretorius 1996) such as thinking, remembering, perceiving or classification (Richards & Schmidt 2002). For the purposes of this research, the term ‘good reader’ refers to good comprehenders who can read expository texts at university level, as the ability to learn subject content depends on their ability to read texts written in expository style (Slater Graves Scott Redd-Boyd 1988). In expository writing, a lot of information is conveyed in texts that contain several main ideas. In other words, texts at this level are dense and contain a lot of new information. At this stage, a skilled L1 reader should read about 350 words per minute, and a skilled L2 reader slightly less (Rubin 1991). Readers have to use various cognitive strategies to comprehend such texts and to acquire new knowledge

from those texts, relate this new information to what they already know, apply this to solve problems and to make decisions. At the same time they need to become critically aware of different perspectives as a result of their newly acquired knowledge by using various levels of comprehension (Pretorius 1996; Slater et al.1988). Central to all this is an understanding of the vocabulary contained in texts as well as reading at a relatively fast pace.

In order to provide clear differences between good and poor readers, an exploration of some research carried out to understand this matter will now be provided.

2.6.1 Previous research on poor and good readers

Kitao & Kitao (2002) carried out a study among Japanese students who were reported to be poor readers in English. Upon close examination, it was established that they used their bilingual dictionaries while reading in English and they translated all the difficult words into Japanese without considering whether the translation fitted the context or not. As a result, little attention was paid to meaning as they simply decoded all words. Due to looking up all the new words in their dictionaries, they were reported to be very slow readers, another characteristic of poor readers. In addition to this, these students paid little attention to how sentences and paragraphs in a passage were related, and they also did not consider paragraph development as being important. The researchers' classification of these readers as poor readers was based on their slow reading speed, limited vocabularies in English, their attention to individual words, their reliance on the literal meanings of texts and finally, their inabilities to understand paragraph development in English. Furthermore, only one quarter of the poor readers could understand and use cues within sentences, neither did they stop reading when they found irrelevant verbs in passages, compared to the good readers who did. While good readers adjusted their reading strategies in order to comprehend texts, especially when the presentation thereof contradicted their expectations, poor Japanese readers saw all reading as the same (Kitao & Kitao 2002). Additionally, the researchers pointed out that it was established in another research

(Waller 1981 in Kitao & Kitao 2000), that when reading aloud, good Grade 7 readers corrected 85% of the grammatical errors they made compared to poor readers who only corrected 42% of their grammatical errors made.

In another study Devine (1996) attempted to identify differences between two L2 readers, one being a 40-year-old PhD graduate in chemistry, and another a 54-year-old high school graduate. The former was classified as a poor reader, despite being a PhD graduate. This was because he regarded sounds of words in English as more important than meaning (sound-centred reader), whereas the high-school graduate was reported to find it more important to guess the overall meaning of the text, and continued reading even though she did not understand some of the words (a meaning-centred reader). The PhD graduate read slowly and paid more attention to decoding, but sacrificed comprehension of the text due to over-reliance on print information. The high school graduate, on the other hand, pronounced words with less accuracy, but actively engaged with the text and made predictions (although not always accurately), and could understand the author's implied meanings. The findings of this research suggest that theoretical orientations towards reading determine reading ability in the L2 and that another reason for poor reading performance is the reader's inability to combine both top-down and bottom-up processing interactively (Devine 1996).

Cohen, Glasman, Phylis, Rosenbaum-Cohen, Ferrara & Fine (1996) implemented a series of four studies to find out why L1 and L2 readers find it difficult to read and comprehend specialised texts at universities. All subjects were university students who were either in their 1st or 2nd years of study, with some receiving instruction in their L1 and some in their L2. According to their different fields of study, they were given texts to read and various activities to complete. Based on the results they were classified as poor or good readers. It was found that those classified as poor readers, in the L1 as well as in the L2, did not regard cohesion as important and therefore failed to see cross-paragraph structure signalled by certain conjunctive elements in the texts, which impaired their comprehension of the texts. In addition, poor readers also considered all parts of the text as equally important.

Based on the above studies, one can conclude that poor readers read slowly, pay equal attention to all the words in the text, rely on decoding processes to unravel the text, continue reading even when comprehension does not take place, and do not actively interact with the text by making predictions, inferences or guessing the meanings of words in context, and some rely heavily on dictionaries. The over-reliance of students on dictionaries when reading is a phenomenon observed at UNAM too, and there is no concrete evidence to suggest that dictionaries assist them to improve their vocabularies in English.

Furthermore, poor readers tend to know fewer words in the L2 as they read less and do not gain new vocabularies through incidental reading (Cummins 2000), do not always understand the purpose for reading and do not actively make use of contextual clues in the text. In addition, they do not always understand the paragraph development in texts and therefore do not monitor their comprehension by looking for main ideas that are either directly stated or inferred in the text, nor do they try to put main ideas in their own words by paraphrasing and summarising. Additionally, poor readers also do not make use of contexts when they read, either preceding or succeeding, and are not very good at understanding implicit meanings (e.g. Cummins 2000; Devine 1996; Kitao & Kitao 2000).

Consequently, when faced with bigger volumes and more complex reading tasks at school and university, skilled readers can cope with all these textual demands and increase their knowledge, language, literacy as well as general cognitive skills. Unskilled or poor readers cannot cope with these reading demands, they struggle and find it increasingly difficult to accumulate knowledge from texts and they fall more behind their peers in terms of language, literacy, cognitive and academic skills, compared to their skilled peers.

Becoming aware of how one reads is a powerful tool when reading to learn. Thus, better readers are aware of the strategies they employ to read and what to do to become better readers (Aebersold & Field 1997), although the very skilled readers carry out these processes automatically. They unconsciously divide the reading

process into *pre-*, *while* and *post* reading activities and understand the process of reading and use top-down and bottom-up strategies by making predictions about the text before they start reading the text. They continuously check how the new information fits with their existing schemata and what they expected to read about until they reach the end of the paragraph. In this way, the main ideas of paragraphs, which are often marked in a physical way, are recognised (for example, by highlighting them or making notes). If there is not a stated main idea in the paragraphs, good readers may formulate their own. At the same time, they become aware of supporting sentences and also of the overall text organisation. As they read, they continuously monitor their comprehension by using their knowledge, experience and syntactic and semantic clues. So good readers look for relationships between sentences in paragraphs and between different paragraphs. Sentences can relate to each other through a paraphrase, a restatement, providing support or by stating reason, cause or giving an explanation or example (Aebersold & Field 1997: 103). Good readers also employ different strategies to deal with unknown words they encounter as they read (Aebersold & Field 1997), compared to poor readers. Good readers have larger vocabularies than poor readers, which in turn, increase better reading comprehension and scholastic achievements (Pretorius 1996).

Since most of the studies conducted on the differences between good and poor readers were conducted in developed countries, one of the aspects the current research focussed on was to establish if there were any significant differences between good and poor readers in developing countries, such as Namibia. Participants in the current research were divided into good and poor readers according to their reading scores and their reading habits were then compared. More details about this are provided in Chapter 3 and in Chapter 4.

As a result of the negative effects of reading problems apparent in the scholastic achievement of L2 learners, especially when one considers the Matthew effect of poor reading comprehension, many attempts have been made to improve the reading performances of students at tertiary level education, mainly through intervention studies. A reading intervention program is a reading recovery program aimed at

assisting readers who are experiencing difficulties in reading (Rubin 1991).

When examining the reading needs of the L2 student, particularly the students I teach, two pertinent problems are obvious. These are, firstly, an inability to cope with the vocabulary in texts, and secondly problems with identifying main ideas. Various researchers have attempted to remedy these aspects in particular, among L2 readers at tertiary level. Some of these studies are reported on in the section below. Thereafter, the characteristics of successful reading interventions will be identified and examined.

2.7 Studies on vocabulary development

Knowing and understanding the vocabulary in the L2 seems to be one on of the major stumbling blocks that L2 readers experience. Readers at UNAM are no exception. In a review of the literature, it became evident that various studies aimed at developing vocabulary competency among L2 readers at various levels of schooling have been carried out. Some of those studies pertaining to students at tertiary institutions are described in the paragraphs below:

Cooper (1999:4) stated that: “If we accept the premise that reading plays a significant role in academic studies, then we must recognise that an adequate knowledge of vocabulary is basic to the understanding of text”. Knowing a word means to be able to know its spoken and written form, as well as its meaning. While oral skills can be acquired naturally, academic literacy skills require some instruction. The vocabulary required to cope in academic situations needs direct instruction and strategy training (Coady 1993 & 1997). Additionally, vocabulary should be automatically recognised and understood effortlessly in order to free cognitive processing resources for dealing with other details in the text such as discourse makers and main ideas, for example. Even native speakers can benefit from explicit vocabulary instruction, but more attention should be given to teaching vocabulary to L2 speakers as the difference between a native speakers’ vocabulary and a L2 learner’s vocabulary can be up to several thousand words (Nation 1990).

Findings (Coady 1997) regarding the number of words an average native English speaking university student should know differ from between roughly 10 000 to 16 000 word families, with L2 students recognising far fewer words. Word families are words and their derivations and inflected forms (e.g. happy, unhappy, happily, happiness all belong to the same word family).

Since it was established that approximately 95% of all vocabulary should be known in order for text comprehension to occur, it became apparent that some words appear more frequently than others, and that some appear only in certain kinds of texts.

Consequently, various word lists were developed (Nation 1990; Nation & Newton 1997). For example:

- High frequency words: These words are of a low level of difficulty, occur frequently in all kinds of texts as they can be used in different contexts and on various topics. Such words add up to about 2 000 and make up roughly 80% of the words in a text. For example, *the, it, book, dog, walk*.
- Academic vocabulary: These words occur frequently in most kinds of academic texts and contexts that students encounter at tertiary institutions. Such words appear in university word lists and amount to about 800. These make up roughly 10% of words in academic texts. For example, *concur, compare, analyse, evaluate*.
- Technical vocabulary: These words occur in specialised texts and cover about 3% of such texts. The estimated total for each subject is between 1 000 and 2 000 words. Each field has its own technical vocabulary range, for example in a subject like Economics, terms such as *treasury bills, money markets, nominal value, liquidity* occur.
- Low-frequency words: Although these words have the largest number (approximately 123 000), they occur only about 2% in texts. They are of a high level of difficulty, with each word occurring very infrequently. For example, *marble, thrill, obscure, en masse*.

Although most researchers agree with the number of high-frequency words, there appears to be some discrepancy about the academic word lists that were developed over the years in terms of the number of words they contain. For example, Nation's list (1997) contains about 800 academic words, but a new list that was developed by Coxhead (2000) contains only 570 words. Although there are fewer of those words, knowledge of academic words in tertiary contexts is crucial.

The general assumption is that knowledge of the 2 000 high frequency words and academic vocabulary will allow a student about 90% comprehension of any given academic text. Teachers are therefore advised to spend time and attention on teaching the 2 000 high-frequency words of English first, because "without these it is not possible to use English in any normal way" (Nation & Newton 1997: 239). Thereafter attention should be given to teaching the academic vocabulary. Subject teachers can teach technical vocabulary. Additionally, students can be taught vocabulary strategies such as guessing the meanings of words in context or using word parts to deal with low-frequency words and other words they do not know. Word parts that can assist readers include the stems/roots of words, as well as prefixes and suffixes.

In a study carried out to establish to what extent academic performance is affected by vocabulary size, Cooper (1999) established that increased vocabulary, especially academic vocabulary, is associated with increased comprehension and academic performance, but seems to be a weak indicator or predictor thereof. The findings in her study suggested that of students' knowledge of words from all basic, advanced and academic word lists available, it is the latter that are most related to an improvement in the academic performance of students. Cooper (1999) further cautions that although vocabulary size influences academic performance, it does not determine academic performance. Moreover, she suggests that the development of vocabulary alone would not improve the overall comprehension of texts.

Cohen et al. (1996), examined the aspects L2 readers find problematic when reading academic texts in various fields. It was determined that non-native readers experienced more problems with general vocabulary (high-frequency words)

compared to academic vocabulary. Possible reasons for this finding were firstly that general vocabulary may have more than one meaning that L2 speakers may not be aware of. Secondly, writers sometimes use more than one word to refer to the same object in one text. This could be problematic for L2 readers who have problems with lexical cohesion, not only with synonyms, but also with storing separate words that have the same meaning. As a result, the reading load, or the storage and retrieval of information from the brain during the reading process, increases.

A 14-week reading intervention programme was carried out (Rickerts 2000) amongst English Communication students at the Polytechnic of Namibia with the aim to improve reading comprehension, reading speed and vocabulary to increase the overall performance of students in English Communication. The post-test results showed that although the reading speed and vocabulary of the students improved, there was no significant improvement in the overall reading comprehension abilities of the students. There was also no significant evidence that the intervention program improved the overall English Communication results of the students. It was believed that absenteeism and the lack of commitment resulted in the poor performance and little gains made by some students. The relatively short intervention period could have also been a factor. No indication was given of the influence of this reading intervention on the academic performances of students who participated in the study.

At the University of Transkei (Perkins 1991), a one-year reading intervention was carried out among students to improve their accuracy in reading, with special attention given to developing their vocabulary skills because vocabulary was felt to be important in improving the comprehension of texts. The posttest results showed that overall progress was made by all students, with improvement linked to the attendance of students on the programme. No indication was given of the influence of this reading intervention on the academic performances of students who participated in the study.

Phillips (2004) reported on an 8-month reading intervention study similar to the current research, in which vocabulary instruction was one of the aspects focussed on.

Students in both control and intervention groups shared the same previous academic and economic backgrounds and were more or less equal in terms of proficiency in English, their L2, as well as their ages (19 years). Despite numerous problems encountered, various reading strategies were taught to the intervention group. For example, general reading skills such as schema activation, understanding the purpose of reading, study skills, summarising and synthesising. Vocabulary skills were also instructed. These entailed the correct use of dictionaries, guessing the meaning of words in context and recognising semantic relations and discourse markers in texts. Although it was not possible to find significant differences between the overall reading results of both groups, the results did indicate a significant improvement in the vocabulary levels of the intervention group. This confirmed that vocabulary strategy training does help to improve vocabulary levels of students, but that improved vocabulary alone is not sufficient to make an impact on overall reading scores. Her study did, however, show a significant correlation between the academic performance of her subjects and their reading scores.

Curtis & Longo (2001) reported on a 16-week intervention study aimed at vocabulary development. It was carried out to measure the effects of increased vocabulary on the comprehension of high school learners. During the 16 weeks students were taught vocabulary, first out of context, and thereafter they were requested to read texts in which these words appeared in context. Throughout, the researchers provided ongoing assessment and communication about the progress of their students. Data from the posttests that indicated an average gain in the reading achievements of the participants was directly attributed to increased vocabulary, a finding contrary to studies by Rickerts (2000) and Perkins (1991) who viewed vocabulary development as one aspect of improving reading comprehension. No indication was given by Curtis & Longo (2001) of the influence of this reading intervention on the academic performances of students who participated in the study.

Since the focus of the current research was on improving overall comprehension and not vocabulary alone, it was decided to focus only on ensuring that students were familiar with the 2 000 high-frequency words as well as introducing them to strategies

to deal with unfamiliar words. These included introducing them to word roots, prefixes, affixes, as well as guessing the meaning of words in context. These issues are dealt with in more detail in Chapter 3.

2.8 Reading for main ideas

Being able to identify main ideas in a text is a very important tool in academic success. The current study did not explicitly concentrate on improving the recognition of main ideas among students, but rather on making them aware of the way expository texts are organised and also how ideas within a text relate to each other, as these are also important to know in order to understand the main ideas of texts.

A study that focused on summarisation, main and supporting ideas was conducted by Slater et al. (1988), in an attempt to assist first-year university students to understand the overall structure of expository texts. After the 9-week study, it was found that students in the experimental group outperformed those in the control group in the recall and comprehension of textbook passages after the experimental group was explicitly taught to recognise the discourse structure (main and supporting ideas) in expository passages. Since the UCE course deals with paragraph development by examining main and supporting ideas in detail, it was decided not to repeat this in the reading intervention program, but rather to focus on textual cohesion.

Expository texts contain a lot of information. As a result students not only need to understand the development of paragraphs, but also the overall textual organisation. In other words, they should understand and recognise how various devices are used to create textual cohesion or links between sentences. A writer shows readers how to make relationships between sentences and paragraphs to clarify meaning, through reference and linking words (Grellet 1999).

Students need to understand that a text is not made up of independent clauses or sentences, but that it is a web of related ideas that are announced, introduced and taken up later throughout the passage with the help of references (Grellet 1999:15).

Cohesion, or unity in texts, can be created by various forms of grammatical cohesion, such as anaphora, (elements previously mentioned) or cataphora (elements still to be mentioned) and also lexical cohesion such as the use of synonymy and hyponymy, among others. Another way in which cohesion is created is through the use of conjunctions. These are words in sentences or clauses that signal semantic relations between clauses or sentences.

There are five main types of semantic relations. For example:

1 Additive

These are words used to add to existing information that are expressed in a sentence or a clause. Linking words, for example, *also*, *besides*, *as well as* are examples of such words. The conjunctions that signal the additive semantic relations are underlined in the following sentence:

Besides being the youngest, I am also the tallest.

2 Temporal

These are words used to show a time sequence or listing. Linking words such as *firstly*, *secondly*, *finally*, *meanwhile* are examples of such words. The conjunctions that signal temporal semantic relations are underlined in the following sentence:

After such a long engagement, they have finally decided to tie the knot.

3 Causal

These are words showing the underlying reason or premise or cause of why something stated in a phrase, sentence or paragraph happened. For example, *since*, *because*, *for this reason*, *in that case*, *on account of this*. The conjunction that signal causal semantic relation is underlined in the following sentence:

I have not had a holiday in years. It is for this reason that I decided to accept her invitation to visit her in Mauritius.

4 Adversative

These are words showing opposing or contrasting views stated in a phrase, sentence or

paragraph. For example, *nevertheless, even so, despite, however, on the other hand*. The conjunction that signals adversative semantic relation is underlined in the following sentence:

Despite several warnings, my sister still walks around alone at night.

5 *Concession*

These are words that indicate an allowance or compromise. For example, *although, (even) though, granted, of course,*

The conjunction that signals the semantic relation that indicate concession is underlined in the following sentence:

I have invited him to attend my birthday party even though he is not my friend.

These relations underlie the way we observe the world and the way we think, but many students seem to fail to understand what they read as a result of not understanding the semantic relations between phrases and sentences in texts. Even more disturbing, it appears as if L2 readers are not aware of the *function* of such links (Cohen et al. 1996) and would therefore greatly benefit from being taught to attend to cohesive devices.

Cohen et al. (1996) conducted research in an attempt to establish how to solve reading problems among L1 and L2 students at a Hebrew University. In this study, they tried to establish to what extent heavy noun phrases and objects, syntactic markers of cohesion as well as non-technical vocabulary in technical texts appeared to hinder students' understanding of texts. Students were placed in four groups, based on their reading levels, and each had to read various texts related to their fields of study. The study revealed that students in all four groups failed to see the cohesion created by even the most basic conjunctions. Furthermore, it was established that the L2 students could not see links between paragraphs, although cross-paragraph markers of cohesion were provided. Readers who do not understand the cohesive devices in texts have trouble understanding the overall inter and intra sentential and paragraph structures of text, and will therefore fail to recognise the communicative value of their texts (Grellet 1999). So, one can deduce that another difference between a good and a poor

reader is that the former pay attention to text-semantic relations, although this often happens unconsciously. Based on these research findings, the current research attempted to make students aware of lexical cohesion in various ways. More details regarding this are provided in Chapter 3.

The literature reveals that many reading researchers attempt to improve the reading abilities of students by designing reading intervention programs in such a way that they target specific skills and strategies. As some are evidently more successful than others, one needs to know what theoretical, methodological, as well as logistical issues should be considered in order to make such an undertaking a success. These aspects will be considered in the following section.

2.9 Requirements for a successful reading intervention programme

Pikulski (2004) is of the opinion that almost all reading problems in young learners are preventable if students receive extra support in the form of early intervention programs. This conclusion was based on an examination of the reasons for the success of five effective reading intervention programs. Because the current research was aimed at University students, a critical look at these requirements for success was made to establish their appropriateness for tertiary students. Pikulski (2004) identified the following 14 requirements for reading interventions to be successful:

1 Pupil-to-teacher ratio is kept very small

Of all the interventions examined by Pikulski (2004), the biggest number of student assigned to one teacher was 7. The report points out that although some learners progress better with individual instruction, many do respond to group tutoring. Due to the fact that there was only one researcher involved in the current research, and also to have meaningful statistics to work with, it was impossible to divide the group of 30 into smaller groups.

2 Fluency in recognising words accurately and rapidly is a major goal

The notion that word recognition needs to be fluent, accurate and rapid in order to exert comprehension is seen as an important goal. This is an aspect that should be

important for any reader, no matter on what level he/she is. At tertiary level, one would assume that students have already mastered this aspect of reading. However, in a developing country such as Namibia where many learners come from poor educational backgrounds, more attention should probably be paid to developing automaticity in reading among students. Unfortunately, although the current research spent roughly 50% of the intervention time on developing vocabulary of the students, only comprehension skills were concentrated on.

3 The dependence on a strong, effective program of regular classroom reading instruction

The instruction students receive in the reading intervention program should be in addition to the regular instruction in the classroom program, and not seen as a replacement thereof. Aspects focussed on in the intervention program can eventually become part of the regular classroom instruction program. In the current research, students in both the control and the intervention groups attended the normal UCE lessons, four times a week. In addition, those in the intervention group met for a further four hours a week for the intervention program. From a research point of view, this creates problems, as the control did not receive any additional instruction other than the UCE lessons. This was unfortunately due to factors beyond my control. This will be dealt with again in Chapter 3.

4 Reading for meaning is the overriding consideration

In order to ensure that reading is seen as an active, meaningful and constructive process, students should be taught to divide the reading process into *pre-*, *while* and *post* reading activities. Suitable activities for each stage should be developed. Additionally, students should be taught to monitor their reading to make sure that what they read makes sense, and be encouraged to read for enjoyment and for information, with the overriding aim to read for meaning. Since this aspect of dividing the reading process into the three phases mentioned above, is dealt with in the UCE course, lessons during the intervention program of the current research did not repeat it, but it was regularly reinforced.

5 Intervention is frequent, regular, and of sufficient duration to make a difference

Daily contact with students allows teachers to become very familiar with students and to recognise their needs as well as strengths. Additionally, teachers can continuously reinforce skills previously acquired. Researchers recommended periods ranging from 20-45 minutes for special instruction. In the current research, students were taught by the researcher in both the UCE classes as well as the intervention programme. As a result, the researcher had enough time to get to know their needs and strengths as well as some of their personal details. The UCE lessons were 45 minutes each and the intervention programme took place for four hours each week. More details are provided in Chapter 3.

6 Instructional procedures are used to introduce new books in order to ensure that students are successful in reading them

When a new book or text is introduced, the teacher assists learners in the previewing process by helping them skim the text in order to activate their schema. This aids activating prior knowledge in order to make predictions and to have expectations prior to reading. Eventually, the teacher withdraws as learners learn to do this each time they encounter a new text. In the current research, this aspect was also dealt with in detail during the UCE lessons, so the intervention sessions only reinforced this.

7 Assessment is meaningful, practical, efficient and ongoing

In the primary school interventions reported on, assessment mostly took the form of regular oral presentations. In the current research, students were assessed in writing by being requested to submit article reviews on a weekly basis, and a book report per month. These were collected and commented on by the researcher.

8 Writing is used to teach and extend word identification skills

An effective reading program does not underscore the fact that reading and writing are inseparable – at all levels of instruction. In the reading intervention programs reported on by Pikulski (2004), primary school children were required to respond to their reading in the form of short sentences, aided by the teacher. Students at tertiary

institutions, on the other hand, could be required to write longer responses in the form of answering comprehension questions, writing summaries or essays in response to what they have read. Students in the current research were required to write book and article reports as well as compile vocabulary lists as part of the extensive reading component of the intervention programme. More details are provided in Chapter 3.

9 Considerable teacher flexibility about instructional activities

During the regular pattern of activities, the teacher needs to decide when to deviate from the original lesson, based on the responses and needs of students. In other words, although the intervention program is about the students, the teacher is still in control and makes informed decisions about the best ways to instruct them. In the current research, UCE and intervention lessons were often modified according to the needs of students. An altered, but not necessarily a less effective presentation lesson was often produced as a result.

10 Instruction is fast paced

Educators should not slow down the pace of instruction because they deal with poor readers. This could reinforce the Matthew effect in reading with the slow readers always being behind. Rather, instruction should be regularly paced. In the current research, lessons in both the UCE and intervention program were normally paced, but students were always encouraged to interrupt lessons in order for certain points to be clarified.

11 Activities completed at home extend student opportunities for reading

In the primary school interventions reported, parents had to be involved by regularly assisting learners with homework assignments. In the current research, however students were assessed in writing by being requested to submit article reviews on a weekly basis, and a book report per month. These were collected and commented on by the researcher.

12 Teacher training is practical and ongoing

For teachers to deliver effective reading intervention programs, they have to be very

skilled or be informed by other skilled instructors. They also have to be involved in ongoing professional development and have to be trained in reading instruction of intervention programs. The researcher in the current research had “ongoing” education during the time of the intervention program, as it was part of the completion of a MA dissertation.

13 Teachers believe in their intervention programmes, and in their students’ abilities to improve

Teachers should believe that their reading programme could make a difference and filter this through to their students. Since I believe in the power of reading and in the ability of students to improve their own reading skills, I designed the reading intervention programme currently reported on. In order to gauge to what extent the intervention program in the current research was successful, students were regularly interviewed, observed and finally they had to write a posttest. The scores thereof were compared with their reading scores obtained in the pre-test in order to see if any significant gains were made.

14 Pupils build confidence and come to see themselves as readers

As students learn to become better readers and begin to apply strategies and skills to comprehend, they grow in confidence. This was observed when students in the intervention group in the current study steadily improved in the UCE course.

Curtis & Longo (2001) are of the opinion that many reading interventions fail because too much is done, rather than too little. From the discussion of the characteristics of poor readers as well as the different higher-order reading skills, it is understandable why a researcher may try to do too much in an intervention, as there are so many reading skills one can focus on in order to attempt to increase the reading abilities of tertiary students and attempt to make them better readers. As will be elaborated on in Chapter 3, the reading intervention programme in the current research therefore focussed on aspects not covered in the UCE course. In addition, some aspects that were dealt with in the course were supplemented in the intervention programme (see Appendix B for UCE course content).

The above discussion leads one to ask what a good reading programme comprises, especially one at tertiary level that focuses on assisting students to cope with the academic demands of their courses.

2.10 In search of a reading programme that works

Most reading that takes place at university requires a high degree of understanding of academic texts (Richards & Schmidt 2002). In order to assist students to read academic texts with “comprehension and critical attention” (Van Wyk 2001: 221), a reading programme should be based on both intensive and extensive reading methods. The sections below serve to give a brief description of what each of these methods of reading instruction entails.

2.10.1 Intensive reading

Intensive reading focuses on carefully analysing texts for maximum comprehension as well as the teaching and application of reading strategies while working with texts (Aebersold & Field 1997). Important aspects to focus on in an intensive reading program where academic reading is developed are as follows (Blue 1993; Spack 1993):

- discriminating and understanding the difference between the main ideas and secondary ideas
- grasping the relationships between ideas
- separating fact from opinion
- distinguishing and relating ideas
- comprehending conventional use of abbreviations
- drawing inferences and conclusions
- deducing unknown words
- understanding graphic presentations such as data and graphs.

Furthermore, an intensive reading lesson should be divided into *pre-, while* and *post* reading phases (Aebersold & Field 1997; Van Wyk 2001). During the pre-reading stage, students should skim the text by looking at any text features that stand out like headings, sub-headings, graphs, pictures, etc. in order to activate background knowledge. This should assist them to establish how much they know about the topic and allow them to make predictions about what they are going to read about. During the while-reading stage, students should be given questions to allow them to interact with the text by paying attention to textual features and relationships within the text. In addition, attention is paid to recognising main ideas and cohesive ties as well as making inferences. The post reading stage typically includes questions and activities to establish overall text comprehension.

2.10.2 Extensive reading

Extensive reading is the reading of large quantities of printed text, with the intention to develop good reading habits in students as well as a liking for reading while vocabulary and knowledge of language structure are developed simultaneously (Richards & Schmidt 2002). Extensive reading is widely seen as supplementary reading to intensive reading where readers willingly engage with texts (including popular literature such as comics, magazine articles, fiction, etc) while at the same time reading for educational purposes (Day & Bamford 1998).

Researchers (Day & Bamford 1998; Coady 1993; Grabe 1991; Van Wyk 2001) agree that there are various educational reasons for introducing extensive reading in a reading classroom. Some of these are to:

- get students to read for pleasure, and as a result, improve their reading fluency
- allow students to encounter and learn the 2 000 high-frequency words in various contexts
- increase the vocabularies of students through incidental reading
- improve background knowledge of students

- improve their text comprehension and processing skills
- develop a positive attitude towards reading.

According to various studies carried out to measure the effects of extensive reading on students' reading gains (Day & Bamford 1997), it was reported that in general, students increased their reading ability in the target language, became more positive towards reading, were more motivated to read and, finally, became more proficient in the target language in terms of vocabulary, linguistic competence, spelling and writing. Pressley (2000) is of the opinion that one way to increase a reader's knowledge is through encouragement of extensive reading of high quality, information-rich texts. This is in line with one of the requirements for an effective reading intervention program, namely that new books should be introduced and that reading is not only restricted to the classroom. Teachers can try as much as they can to improve readers' reading skills, in particular vocabulary, but "the final responsibility for learning new words rests with the students" (Aebersold & Field 1997:150). Incidental learning of new words happens when students read more texts that they enjoy, not necessarily of academic content. In this way, students are in control of their own learning. Even so, this can take place under teacher supervision as teachers should occasionally gain insight into what learners have been reading and learning through these additional reading activities (Aebersold & Field 1997).

In a high school reading project in Alteridgeville near Pretoria, (UNISA 2005), it was established that when more reading material for extensive reading was made available to the students by re-opening the school library and encouraging learners to read more, an overall increase in their reading skills and reading speed were reported. However, this was observed only in those students who were regularly taking books out of the library.

In the intervention programme reported on in Pretorius & Bohlman (2003) that was implemented with a group of 33 Maths Access students at UNISA over a period of 22-weeks, the overall aim of the study was to improve the Maths reading skills of students so that they would find it easier to "read to learn" in the university context. In addition to explicitly developing reading skills through an intensive reading program,

specifically for the reading of Maths texts, the programme also emphasised reading for pleasure (as opposed to reading for study purposes). The students were encouraged to do as much pleasure reading as they could (i.e. reading novels, magazines, newspapers, etc) and had to complete various reports and develop their own mini-dictionaries in the process. These had to be shared with a reading buddy (Pretorius & Bohlman 2003). The researchers then collected the reports on a regular basis and feedback was given to students. Additionally, class time was spent on dealing with reports and exchanging words and ideas. This ensured that students took the extensive reading component of this intervention programme seriously.

The extensive reading program reported on in the current research was implemented in a similar way as the one reported on above. More details regarding this are provided in Chapter 3.

Van Wyk (2001) reports on the effects of a reading course supplemented by a writing course that was introduced at the University of Free State to assist students from disadvantaged educational backgrounds to cope with the academic demands of their courses. It includes an intensive as well as extensive reading component. Moreover, explicit vocabulary instruction is also an essential part of this reading course. Although Van Wyk (2001) did not carry out a formal experiment on the effects of this program on their students, she does report an average gain of 8,5% in reading performance of the students, as well as improvements of their reading rates since its implementation.

The current research included both an intensive and an extensive reading programme, with a focus on vocabulary built into both aspects of the programmes. The intensive reading with the intervention group was in addition to the intensive reading dealt with in the UCE lessons. As elaborated on in Chapter 3, extensive reading was built into the reading intervention program by explaining to the students the importance thereof, making reading material available to them as well as constantly monitoring progress by expecting students to hand in reports of books and articles. In addition, the researcher gave regular feedback. This leads us to consider a very important

contributor to the success of the reading class, namely the reading teacher.

2.11 The role of teachers in reading instruction

Cummins (2000) rightfully claims that students are the products of the quality of teaching that they have been exposed to. Therefore, if reading teachers want their students to become independent readers, they should be role models for learners by being active readers who read for enjoyment as well as for educational purposes themselves (Day & Bamford 1998). In addition, they should plan effective reading lessons according to the aims of the lesson, the best approach to achieve that specific aim, the materials and time available as well as the best method of assessing the students' abilities during and after the lesson (Aebersold & Field 1997). Moreover, they should be able to refer students to appropriate reading material. The implication is that every reading teacher should engage in ongoing training (Pikulski 2004) and continue to "observe, reflect, inquire and incorporate new information" (Aebersold & Field 1997: 198).

It was observed by Dunn (1990) that her students seemed to comprehend less of their texts every year. She subsequently realised that her task was to ensure that her students could survive or understand texts independently of her instruction. As a result, she designed a reading program to teach students to improve their comprehensions of texts, and encouraged other teachers not to simply accept the reading problems of students, but to find solutions in order to make reading a mutually rewarding process, for the teacher as well as for the students.

Fletcher & Reid (2005) contend that the challenge for all teachers should be to become a successful teacher of reading. In doing so, reading teachers should be prepared, apply their own knowledge to give appropriate instruction, and also be able to identify reading impairments before too much damage is done. Furthermore, teachers should inform parents and the educational communities of the need to involve children in reading from the first days of their lives. Teachers themselves should become aware of the significance of reading in the academic success of students and

become committed to producing efficient readers (Fletcher & Reid 2005).

In view of the importance of the reading teacher in the instruction of reading and also the fact that is often incorrectly believed that only primary school teachers are responsible to teach reading (Spingies 1993), the current research also aimed at establishing how lecturers at the Language Centre view their roles as teachers of readers.

2.12 Conclusion

The aim of this chapter was to provide a review of relevant research findings in relation to issues that were examined in the current research. Throughout, the focus was on reading and the L2 student, why and what reading problems are encountered, the relationship between reading and academic performance as well as an overview of the characteristics of successful intervention studies. Throughout, principal theories and findings with regard to reading were discussed in an attempt to pave the way for the formulation of the research questions and hypotheses on which this research is based. These were presented in Chapter 1, but are described in more detail in Chapter 3.

Chapter 3

Research Methodology

3.0 Introduction

This chapter serves to explain the research hypotheses and research questions that informed the study, and to describe the research design, materials and procedures used to test each hypothesis and find answers to the research questions. Finally, a summary of the chapter is presented.

3.1 Research hypotheses and research questions

In this section, the research hypotheses and research questions that formed the basis for this study are discussed. Special reference will be made to the research approaches and underlying assumptions of each. The research was analytical as the data collected were mostly quantitative, but some were also qualitative, as will be apparent from the discussion below.

In order to present a coherent representation of the research reported on, the research questions and hypotheses are presented in the following order:

- Research question 1
- Hypothesis 1
- Hypothesis 2
- Hypothesis 3
- Research question 2
- Research question 3

3.1.1 Research question 1

What are the language and literacy profiles of the students who participated in the current research?

In order to find out more about the general background of the participants in this research, a questionnaire was administered in order to gain a better understanding of who my students are and the literacy knowledge they bring with them to university. More details regarding the questionnaire are obtained in Appendix C.

A questionnaire is a way of collecting data by “*asking* people for information rather than *observing* and *sampling* their behaviours” (Tuckman 1999: 237). Respondents give their answers in writing by answering either closed or open-ended questions. A closed question is one where a number of possible responses are determined by the researcher prior to the administration of the questionnaire whereas respondents can give any answer to open-ended questions. A questionnaire can consist entirely of open-ended or entirely of closed questions, or of a mixture of the two (Nunan 1992: 143). The questionnaire to the students used in the current research contained mainly closed questions, as can be seen in Appendix C.

These questions were about their earlier experiences with books and reading, the environmental support they have and had to support the development of reading in their L1 and L2, how they rated the importance of reading, as well as their general reading habits. It also included questions about the difficulties they encounter when reading in English, their perceptions of reading, their exposure to books at home, and so on.

3.1.2 Hypothesis 1

There are significant differences in reading attitudes and practices between the competent and the weaker readers in the study.

As discussed earlier (cf. §2.4.1), good readers display certain traits when they are reading (Devine 1996; Kitao & Kitao 2002; Pretorius 1996; Slater, 1988). On the basis of their results in the reading pre-tests, the students were divided into three groups, viz. competent, moderate and weak readers. The reading habits of the three reading groups were compared and statistically analysed in order to answer this question. One can assume that those students who performed better than others in the reading pre-tests would have different reading habits compared to those who obtained lower marks. Although readers with a 60% comprehension level could still be regarded weak readers (i.e. borderline readers) that would benefit from intensive reading instruction (cf. §2.3), only two participants scored higher than 75%. The criteria used in standardised tests were thus modified to accommodate the norms of performance reflected in the student sample. It was therefore decided to compare the reading habits of those who obtained 60% and more with those who obtained below 60% in the reading pre-test.

I was also interested to see if those participants who scored higher in the tests had had richer early pre-literacy experiences and more support in the learning of English as their L2, compared to those participants who scored lower marks (Buchorn-Stoll 2002; Machet 2002; Solarsh 2002) (cf. § 2.2.4.3). In order to gauge this, responses from participants to certain questions in the questionnaire, in both the control and intervention groups, were collected and analysed. The questions from the questionnaire that were used for this comparison are: questions 3, 8, 9, 10, 12, 13, 14, 17, 23, 24, 25 and 26 as they appear in the questionnaire (cf. Appendix C).

3.1.3 Hypothesis 2

There will be a significant difference in the mean reading scores of the intervention group compared to the control group, as reflected in the pre- and posttest reading scores.

This hypothesis, that formed the core focus of the study, predicted that the reading intervention program would be successful in improving the reading abilities of those students who took part in the intervention. Since many L2 students are poor academic performers due to their poor reading abilities (Kitao & Kitao 2002; Perkins 1991; Pretorius 1996), it is assumed that a deliberate attempt to increase their reading capabilities, especially with regards to reading comprehension, may lead to an overall increase in reading performance and as a result academic performance, in general.

The assumptions that this hypothesis were based on, developed into Hypotheses 3 of this research, that are discussed below:

3.1.4 Hypothesis 3

Hypothesis 3 related to the academic performances of students, and aims to explore two perspectives. The first aim was to determine whether the academic scores of participants in the control and intervention groups were any reflection of their reading scores in both pre- and posttest.

The second aim was to determine whether there were any differences in the mean reading scores of those students that attended the intervention program in terms of their academic performances. Their pre-and posttest results were used to establish this.

3.1.4.1 Hypothesis 3(A)

There will be a significant relationship between the reading scores of participants in both intervention and control groups and their academic performance, as reflected in the end-of-year results of the students' respective main subjects.

In order to test this hypothesis, the correlations between the academic performance of participants and their reading scores were explored by:

- Comparing the correlations between academic performances and reading scores in pre-and posttest between the control and the intervention group;

- Exploring the overall correlations of academic performances and pre-and posttest scores of both groups together.

3.1.4.2 Hypothesis 3(B)

There will be a significant difference in the mean posttest reading scores of the intervention students in terms of the three academic groups (fail, at risk and pass).

Participants who attended the reading intervention program were grouped into three groups according to their academic results as: Fail (0 - 49%), At risk (50 - 60%), and Pass (60 -100%). According to UNAM criteria, an academic score below 50% represents a failure and 80% and more represents a distinction.

A one-way ANOVA procedure was used to determine whether there were any significant differences between the three academic groups in terms of academic performance (independent variable) and their pre- and post reading scores (dependent variable).

3.1.5 Research question 2

Did students benefit from attending the reading intervention program and to what extent did the students in the control group gain from attending the UCE course?

In order to gauge levels in awareness of the importance of reading and changes in their attitudes towards reading, regular, informal interviews were conducted with students who attended the intervention program as well as with those who formed the control group. Another reason was to collect qualitative data to see if the reading intervention achieved what it aimed to do (internal validity).

3.1.6 Research question 3

What are the attitudes and practices of my colleagues towards explicit reading instruction at university level?

The final research question addresses another important factor in reading instruction at University level, namely the attitudes and experiences of university lecturers teaching the UCE course. These lecturers are not actually reading specialists who only focus on reading instruction, but one of their responsibilities is to develop the reading skills of university students.

Given that the importance of reading instruction has been established (e.g. Dunn 1990; Fletcher & Reid 2005), it would be interesting to know what experiences my colleagues have regarding reading instruction and what their attitudes towards reading instruction are. To this end, a questionnaire was administered (cf. Appendix C).

The research design that was employed to find answers to the hypotheses and research questions discussed above is elaborated below. A distinction is made between the pilot phase and the main study.

3.2 Research design

In order to carry out the aims of this research, the experimental method that is used in order to “explore the strength of relationships between variables” (Nunan 1992:25) was adopted. A true experiment has both pre-and posttests and relies on participants in experimental and control groups being assigned to groups randomly. Since it is not always possible to form groups randomly especially for the purposes of research, quasi-experiments can also be carried out. In such experiments, researchers still have pre- and posttests, but with *intact* groups that become the experimental and control groups (Tuckman 1999). The current research reported on was a quasi-experiment, because the participants of the research were intact and formed according to their subject choices and/or timetables (cf. §3.4). Although the internal validity of an experiment can be threatened when one deals with intact groups, this was the only way to ensure a fair number of participants in both the intervention and the control groups in the current research. In other words, in the current research, pre- and posttests were administered to groups who have not been randomly assigned (Nunan 1992).

Variables can be dependent or independent. The latter is the label given to the variable that is regarded as influencing the dependent one, while the former is the label given to the variable that the independent variable is acting upon. In my case, the independent variable for H1 was explicit reading instruction and the dependent variables were scores in the reading pre- and posttest. For H3 (B), the independent variable was academic performance and the reading scores in the pre-and posttest served as the dependent variable. My approach towards the hypotheses was deductive as I started with definite hypotheses that had to be either refuted or confirmed through statistical analysis. With regards to the research questions, my approach was inductive since I did not have definite hypotheses. I explored the general background of the participants in the research, and examined early literacy experiences among them. In addition, I explored the attitudes and practices of my colleagues towards reading instruction at university level. After this, my findings were formulated as definite statements regarding the research questions (cf. Chapter 4).

3.2.1 Pilot study

During the second semester in 2003, a pilot study was carried out with 10 UCE students. The aim was to pilot the questionnaire for students as well as the reading tests that were to be used in the main study the following year. One reason for the pilot study was to test the questions in the questionnaires and reading test. Moreover, I wanted to determine how much time students, on average, would need to complete both the questionnaire and the tests, as each had to be completed during the normal time allocated to a university period, that is, on average 40 minutes long. As is explained in §3.3, it was decided to use class time to write tests and to administer the questionnaire in order to have enough participants in both the control and the intervention groups.

Another reason for the pilot study was to receive input regarding any ambiguity and lack of clarity in the questionnaire and the tests. I therefore asked 10 students in one of my UCE classes during the year prior to the intervention to complete the questionnaire

and to do the test, after which they had to provide me with feedback on certain aspects, such as:

- *Was one 40- minute lesson long enough to complete the questionnaire?*
- *Was one 40- minute lesson long enough to complete the test?*
- *Were there any instructions you did not understand?*
- *Were there any questions you did not understand?*
- *Did you object to answering any of the questions?*
- *Did you think the layout (of both questionnaire and test) was clear and attractive?*
- *Do you have any further comments?*

The same procedure was followed to pilot the questionnaire administered to my colleagues. In this case, I only asked two colleagues to work through it. They followed the same criteria used in the student evaluation.

Based on the feedback that I received in the pilot study, changes to the questionnaires and tests (cf. §3.3.2.2) were made in order to carry out the main study during the first semester of 2004. This study was carried out with a sample of UCE students in the three classes allocated to me out of the almost 20 classes doing the UCE course at the Language Center and is the study currently being reported on.

3.3 Main study

In this section, information about the participants, the materials used for the research, the procedures followed in the process as well as the instrumentation used in the analysis of the data collected in the main study are described.

3.3.1 Participants

As I am lecturing at the Language Center at UNAM, the participants in the research were a sample of first year UNAM students who enrolled for the UCE course at the Language Center during the first semester of 2004. It was decided to use them as participants in the research as one of the aims of the Language Center is to assist students in becoming better readers in order to improve their achievement in their academic courses. As elaborated on in Chapter 1, the UCE course deals with more general aspects of reading and writing than the UCA course, and its curriculum was found to be more flexible to allow for class time to be used for purposes of the research. For example, the questionnaire as well as the tests had to be administered during class time, but only a maximum of five lessons could be used for research purposes, as the UCE curriculum also had to be completed before the end of the semester to allow my students to have covered all the prescribed topics before sitting for the examination.

As explained in Chapter 1, these students shared one common characteristic, namely that they all obtained a C symbol in English at the IGCSE level. Out of about 700 hundred UCE students, 108 students attended my three classes. Because the Language Center accommodates students from all faculties, we offer classes during most slots on the University timetable. As a result, the administration officer who tries to group students according to their subject choices assigned some students to my classes, but many joined because of their individual timetables. As a result, it was impossible to have homogeneous groups of participants in terms of subject choice, and I had a combination of students from the Science, Education and Commerce faculties to work with. In all, 108 was the number of students allocated to my classes. Our aim at the Language Center is to have no more than 40 students per group, so some classes have slightly fewer or slightly more students.

It was decided to involve all my classes in the research in order to have a sample large enough to ensure statistical validity of the tests (Leedy 1993). Due to absenteeism, only 90 participants qualified to join either the intervention or the control group, as

will be explained below in §3.3.3 that deals with the procedures. Of these 90 students, some joined the intervention and the rest became the control group. However, again due to the fact that not all students wrote the posttest, only the results of those who did could be used in the final analysis of the effect(s) of the intervention. As a result, I am referring to 27 students in the intervention group and 24 students in the control group. As previously indicated, both the intervention and the control groups comprised of students from the three groups based on their pre-test results (competent, moderate and weak readers).

3.3.2 Materials

Here follows an explanation of the materials I used during my research in order to test the hypotheses and answer the questions that my research was based on.

3.3.2.1 Reading Test materials

Since the participants in the research were from various faculties across UNAM, it was decided to use expository texts from the Social Studies in the tests. These Social Studies texts were not very specific to any field of study, so no participant could be advantaged or disadvantaged in any way by having more or less background knowledge about the subject (Alderson and Urquart 1996; Cohen 1996).

As explained in Chapter 1, an examination of the UCE course content revealed gaps in the way reading was being taught and consequently, oversight of certain component skills in reading. A review of the literature into reading research, (cf. Chapter 2), also confirmed the importance of these components. Some of these components were included in the contents of the reading tests as well as in the reading intervention program.

Since we only had 40 hours to use for the intervention, it was decided to focus on *some* aspects of reading comprehension only (§2.6). These aspects included: understanding anaphoric resolution, understanding vocabulary by using contextual

clues, literal and inferential comprehension, reading for main ideas as well as understanding text-semantic relations. Each of these aspects was tested in different questions in the tests and was dealt with during different lessons during the intervention (See Table 3.2). It should be noted that the test was not a standardised test due to a lack of standardised reading tests in Namibia. Due to time constraints, the test that was designed for the purposes of this research was not intended to be an in-depth diagnostic test. By tapping into the different aspects of reading, it was hoped that the test would simply reflect the general ability of students to understand expository texts.

3.3.2.2 Changes to materials

As a result of the feedback obtained during the pilot study, the following changes were made to the materials used during the main study:

Regarding the questionnaire to the students, participants in the pilot study did not experience any difficulties in answering the questionnaire within the 40-minute duration of the UCE lesson. A few spelling errors were indicated that were subsequently corrected. A few spelling errors were also indicated and were subsequently corrected in the questionnaire to the lecturers.

In the pilot phase, only two out of the 10 students managed to complete the test within the 40 minutes allocated, so it was decided to divide the test into two components, namely Test 1 and Test 2, in order for each to be written during two separate 40-minute lessons. Students found Section C to be problematic due to minor technicalities. I had initially left out the answer in the example (cf. Appendix B). This was corrected. The mark allocation for the same section was also left out and therefore included in the final tests.

I marked the tests of the students who participated in the pilot study, and found their marks to be below 50%, with the exception of one student who scored 69%. Since these were students repeating the UCE course, one could assume that the reason why they repeated the UCE course was probably as a result of their poor reading abilities. I

did not carry out the intervention with them, due to a lack of time. However, as they were repeating the UCE course I supplemented their lessons with additional reading. They also did not write the posttest, but two of them failed the end-of-year UCE examination for a second time.

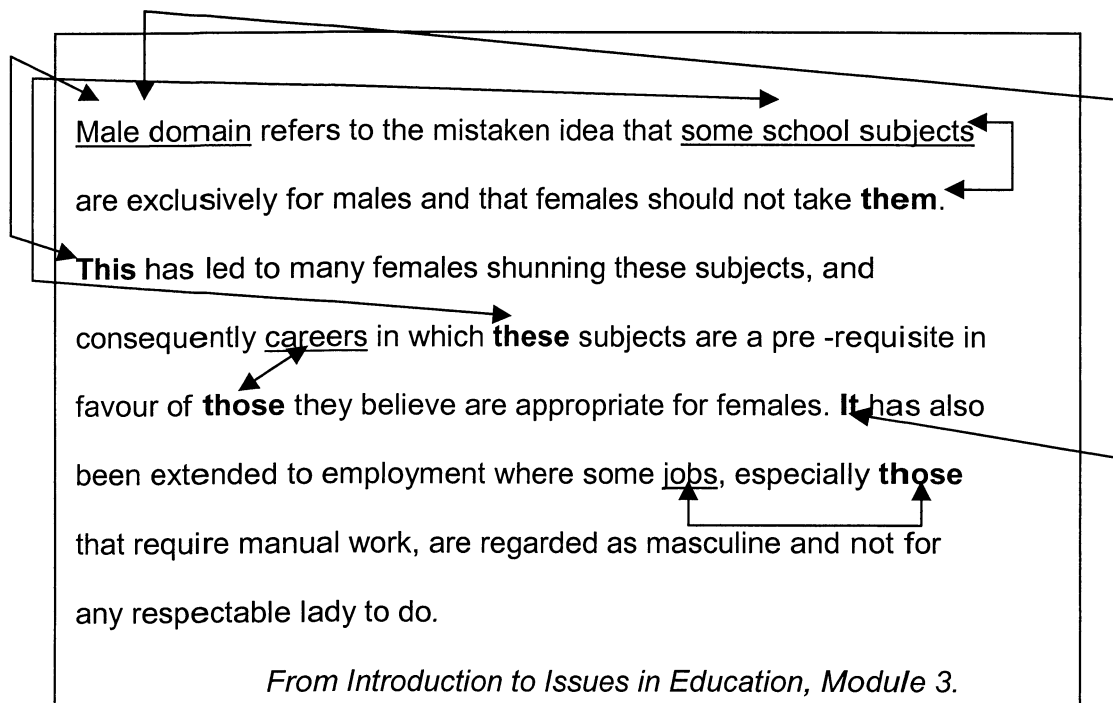
3.3.2.3 Test 1

Section A: Anaphoric resolution

Anaphoric resolution enables readers to link new information in texts with previous information and to see how words in phrases and sentences are related (Haarman et al. 1988). These cohesive devices are also used to avoid repetition and to achieve a more cohesive and economical text. Anaphors can be intra-clausal or inter-clausal and can be pronouns, nouns functioning as synonyms for words previously used, determiners on their own, determiners followed by a noun phrase or another phrase. Since it is a known fact that students at the Language Center struggle with vocabulary they encounter as they read texts, it was decided to include only pronouns as anaphors in the test since these are of high frequency and do not draw too much on their recognition of vocabulary.

In order to test the ability of participants to resolve anaphoric devices, they were given an example of an anaphoric device (out of context) and then a text to read about Russian History (Haarman, et al. 1988: 33). They had to:

- 1 *Underline the words to which the words in bold in the text refer to.*
- 2 *Draw arrows to show how these words are linked.*



This section tested the following 11 anaphors.

- Anaphors

Its - singular possessive pronoun (3x)

Their - plural possessive pronoun (3x)

His - singular male possessive pronoun (2x)

It - third person singular pronoun (1x)

They - third person singular pronoun (1x)

This party's - singular determiner followed by noun phrase (1x)

Section B: Literal and inferential reading

This section contained both literal and inferential questions (Richards & Schmidt 2002; Rubin 1991) about the same text that the participants read in Section A. The section counted 6 marks, and contained two questions.

In question one, participants were asked to summarise information in the text, using their own words. This answer relied on literal information and also to some extent on their ability to synthesise information from the text, and counted 4 marks. Students

were penalised if they simply re-wrote information from the text. Question two was a deletion activity and the answer depended on the ability of students to make inferences from the text. This section contained two questions.

Section C: Guess vocabulary in context

This section included three questions and tested the abilities of participants to infer the meaning of a word with the help of contextual clues. It was designed in such a way that all sentences contained supporting clues that could assist in the guessing of the words indicated. Contextual clues can have many forms, for example, the use of synonyms, antonyms, words used previously, examples, or even an outright definition of the word. Participants were given an example and then asked to guess the meanings of three words. In doing so, they had three questions to answer in the guessing of the meaning of each word, each assisting them in the process. The first question was only to be answered if they were absolutely sure what the word meant. The second question required from them to say what they think the word means and the final question asked them to indicate which words/ sentences or phrases in the paragraph provided them with clues to suggest the meaning of the words.

For example:

*The **pluriformity** that is so characteristic of philosophy is an academic discipline and what is evident in matters of content is equally obvious when one examines the methodology of philosophy. Unlike science, which is defined by its method- the scientific method- and thus presents a clear and well-defined picture, philosophy employs a variety of methods. This variety finds its origin in the complex character of philosophy itself.*

Answer either (a) or (b)

<p><i>(a) I know for sure that the word pluriformity, as used in this context, means.....</i></p> <p>.....</p> <p>.....</p>	<p><i>(b) Although I am not absolutely sure, I think the word pluriformity, as used in this context, means.....</i></p> <p>.....</p> <p>.....</p>
--	--

c. Write down the words/ phrases/ sentence in the paragraph that provide clues, if any, to the meaning of this word. Or else, write down, in the space below, possible clues in the context that suggests the meaning of pluriformity_____

The total for Test 1 was 29 marks.

3.3.2.4 Test 2

This test included only two sections, each dealing with a different aspect of reading. Initially it was also used to test reading speed, but as the intervention period was found to be too short to also deal with that aspect of reading, it was omitted in the posttest and it was therefore not established whether the reading speed of participants improved or not.

Section A: 1 Timed reading activity (only in pre-test)

Once again, a “neutral” text that was felt not to favour certain groups of students was selected in this section. It was entitled “Late Adulthood” (Haarman et al. 1988) (See Appendix D).

The reading rate of participants were determined by timing them for 60 seconds when they started reading the passage and then to say STOP when 60 seconds were over. They then had to draw a circle around the word they were reading when I told them to stop. Thereafter they continued reading as usual and answered the multiple choice questions that followed. In order to have as few complications as possible, this became the first question in the test and all participants had to fill in their personal details beforehand so that nothing could interfere with the reading of the passage. Clear instructions were given verbally as well as in writing to ensure that they knew what to do.

2 Literal and inferential reading

Here participants had six multiple-choice questions to answer, based on literal as well as inferential information from the text. It contained one literal question and five inferential questions. This activity also tested for students' ability to infer main ideas.

For example:

- 1 A good title for this text would be _____
- a The Myths of Old Age
 - b The Misery of Old Age
 - c The Joys of Old Age

Section B: Semantic relations

This first section of Section B tested for semantic or logical relations in a text. The aim of this activity was to see how well participants could see the connection between items of information in texts they read. Knowing those words that signal a logical relation enables a reader to closely follow a writer's discourse and understand relationships of vocabulary in texts, which, in turn facilitates rapid and efficient processing of the text (Haarman et. al. 1988). Students were given a paragraph to read, plus a sentence omitted from it. They then had to insert the omitted sentence at the right place in the specific paragraph. In doing so, participants had to understand each sentence, and they had to pay attention to textual clues to understand the argument of the paragraph as a whole.

In the first question in this section, the consequent part of a relation was omitted from a paragraph and participants were asked to indicate where in the paragraph the omitted sentence should go.

In (a) participants had to be aware of a comparative relation, in (b) of an adversative relation and in (c) of a temporal relation. For example:

- a. *Although we often assume that old age brings with it the curse of poor health, a 1981 Harris survey tells us that only 21 percent of the respondents over 65 claimed poor health to be a serious problem. So although health problems are more*

common, they are not nearly as widespread or devastating as we may think. It should also be noted that poor health among the elderly is very much related to income and educational levels.

Omitted sentence:

That compares to 8 percent in the 18 to 54-age range and 18 percent in the 55 to 65-age range.

It is acknowledged that many students find these concepts particularly difficult to understand, mainly also because they do not know what the concepts mean. However, due to a lack of time, it was decided not to include more questions of this nature, but to deal with these aspects in detail in the intervention. This type of test item has shown to have high psychometric validity (Pagé 1990).

In the second part of Section B, students had to unscramble a text by attending to clues that signal text-semantic relations. For example:

The sentences below all belong in the same paragraph, but unfortunately their order has been scrambled (mixed up). You must try to make sense of each paragraph by re-arranging the sentences into their correct order. Write down the correct order of the sentences, as indicated below. (NB Do not write out the sentences, just the order in which they should follow each other.)

- a. These changes can give you a clue as to the possibility of drug abuse.
- b. For example, a change in behaviour, which can be sudden or gradual.
- c. For a person who is a regular user of drugs, there will be noticeable changes his/her life
- d. Furthermore, school performance changes.

This paragraph should be arranged in the following way :

1. _____ 2. _____ 3. _____ 4. _____

Again, in order to allow participants to complete the test within one period, it was

decided to include only two items that dealt with this aspect of reading comprehension. This type of test item has also been shown to have high psychometric validity (Pagé 1990)

The total for Test B was 20 marks and the final total of the pre-test was 49 marks (i.e. Test 1 + Test 2) (cf. Appendix D).

3.3.2.5 Questionnaire to participants

In order to establish the backgrounds and reading habits of a sample of students at UNAM enrolled to do the UCE course, a questionnaire comprising 27 items was compiled. This questionnaire contained mainly closed questions and the participants gave written responses. The questions were designed to find out more about their backgrounds, early literacy experiences, reading habits, and also the reading strategies they employ when they read. See Appendix C for an example of the complete questionnaire.

3.3.2.6 Questionnaire to lecturers

As the literature reveals, a teacher of reading should know about the reading habits of his/her students (Grabe 1991; Spingies 1993). The questionnaire to my colleagues contained 14 questions, of which 13 were closed and one open ended. These questions probed their own attitudes to reading as well as their views of teaching reading at University level. See Appendix E for a sample of the questionnaire.

3.3.2.7 Unstructured interviews with participants in both groups

Throughout the reading intervention, unstructured interviews were conducted with participants in both the control and intervention groups. I was interested to find out from the intervention group whether they were benefiting from the reading intervention program and from what aspect(s) of the intervention they gained the most

from. I probed the control group about why they did not join the intervention group and whether they found the UCE course beneficial.

Interviews are means for a researcher to collect information and responses from participants other than through observations and manipulation. Participants give oral responses to answers (Nunan 1992). Samples of the questions asked to the various participants can be seen in Appendix F.

3.3.3 Procedures

In order to make use of class time for the research, as well as to be able to use the facilities and students at the Language Centre, special permission was obtained from the Head of Department (cf. Appendix A). Furthermore, I taught three UCE classes for the first semester, as we usually teach more than one course at a time.

During the first lesson in my UCE classes in 2004, students were informed about the research. During that lesson, participants were also asked to volunteer to take part in the intervention programme, in order to give students a chance to improve their reading abilities or the choice not to participate in any activity related to the research during normal class time.

The next day, upon arrival in their UCE classes, all students who were present on that day (n=108), were given the questionnaire to complete, and thus officially became the participants in the research. During the following UCE lesson, all students who were present were then administered Test 1, and the next day, those who were present wrote Test 2. In other words, their reading performance prior to the intervention was measured through a pre-test and their reading performance 10 weeks afterwards was determined by administering the same test, which then served as the posttest (Nunan 1992).

The questionnaire and the two pre-tests were administered, supervised and marked by myself. Due to absenteeism, not all students who wrote Test 1 wrote Test 2 as well. As a result, only 90 students wrote both tests (cf §3.3.1) . Their marks were used to

categorise them into three groups, based on their reading scores in the pre-test. These groups were: *competent* readers (60-100%), *moderate* readers (50-59%) or *weak* readers (49-0%). It should be noted that the pre-test that was written was not a standardised test, and students were not classified according to reading levels of both decoding and comprehension, as it was assumed that by the time students arrive at university they would have developed decoding skills already (cf. §2.2.2).

The three groups into which students in the current research were categorised according to their reading scores merely indicated that those with marks above 60% were not considered to be as critical as those in the other two groups, as the university generally regards any mark below 50% as a fail. Additionally, the introduction of a fourth group would have been unnecessary as of those in the competent group, only 1 student scored 80%, and 5 between 70-79%. The rest scored between 60-69%. So the small number of students in the 70-100% range would not have justified the classification of students into more than three groups.

The table below reflects the number of participants in each category:

Table 3.1: Results of students' pre-test reading scores

Competent: 60%- 100% n=23	Moderate: 50%- 59% n=24	Weak: 0%- 49% n=43
(80-100% = 1)	(50-55%=8)	(0-29%=1)
(70- 79% = 5)	(56-59%=16)	(30-39%=9)
(60- 69% =17)		(40-49%=33)

After another discussion about the importance of reading in academic success and based on their results in the pre-reading tests, volunteers from all three groups were asked to become part of the intervention program (Leedy 1993) and arrangements were made about times to meet when the participants as well as I had lecture-free periods. We agreed to meet on two afternoons per week for two hours per afternoon, for a total of ten weeks at a specific venue at the Language Centre.

It was important for students to volunteer to be part of the research as everyone has the full right not to participate in a study. Making it compulsory to attend would have violated the ethics of research (Tuckman 1999), and could have resulted in high absenteeism and negative attitudes as not all students are willing to sacrifice their leisure time for classes not formally scheduled for the semester. Care was also taken not to give them too much information about the expected outcome of the program as this may have led to a situation where participants showed an increase in performance due to the fact that they have been included in the experiment or because of a feeling of obligation to do better. This is referred to as the Hawthorne effect (Leedy 1993; Tuckman 1999).

As it was felt that all students could benefit from attending an intervention program to improve their reading abilities, it was open to all students who wrote the pre-test to volunteer to become part of the intervention group. It was obvious that many students who scored higher in the test felt they did not have a need to attend the intervention, but some did. Seeing that this could immediately build a bias into the study by resulting in the control and intervention groups not being equivalent, Levene's test for homogeneity of variance was done to determine whether the variance of scores within the control and intervene groups were equal. The results of Levene's test for equal variances showed that $p > 0,05$, indicating that the variance between the intervention and control groups were equal.

Keeping a record of class attendance every day enabled me to monitor the attendance of the participants in the intervention classes. Those who did not participate in the intervention program became the control group. In total, 27 students attended the intervention program, and 24 were in the control group. The fact that the intervention group had four hours additional instruction compared to the control group who only attended the UCE lessons, could obviously compromise the results of the study. However, this was a situation beyond my control since I was working within the constraints of semester and timetable demands. Due to curriculum demands, I could

also not substitute the UCE lessons with the intervention programme. Because I was keen to try out a dedicated reading programme, I decided to go ahead with the study despite this obstacle. This limitation will be discussed in more detail in Chapter 5.

3.4 The reading intervention program

Although the UCE course runs for 15 weeks, the reading intervention program was carried out over a period of 10 weeks to allow for breaks and unforeseen cancellation of classes. We had two two-hour sessions per week in which an intensive reading as well as an extensive reading program was conducted. (cf. §2.10.2). The components that were included in the program are discussed below.

3.4.1 Materials used in the intervention study

Since participants from various faculties joined the control and intervention groups in my study, I decided not to select materials from any courses any of the students were doing, but rather to use texts from a book entitled 'Reading Skills for the Social Sciences' by Haarman, Leech and Murray (1988). The texts are authentic and expository of nature and only those that dealt with more general topics were selected to teach the various aspects dealt with in the intervention study. Other sources were also consulted (e.g. Adey, Orr & Swemmer 1996; Grellet 1999; Schwagger 1996).

3.4.1.1 Intensive reading

The first focus in the intensive reading program was on vocabulary development. Attempts were made to increase basic word development and word recognition skills as well as the recognition of vocabulary in context amongst students. We spent some time focusing on roots of words, the meanings of different prefixes and suffixes, antonyms and synonyms as well as looking at word lists of high frequency, academic and low frequency words (Adey, Orr & Swemmer 1996; Aebersold & Field 1997). Then, anaphoric references were dealt with, and thereafter we explored different aspects of semantic or logical relations. All these were done in context and various

expository texts were used to explore the structure of academic texts.

Since reading is an interactive process involving processes occurring simultaneously (Anderson 1994; Grabe 1991; Pretorius 1996; Spingies 1993), skills were not taught in total isolation, although some skills were selected for specific attention. For example, as part of vocabulary instruction, I explained the meaning of semantic relations that mark cohesion in a text, as participants first had to understand the meanings of those words in order to understand their functions. As I was also their UCE lecturer, I knew what skills students were already familiar with, and built on that. Similarly, during UCE lessons, I integrated the skills dealt with in the intervention. Given the limited time of the intervention, not more could have been done. However, since students from the control group also attended the same UCE lessons as participants from the intervention group did, the former had the benefit of knowing what we did and in that way became aware of those aspects of reading.

Different expository texts were used each week to deal with the various aspects of the reading course, and towards the end of the semester, it was possible to illustrate and examine all the skills above by using one well written text. In other words, these skills of reading comprehension were taught both in context as well as out of context (Grellet 1999).

3.4.1.2 Extensive reading

The extensive reading component and intensive reading programme were dealt with concurrently. Already during the first lesson, the importance of reading for pleasure was explained to the students. They were encouraged to read at least one article of their choice per week, either from a magazine or a newspaper. Participants had to write a short summary of it, which was then submitted to me in class. Furthermore, I explained that I expected them to each read at least two novels of their choice during the duration of the intervention program. Summaries of these also had to be handed in to me. Each student was given ten prepared sheets for the summaries of the articles and two for their summaries of the books (cf. Appendix G).

At our first meeting, students were also encouraged to create their own “mini-dictionary” in which they had to list at least ten new words per week. These could come from any source or lecture they attended. They then had to choose a ‘reading buddy’ to share these new words with each week, in class. So in total, each student had 20 new words in his/her mini-dictionary (c.f. Pretorius & Bohlman 2003). An example of the handouts given to the students during the first lesson is given in Appendix G.

Initially, there were more than 50 volunteers from all three reading groups in the intervention group, and 40 in the control group. However, due to absenteeism during the days when the pre- and posttests were administered in the UCE classes, only 51 participants wrote all four tests. As a result only their reading scores could be used in the statistical analysis. Of this total, 27 were from the intervention group and 24 from the control group.

In order to see if there were any significant improvements between the pre- and posttest results of the two groups, these results were compared. In the other parts of the research such as the informal interviews with participants in the control and intervention groups as well as the questionnaire to students and my colleagues, more qualitative data was collected.

I have included a breakdown of the topics that were covered during the 10-week intervention period on the next page:

Table 3.2: Aspects dealt with in the 10-week intervention period.

Week 1	Distribution and collection of questionnaires during UCE lesson to all students present. All students present write pre-test during two UCE lessons. Researcher marks tests and results given to students Asks for volunteers to attend intervention.
Week 2	Lesson 1: Introduction and compiling of class list. Lesson 2: General lesson about reading. Introduction to extensive reading
Week 3	Lesson 1: Introduction to vocabulary in context. Lesson 2: Roots, prefixes and suffixes. Extensive reading
Week 4	Lesson 1: Word lists. High and low frequency words. Academic word lists. Lesson 2: Antonyms and synonyms. How to guess the meaning of words in context. Activities. Extensive reading.
Week 5	Lesson 1: Anaphoric resolution. Lesson 2: Continuation of extensive reading.
Week 6	Lesson 1: Cohesion. Introduction to semantic relations. Lesson 2: Semantic relations. Extensive reading.
Week 7	Lesson 1: Inferences during reading. Lesson 2: Literal and inferential reading. Extensive reading.
Week 8	Lesson 1: Revision. Lesson 2: Revision. Extensive reading.
Week 9	Lesson 1: Revision. Lesson 2: Revision. Extensive reading.
Week 10	All students present write posttests during two UCE lessons.

Internal validity, which seeks to establish to what extent the research really sets out to determine what it aimed to (Leedy 1993), was ensured by taking the following measures:

- The intervention group was instructed by the same lecturer (researcher), during the usual UCE lessons that all students attended.
- Lessons were conducted in the same environment (classroom) every time.
- Students were assigned voluntarily to the intervention group with one common characteristic, namely the fact that they wanted to improve their reading skills.
- Both groups received some reading instruction in the normal UCE course.

The internal validity may have been weakened due to the fact that the intervention group received about 40 hours of extra instruction compared to the control group, and as a result, improved results of the former group could be attributed to the fact that they received more attention and not to explicit reading instruction per se, compared to the control group. This was unfortunately due to formal institutional constraints, which resulted in no time available for me as a researcher to do something else with the control group. In order to compensate for this and to try to determine if the research really achieved what it set out to do, more qualitative data to gauge levels in awareness of the importance of reading and the changes in their attitudes towards reading, were collected during the intervention program in the form of interviews with students from both groups. More details regarding this can be seen in Appendix F.

Interviews, which constitute a form of elicitation technique, were used to obtain certain information from the participants in the research. In a structured interview, the agenda is predetermined by the researcher (Nunan 1992). In my case, I was interested in knowing whether the students in the intervention group found the instruction useful, which aspects they found more useful, and whether they perceived an improvement in their reading skills, especially towards the end of the UCE course. By this time they had already written two different reading tests. I also interviewed some participants in

the control group to see whether they perceived an improvement in their reading, especially after the two UCE reading tests were written. In addition, I also wanted to know if there were any parts that were covered in the UCE course for which they felt they needed more explanation, or anything else regarding reading that was not part of the course. Although students in the control group did not attend the intervention lessons, they had a good idea of what was covered as I always referred to these aspects during our formal lessons.

Since all tests and the questionnaire were completed during class time, no assistant was needed to carry out any of the procedures. The questionnaire for my 12 colleagues was given to them on campus and collected by myself afterwards, although I only managed to get four back.

The problem with a questionnaire as a data collection tool is that it is often difficult to get them all back after completion. This is why I asked my students to complete them during one of their UCE lessons, and collected the responses from my colleagues personally.

3.5 Collection of academic results

Since the UCE course is not a major subject and is only a semester course, the intervention program had to be completed during the first 14 weeks of the University calendar. As the major subjects of the participants were full-year courses, I had to wait until January 2005 to obtain their final marks in their academic courses. This I obtained with the assistance of an examination officer who furnished me with all their results. Since participants were from various faculties, all did not have the same subjects as majors. I also found that some did not write all the subjects they were registered for, and some therefore only had one subject that could be counted as a major. As a result, I selected the final result of only one major subject from each participant to use to compare the academic results of those who attended the

intervention group compared to those who did not, in order to see if the former group made any significant gains in their academic courses compared to the latter group. The results are discussed in Chapter 4.

All the data were collected and quantitative data analysed statistically using SPSS (Statistical Package for the Social Sciences), a computer programme used to compute data (Howell 1985).

3.6 Summary of Chapter 3

This chapter has presented the methodological details with regard to hypotheses and research question formulation, materials used in the collection of data as well as the procedures carried out in conducting the research. Chapter 4 follows and deals with the results and the statistical and graphical presentation thereof.

Chapter 4

Findings: Results and discussion

4.0 Introduction

In this chapter the data collected during the research are presented and discussed together with tabulation. Data were collected in the form of pre- and posttests, academic results, questionnaires and unstructured interviews. Where appropriate, these were statistically analysed. In order to conceptualise the results, the research methods used to obtain the data are briefly elaborated at the outset.

4.1 The current research: An overview of Qualitative and Quantitative findings.

Although the primary aim of this research was to establish the effect of explicit teaching of comprehension skills on a group of first year students at UNAM (cf. §2.2.3), various other aims were incorporated (cf. §1.4). These were to establish the effect of the reading intervention program on the academic performance of the participants in the study, and to obtain a literacy profile of the participants in terms of their cultural and linguistic background, the extent to which they had received adequate environmental support (cf. §2.1) during the process of being instructed in a language which is not their L1, and what their attitudes towards reading and their reading habits were. Finally, this research also aimed to establish how staff members of the Language Centre at UNAM view themselves as readers and teachers of reading.

4.2 Research methods employed

Since it was not possible in this study to randomly assign participants to groups (cf. § 3.2), this research is representative of a quasi-experiment (Leedy 1993; Nunan 1992;

Tuckman 1999) that had one experimental and one control group. The following data collection tools were employed:

- pre- and posttests
- academic results
- questionnaires
- informal interviews

The statistical methods that were employed to interpret the data yielded in the current research are representative of both descriptive and inferential statistics. Descriptive statistics are used to describe a set of data, and inferential statistics to infer or to test hypotheses based on logical reason about a sample of a population based on numerical values summarising the data (Howell 1985). Additionally, while researchers can pose both research questions and hypothesis for inferential statistics, only research questions can be posed for descriptive statistics.

The following statistical methods were employed to interpret the data yielded in the current research:

- **Frequency tables**

Frequency tables, examples of descriptive statistics, are summaries of the frequency distribution of the dependent variable and are tabled or plotted against their frequency of occurrence (Howell 1985:18). In the current study, these were used to show the results of the students' questionnaire, in other words, to report on the findings of research Question 1.

- **Chi-square**

Two-way contingency table analysis (Tuckman 1999), using cross tabulations, were also used to analyse the data yielded from the questionnaire. A two-way contingency table analysis evaluates whether a statistical relationship exists between two variables, and focuses on cell frequencies to evaluate if there is a relationship between the rows and columns. In all cases, a value for the Asymp. Sig (2-sided) of smaller than 0.05

indicates a significant difference between the two groups and a value of more than 0.05 indicates no significant difference between the three groups (Tuckman 1999).

- **T - tests**

T-tests, examples of inferential statistics, are commonly used in quasi-experiments to compare the results of two groups. This is a parametric procedure used to test for significant differences between two sample groups from two related or two unrelated samples (Tuckman 1999). In the current research, the t-test for related (paired) samples was first applied to the scores for pre- and posttests from both the research and the control groups respectively, to see if there was any significant difference between the scores. Secondly, the t-test for unrelated (independent) samples was applied in order to compare the posttest scores of the same two groups.

- **ANOVA (Analysis of variance)**

When more than two means or groups are compared, an appropriate test is the F-test. ANOVA, another example of an inferential statistical technique, is a procedure to compare more than two groups or variables. In the current study, the ANOVA technique was utilised to see whether there were significant differences in reading scores as reflected in the posttest results, between the three academic groups.

- **Correlations**

Correlations, also examples of inferential statistics, are used to show relationships between variables. In the current research, the Pearson Product Moment Correlation statistical procedure was used to establish possible relationships between the academic results and the reading performances of participants in the reading intervention program, as reflected in their pre- and posttest results. Correlations can be either positive or negative and are expressed as r . The significance of a correlation is expressed as a probability (p) score. According to Mulder (1986:73), the following guidelines can be used to interpret r - scores between parameters:

- 0.80 – 0.99 = very high correlation
- 0.60 – 0.79 = high correlation
- 0.40 – 0.59 = moderate correlation

- 0.20 – 0.39 = low correlation
- 0.10– 0.19 = very low correlation.

4.3 The concept ‘hypothesis’

A hypothesis is “a formal statement about an expected relationship between two or more variables which can be tested through an experiment” (Nunan 1992: 230), or “a suggested answer to the question posed in a research problem statement” (Tuckman 1999). Similarly, Leedy (1993:75) states that hypotheses are “tentative, intelligent guesses posited for the purpose of directing one’s thinking towards the solution of the problem...that are set forth as a possible explanation for an occurrence”.

A hypothesis can therefore not be proved or disproved, but can be accepted or rejected, in other words, confirmed or not confirmed. So, when a hypothesis is tested, the researcher tries to see if there are any relationships between variables and also how significant these are. Variables, or the factors identified in the problem (Leedy 1993:16), can be independent or dependent. Although both can be measured, independent variables refer to those variables that can be controlled by the researcher and dependent variables to those that are not under control (Howell 1989). Moreover, it is assumed that independent variables have an effect on or influence dependent variables.

As a starting point to discover if there is any significant difference between variables in a research, the null hypothesis or the hypothesis of no difference is introduced.

4.3.1 The null hypothesis (H_0)

Testing a hypothesis means to accept or to reject the null hypothesis. The latter assumes that there is no statistically significant difference between the means of the variables identified in a hypothesis.

If tests find differences large enough, real effects are indicated with the implication that differences cannot be attributed to chance alone, but to some other factor. Based on this, the null hypothesis can be rejected. No difference or a minor difference

implies that differences are a result of chance variation and that the null hypothesis can be accepted (Leedy 1993).

How does the researcher know whether differences between variables are not attributed to human or some *other* kind of error? In order to establish whether differences are indeed statistically significant, the means of scores are compared to determine the probability that the calculation differences reflect real differences and did not simply occur by chance (Tuckman 1999: 282).

4.3.2 Significance testing

The probability or stability of the degree of variation of results between groups is used to determine whether the differences are significant or not. This is known as the confidence or significance levels at which the null hypothesis can be rejected or accepted. When there is a value between one and five percent, the null hypothesis is rejected. It is then stated that the significance level is 5 percent or below and is written as $p < .05$. This value indicates that there is a probability (p score) of being equal to or less than 5 percent that the differences are due to chance.

Occasionally, a researcher uses a significance level of 10 percent, which is written as $p < .10$. It means that there is a 10% probability that the differences obtained are due to chance. Based on these values, researchers can conclude that the results are probably as a result of the treatment during the research and did not simply occur by chance (Tuckman 1999).

In all cases where the significance of results was tested in this research, a significance level of $p < .05$ was assumed as this is the level usually selected for research in the Social and Human Sciences. Various types of statistical techniques were used to interpret the findings in this research, each depending on the research questions and hypotheses (cf. §3.3).

The section that follows expands on the research questions in the main study of the current research, as well as the various statistical techniques that were applied in the

process. In each case, the research question will be presented, followed by the data and the discussion thereof. In the section thereafter (§4.5), the findings of all research questions are discussed and interpreted under various headings.

4.1 Research questions and hypotheses: Qualitative and Quantitative findings

As explained in Chapter 3 (cf. §3.1), in order to represent a cohesive overview of the current research reported on, it was decided to integrate the qualitative and quantitative findings by presenting them in the following order:

- Research Question 1
- Hypothesis 1
- Hypothesis 2
- Hypothesis 3
- Research Question 2
- Research Question 3

4.4.1 Results of Research Question 1

- *What are the language and literacy profiles of the students who participated in the current research?*

Knowing who one's students are is an important aspect of being an effective reading teacher (Aebersold & Field 1997) (cf. §2.1). In order to answer this question, a questionnaire was administered to all students who attended my classes at the beginning of the first semester, irrespective of whether they formed part of the control or intervention groups (cf. §3.3). The questionnaire included questions about the general background of my students, their early literacy experiences, their attitudes towards reading, their access to reading material as well as their reading habits (See appendix C).

The results in the tables below indicate the results of the questionnaire to the participants in the main study that was conducted in February 2004.

(i) Background of learners

According to their responses to the questionnaire, the majority of students (53.7%) who participated in the research, either in the control or the intervention group, were between 20 and 29 years old, with a large number (42.6%) younger than 20 and only two older than 30. The results further indicated a relatively equal distribution of males and females in my classes, with the females slightly more than the males. In addition to this, the majority of students (74%) came from rural areas.

When questioned whether their parents ever read stories to them (in any language), only 7.1% of the respondents indicated that when they were children, their parents read to them quite often, while 38.8% indicated that their parents never did. Additionally, of the six participants who have children, four sometimes read to their children and the other two never do. The table below reflects their responses to these questions.

Table 4.1: Parental involvement in reading

Questions	Response Categories	Students' responses (n=108)	% of responses
As a child, did your parents read stories to you?	Never	38	38.8
	Seldom	8	8.2
	Sometimes	45	45.9
	Often	7	7.1
Do you read to your children?	Never	2	33.3
	Sometimes	4	66.7

Moreover, it is evident that the majority of the respondents (71.3%) are not members of another library other than the UNAM one, and that they have very little exposure to reading material at home. This transpired from the fact that in only 46.3% of the homes newspapers are bought daily, and that only 1.9% are regular magazine subscribers (or buyers).

When questioned about how many books participants had in their homes, it was discovered that 42.6% have only about ten, while 5.6% of the respondents had no books at home. The available literature in their homes are reflected in the table below:

Table 4.2: Available literature at home

Questions	Response Categories	Students' responses (n=108)	% of responses
How often is a newspaper bought in your home?	Every day	50	46.3
	Once a week	23	21.3
	Occasionally	33	30.6
	Never	2	1.9
How often do you buy a magazine or a journal	Once a week	12	11.1
	Once a month	33	30.6
	Regular subscriber	2	1.9
	Occasionally	49	45.4
	Never	12	11.1
Number of books in home	More than 100	13	12.0
	More than 50	16	14.8
	More than 20	27	25
	About 10	46	42.6
	None	6	5.6

When questioned what they enjoy reading the most, participants could tick more than one block as an option. The categories included only those related to reading for pleasure and therefore did not include textbooks as an option as they all have to read textbooks for their studies. The following table contains their responses:

Table 4.3: What do you enjoy reading the most?

Categories	Students' responses (n=108)	% of responses
Magazines	101	93.5
Newspapers	96	88.9
Story books	82	75.9
Internet websites	40	37.0
Photo stories	27	25.0
Comics	20	18.5

In response to what kind of books they enjoy reading, most students favoured romance (70.4%) and academic books (59.3%), a few indicated to favour westerns (13.9%) and science fiction (14.8). When asked to list the names of two books they recently read as well as the names of the authors, very few were able to. The majority simply stated “cannot remember”.

(ii) Attitudes towards reading

From their responses to the question about how much they enjoy reading, some respondents indicated that they liked reading either very much (33.3%) or quite a lot (46.3%). Furthermore, the majority of respondents (65.7%) viewed themselves as average readers.

Their positive attitudes towards reading is reflected in the following table that sums up their preferred choice of relaxing. Respondents could tick more than one option.

Table 4.4: Responses to preferred activities on a free evening

Categories	Students' responses (n=108)	% of responses
Reading	70	64.8
Watching TV	69	63.8
Listening to the radio	57	52.7
Visiting friends / family	48	44.4
Going to a party	21	19.4
Watch a film	13	12.0
Practicing a hobby	13	12.0

(iii) Problems with reading

From their responses, most participants felt that they had problems with reading (73,1%). These problems are summed up in the following table

Table 4.5: Reading problems experienced

Categories	Students' responses (n=108)	% of responses
Unknown words	58	53.7
Grammatical structures	59	54.6
Reading slowly	37	34.3
Keeping track of main ideas	29	26.9
Forgot what was read at end of page	15	13.9
Problems with diagrams, graphs and tables	12	11.1

(iv) Factors important for academic success

In response to the question about what factors they regard as being most important for academic success at UNAM, the majority of participants felt that being able to read (75.9%) and write (85.2%) are the two most important skills required for academic success.

(v) Reading habits and strategies

From the responses about the reading habits of the participants in the current study *prior* to the intervention, one can conclude that the majority of students read in English for study purposes (88%), for enjoyment (72.2%), but also for work-related (38%) and religious purposes (25%). 5% of respondents indicated that they read a chapter in their course guides or textbooks only once. The rest read through it twice (48%), 3-4 times (43%) and five and more times (11%).

In response to the question of what they do when they come across a word they do not know, 42.6% indicated that they try to guess its meaning, 51.9% relied on dictionaries,

1.9% indicated to simply continue reading and 3.7% to ask someone else for its meaning.

The actions students indicated to take before, while and after reading are summed up in the following table.

Table 4.6: Actions taken before, while and after reading course guides and textbooks for study purposes

Categories of actions taken	Students' responses frequencies (n=108)	Percentage (%) of responses
before reading		
Read a little to see what it is about	90	83.3
Check number of pages to read	58	53.7
Make guesses of what it is about	38	35.2
Check for missing pages	33	30.6
Look up difficult words	28	25.9
while reading		
Keep thinking of title and pictures to see relation to text	62	57.4%
Make a lot of guesses about what is going to happen next	61	56.5%
Look up words	59	56.2%
Check to see if predictions are correct	43	39.8%
Read slowly not to miss important parts	37	34.3%
Stop to summarise main points	36	33.3%
Say every word in mind to see if word is known	21	19.4%
after reading		
Underline main ideas	69	63.9%
Think about how information may relate to specific situations	67	62.0%
Retell main point to test understanding of text	56	51.9%
Look up all difficult words	51	47.2%

The data yielded from Research Question 1 served to provide more information regarding the general literacy profiles of the participants in the current research. These results will be discussed in relation to the other research questions and hypotheses that are presented below (cf. §4.5).

4.4.2 Results of Hypothesis 1

- *There are significant differences in reading attitudes and practices between the competent and the weaker readers in the study.*

In order to test this hypothesis, the answers to the questionnaires between the participants classified as competent readers (those who scored 60% and above) on the one hand, and the moderate and weaker readers (0-50%) on the other hand, based on their results in the pre-test, were compared. Responses from participants in both the control and intervention groups were used in this comparison.

Only those questions that relate to early literacy experiences, attitudes towards reading and reading habits were used in this analysis. The responses of students to what they do before, during and after reading were also compared. Cross-tabulations across the three reading groups were done for responses to the following questions were used in the comparison, as they appear in the questionnaire:

3, 8, 9, 10, 12, 13, 14, 17, 23, 24, 25, 26 (cf. Appendix C).

Of all the responses reported on, the only instance where there was any significant differences between the competent and their less competent reading peers, was in one action taken during the ‘while reading’ phase of reading. This was that the competent readers indicated that they tend to think more about words to make sure they know the meanings thereof, compared to the readers in the other two groups who do not pay so much attention to this. It was therefore decided to only include those figures in the following table that represents this difference:

Table 4.7: Action taken while reading:

Category/ Response	Chi- Square value	p value
While reading I say every word in my mind to see if I know the words.	3.8	0.051

Hypothesis 1 therefore only very partially confirmed that there are differences between the readers who obtained 60% and more in the pre-test compared to those with scores less than 50%. This is because only one difference was clearly discernable. Possible reasons for this which will be discussed in § 4.6 in relation to the results and findings from the other research questions and hypotheses.

4.4.3 Results of Hypothesis 2

- *There will be a significant difference in the mean reading scores of the intervention group compared to the control group, as reflected in the pre- and posttest reading scores.*

To test this hypothesis, the means of both pre- and posttest reading scores were calculated for each group. As stated earlier, Levene's test for equal variances was done and it was established that the variances between the two groups were equal ($p = 0.633$). The t-test procedure for related samples was then applied to the scores for pre- and posttests from both the research and the control groups to see if there was any significant difference between the scores after the intervention period. Thereafter, the t-test for unrelated samples was applied in order to compare the possible improvement in posttest scores of the same two groups.

In the process of testing this hypothesis, the independent variable was explicit reading instruction and the dependent variable was reading performance. The latter was measured in the form of reading tests before and after the intervention. The descriptive statistics are given first, followed by the results of the inferential statistics. The

following table reflects the means and standard deviations (SD) for pre- and posttest reading scores.

Table 4.8: Pre- and posttest reading differences between groups

	Pre-test (SD)	Posttest (SD)
Intervention group(n= 27)	48.7 (12.54)	54.96 (8.65)
Control group (n=24)	53.04 (13.14)	50.04 (12.88)

The table below presents the ranges of scores in percentages for the reading pre-and posttests of the two groups.

Table 4.9: The range of results

Categories	Pre-test	Posttest
Intervention group (n=27)	18% - 76%	37% - 76%
Control group (n=24)	33% - 80%	33% - 70%

A t- test for related samples was used to test for significant differences between the pre- and posttests scores for both groups. The analysis yielded $t(26) = 3.022$, $p = 0.006$ for the intervention group, and $t(23) = 1.124$, $p = 0.272$ for the control group respectively.

As the results show, there was a highly significant difference between the pre-and posttest scores for the intervention group, but not for the control group. Therefore, the H_0 is rejected for the intervention group since $p = 0.006$ ($p < 0,025$), but accepted for the control group as $p = 0.272$ ($p > 0,025$).

In order to compare the level of improvement in the scores of the two groups, the t -test for independent samples was applied. The analysis yielded $t(49) = 2.749$, $p = 0,008$.

The results indicate the rejection of the null hypothesis for H2, as it is evident that there was a highly significant difference between the posttest reading scores of the intervention group compared to the control group.

The section above describes the differences in improvement in reading between the control group compared to the intervention group. These results will be interpreted in §4.5 in relation to all other findings from the various research questions and hypotheses.

4.4.4 Results of Hypothesis 3

As explained in Chapter 3 (§ 3.1) Hypothesis 3 has been divided into H3(A) and H3(B). These are elaborated on next:

H3(A):

- *There will be a significant relationship between the reading scores of participants in both intervention and control groups and their academic performance, as reflected in the end-of year results of the students' respective main subjects.*

H3(A) was proposed to examine a possible relationship between reading ability and academic performance. Academic performance was based on examination results in one of the major subjects of participants in the current study. The reasons why it was not possible to single out one specific subject across the board and also why end-year-results in more than one major subject could not be used are outlined in Chapter 3 (§3.6).

Before examining the possible relationship between reading scores and academic performance (H3), the relationship between students' reading scores and their performances in UCE are also presented. The UCE examination was written soon after the end of the reading intervention study, and these scores reflect performance in a combination of various English language proficiency skills such as reading,

speaking and writing. These results are included to represent a bigger picture of the relationship between reading ability, language proficiency and academic performance.

The mean reading score, UCE score and examination score in one major subject of the intervention and control groups in 2004 are represented in the following table.

Table 4.10: The means of the reading, UCE and examination scores

		Control group n=24	Intervention group n=27
Reading	Pretest	53.04%	48.70%
	Posttest	50.04%	54.96%
	Gains	-3%	+6.26%
Mean UCE score - June 2004		58.9%	61.0%
Mean Academic performance – November 2004		59.4%	56.8%

Again further results of changes in the ranges from lowest to highest in the raw percentages are represented for both groups:

Table 4.11: Ranges (in percentages) of the reading, UCE and Academic performance of two groups

Subject	Control group n=24	Intervention group n=27
Reading		
Pre-test	33% - 80%	18% - 76%
Posttest	33% - 70%	37% - 80%
UCE	34% - 78%	50% - 75%
Major subject	29% - 94%	26% - 84%

It is interesting to note that the weaker students in the intervention group improved their reading scores in the posttest while the same trend did not occur in the control group.

To investigate the relationship between reading ability and its possible effect on the academic performance of students, the following correlations were established:

- Correlations between the academic performance of students in the intervention group and their reading scores in the pre- and posttests.
- Correlations of the academic results of students in the control group and their reading scores in the pre-and posttests.
- Overall correlations or reading scores from both groups and their academic performance.

These correlations are reflected in the table below:

Table 4.12: Correlations between academic scores and pre-and posttest scores for both groups

Academic scores	Pre-test reading scores	Posttest reading scores
Intervention group (27)	$r = .491^{**}$	$r = .146$
Control group (24)	$r = .250$	$r = .496^*$
Both groups (51)	$r = .341^*$	$r = .218$

** $p < 0.001$ * $p < 0.05$

As the table shows, for the intervention group there was a highly significant moderate correlation between academic scores ($p < 0.001$) and pre-reading scores, but not between academic scores and posttest reading scores. In contrast the results incited a significant moderate correlation between academic scores and post-reading scores for the control group ($p < 0.05$), but not between academic scores and pre-reading scores. When looking at the overall correlation between academic performance and pre- and posttest scores for both groups, the results indicate a significant albeit low correlation between academic scores and pre-test results ($p < 0.05$) but not for posttest scores.

These results will be taken up again in the discussion and interpretation of results in §4.5.

H3(B)

- *There will be a significant difference in the mean posttest reading scores of the intervention students in terms of the three academic groups (fail, at risk and pass).*

To further explore the overall picture of a possible relationship between reading and academic performance of participants in the intervention group, the ANOVA procedure was used (cf. §4.2). From their academic performances, students that attended the intervention group were divided into the following three groups:

- Group 1: fail (0 – 49%)
- Group 2: at risk (50 – 59%)
- Group 3: pass (60%-100%)

As was explained in §3.2, these groups were decided on according to UNAM criteria for a ‘fail’. An academic score below 50% represents a failure.

The distribution of the students in the intervention group and their mean reading scores for each academic group are shown in the following table:

Table 4.13: Mean reading and academic scores of intervention group

Academic groups	Group 1 (Fail) 0-49%	Group 2 (At Risk) 50-59%	Group3 (Pass) 60-100 %
	(n=8)	(n=6)	(n=13)
Pre-test mean	41.9%	46.3%	51.7%
Posttest mean	49.1%	56.7%	55.1%
Academic mean	37.1%	56.8%	64%

The table depicts a uniform increase in reading scores as the academic scores increased: as the reading scores increased, so the academic performance. For the posttest scores, the picture changes slightly, as the participants in Group 2 had a higher reading mean than those in Group 3.

A one-way ANOVA procedure was used to determine whether there were any significant differences among the different academic groups of the intervention group in terms of their academic performances (independent variable) and their pre-and post reading scores (dependent variable).

With performance in the reading pre-tests as the dependent variable the results yielded an insignificant $F=1.611$, $p >0.05$. Similarly, with performance in the reading posttest as the dependent variable, the results yielded an insignificant $F=1.549$, $p >0.05$. A post hoc Bonferroni test showed no significant differences among the three groups. H3 was therefore not confirmed.

The results yielded from Hypotheses 3(A) and 3(B) will be discussed in §4.5 in relation to the findings and results in the other research questions and hypotheses.

4.4.5 Results of Research Question 2

- *Did students benefit from attending the reading intervention program and to what extent did the students in the control group gain from attending the UCE course?*

In order to gauge levels in awareness of the importance of reading and the changes in their attitudes towards reading, regular, informal interviews were conducted with students who attended the intervention program as well as with those who formed the control group. Another reason was to collect qualitative data to see if the reading intervention achieved what it aimed to do (internal validity).

The following tables represent the results of these informal interviews.

Table 4.14: Results of interviews with intervention group

Questions	Categories	(n=10)
Improvement in reading skills since start of intervention	Yes	10
	No	0
Became part of intervention group because:	I did badly in the pre- test	8
	I had nothing better to do in the afternoons	0
	I want to read better and as a result do better in other courses.	10
	Was curious to see what would be taught	3
I found the following aspects of the intervention very useful.	Word formation.	5
	Vocabulary development.	8
	Anaphoric resolution	10
	Semantic clues.	10
Can you see an improvement in UCE and / or other academic courses?	Yes	10
	No	0

Table 4.15: Results of interviews with control group

Questions	Categories	(n=10)
Improvement in reading skills since start of UCE course	Yes	10
	No	0
Time spent on the following topic(s) not enough:	Vocabulary development	10
	Inferencing	10
Did not join experimental group because of:	Time table clashes	3
	Practicals in the afternoons	4
	Too many domestic obligations	3
	Satisfied with reading abilities	2
	Not really interested	1

4.4.6 Results of Research Question 3

- *What are the attitudes and practices of my colleagues towards the instruction of reading at university level?*

In order to obtain answers to the questions above, a questionnaire was administered to 12 of my colleagues, but I only managed to collect four completed questionnaires. Although disappointing, the results of the four responses were interpreted and are summed up in this section.

From their responses to the questionnaire, it seems as if four of my colleagues do enjoy reading academic as well as non-academic literature very much. Two regarded themselves as highly skilled and the other two as average readers. Surprisingly, only one indicated to often read to his/her children while the rest only sometimes do.

When asked about how they spend their leisure time, they could tick more than one option. The following table sums up their responses to this question:

Table 4.16: List of preferred leisure activities

Categories	Responses (n=4)
Reading	4
Watching television	3
Visiting friends and family	3
Going to the movies	1
Listening to the radio	1
Attending a party	0
Practicing a hobby	0

In response to the question about the usefulness of reading theories in the teaching thereof, most admitted that their reading teaching methods have developed over the years of teaching reading (i.e. without being influenced by reading theories), although two acknowledged the importance of theory.

The majority of them (three) valued the knowledge of the reading habits of their students as very important. Additionally, every respondent attributed the poor reading performance of students to the fact that they do not know how to read. One felt that it is the responsibility of teachers at school to teach students how to read, while three indicated the need to also teach reading at University level. According to them, lecturers who teach reading need to make students aware of the different reading skills.

Only two indicated that they make enough class time available for reading, while the other two, although thinking that it was a good idea, did not do so because of all the other work to complete during class time. Two admitted to making extra reading materials available to students all the time and the others indicated that they seldom do so.

Finally, the respondents indicated that they motivate students to read more by mentioning to them the value of reading (two), mentioning interesting topics, referring them to texts to read (one) and providing their students with interesting articles to read (one). The table below sums up their responses to this question:

Table 4.17: How are students motivated to read more?

Categories	Responses (n=4)
I mention the value of reading to gain more knowledge	2
I mention interesting topic and refer them to texts.	1
I give them interesting articles to read.	1

This section above summed up the views and attitudes lecturers at UNAM have towards reading as well as the instruction of reading. These responses will be elaborated on in § 4.5 in relation to the other research questions and hypotheses addressed in the current research.

4.5 Discussion and interpretation of qualitative and quantitative results

Once again, for a more cohesive interpretation of all the findings in the current research, the findings from the qualitative as well as quantitative data are presented.

4.5.1 Underlying factors affecting the reading proficiency of L2 readers.

Based on their ages, one can assume that most of the participants in this research matriculated after 1990, the year when Namibia became independent and English was subsequently introduced as MOI. In other words, from this time onwards, the majority of Namibian school learners attended school and wrote examinations in English, a language that was either their L2 or an FL, with far reaching negative pedagogical consequences (cf. §2.1). Additionally, most of the respondents to the questionnaire came from rural areas. These are the areas in Namibia in which most of the requirements for environmental support for the successful immersion in English do not exist (Harlech-Jones 1998; Willemsse 2000). As a result, learners are exposed to submersion (cf. §1.2), have very **little exposure to books in- and out of schools**, and are subjected to inadequate teaching practices, such as rote-learning, as many teachers are not only under-qualified, but also not proficient enough in English to use it adequately as MOI (cf. §2.1). Due to all these factors students do not develop their cognitive abilities (CALP) nor do they learn to read rapidly, accurately, comprehendingly and evaluatively (Grabe 1991). As a result, Matthew effects in reading (cf. §1.4) will prevail unless something is done to remedy the situation.

The results in Table 4.2 confirm that the participants in this research did and still do not have much access to reading material out of school, either in the form of libraries or in their homes. It is worrying that 48.2% participants reported to have less than 10 books at home. This figure includes those who reported not to have *any* books at home. All these factors can negatively affect their reading abilities as reading is developed through having easy access to books to read (Matjila & Pretorius 2004).

Machet (2002) maintains that it is of utmost importance to be aware that any language policy can only successfully develop reading skills among the learners through a

combination of access to a variety of books and good instructional practices, where teachers realise the importance of spending time on teaching basic reading skills. Cummins (2000) concurs with this statement by claiming that students produced by an educational institution are direct products of the **quality of teaching** they have been exposed to. Therefore, untrained teachers who are not equipped with the essential training and qualifications would also not know how to develop literacy skills in students, even in additive bilingual programmes.

The **positive effects of parents reading to their children** on their children's reading abilities were illustrated in Chapter 2 (cf. §2.4) (Buchorn-Stoll 2002, Elley 1991; Feitelson et al 1990; Kaderavek 2003; Machet 2002; Solarsh 2002; Williams 2000). In this regard, it became apparent that the parents of the respondents to the questionnaire also did not help them much in the acquisition of literacy in either L1 or English. This finding was made as the majority of the respondents indicated that they were never read to when they were children, nor do they read much to their own children (cf. Table 4.1) This possibly reflects the low literacy levels of parents, as the question did not relate to reading in English only. A similar finding, namely that most parents of the group of students from the northern rural parts of Namibia had poor literacy levels, was made by Willemse (2000). The fact that literacy does not feature much in the homes of participants in this research could also reflect cultural differences in attitudes to reading and the values they attach to it. The low access to books in many homes could also be attributed to poverty. However, the fact remains that as a result of a lack of parental involvement and possibly low-literacy levels, many participants in the current study may have started school with disadvantaged positions at the beginning of their school careers and may never manage to catch up with their peers who were exposed to literacy from very young ages (cf. §2.4). Allen & Rubin (1993) observed that low-literacy levels among parents need not be an impediment towards introducing children to rich literacy experiences. All they are required to do to become more involved in their schooling is to motivate their children and expect them to excel at school. Additionally, they need to be made aware of the value of books and reading to their children.

In summary, from the responses to the questionnaire, it transpired that the majority of participants in the current research came from educationally disadvantaged backgrounds where not only were they exposed to poor literacy environments at home but also to poor teaching practices and very little exposure to books at school.

4.5.2 Influence of motivation on reading success in an L2

“It is not that students cannot learn; it is that they do not wish to learn” (Mihaly Csikszentmalyi, 1990b in Day & Bamford, 1998:21)

Although the respondents indicated that they have not had much access to reading sources, there seemed to be a general tendency to like reading, as many stated that they liked reading newspapers, magazines and books (cf. Table 4.2). On the one hand, this response could explain the enthusiasm amongst the participants to become part of the research group (cf. §3.3), but on the other hand, it seems to be contradictory to the fact that most respondents could not remember the title or the name of the author of a book they had recently read. If they were such keen readers, they should have remembered such details.

Another discrepancy is the fact that although so many students indicated that they read novels, magazines and newspapers, the majority did not belong to public libraries and also did not have many books at home (cf. Table 4.2). The question as to where they find access to books remains to be answered, as the majority of participants in the intervention group borrowed books from me to read for the assignments for the extensive reading program, as the UNAM library only stocks academic books.

A possible explanation for these discrepancies could be explained by the “halo effect” (Tuckman 1999: 224), the tendency that what people say they like to do and their actual accomplishments in that specific area are not always the same. This tendency is also illustrated when respondents give answers that they think are the desired ones. This seems to be a weakness in questionnaires and researchers need to be aware this. Caution should be taken against taking answers of respondents at face value. For

future research of the same nature as the current one reported on, researchers could perhaps follow up responses in classes through observations and informal interviews to ensure authenticity of answers to questionnaires.

A positive fact that transpired from the answers to the questionnaire is the fact that the majority of respondents viewed reading and writing as the most important factors for success at UNAM. This is important for three reasons: *Firstly*, although only based on the personal beliefs of the respondents, their view is supported by various studies undertaken in support of the link between reading ability and academic success (Perkins 1991; Pretorius 2000 & 2002) (cf. §2.3). *Secondly*, this perception could partially explain the improved results of the intervention group as reflected in the posttest results, as motivation, although not the only one, is also an important indicator of educational success (Day & Bamford 1998; Pretorius 2002). *Thirdly*, in order to deal with the ethical aspect of research (cf. §3.5), one would require participants in the research who could see the value thereof to take part voluntarily.

Additionally, it is apparent from their responses that being able to read well is clearly not only important to them for studying at UNAM, but also for religious and work-related purposes. This indirectly suggests a positive desire to be immersed in English (Harlech-Jones 1998; Swarts 1995), a motivation driven not only by parents, but by the participants themselves (internal motivation), as pointed out in Chapter 2 (cf. § 2.1.2).

According to their responses to their preferred leisure-time activities (cf. § Table 4.4), most students (64.8%) indicated that they preferred reading to watching television (63.8%). This is surprising as most students of their ages (20-29 years) usually spend their free time clubbing or attending parties, and not reading. Additionally, when I asked a few students in my classes why they did not go out more regularly, their responses were mainly that they did not have much money to do so. Consequently, they rather stay at home (or in the hostels) to read or to watch television. As UNAM hostels have television sets in their common rooms students staying there have access to television.

Since they do not have much access to books for extensive reading, the real question that remains is: *What kind of books* do they read during their leisure time? This is a valid speculation as 59.3% indicated that they favour reading academic books, although this question in the questionnaire did not actually tap into their academic reading habits, but their preferred leisure reading activities.

Admittedly, the question could have had more than one interpretation, as the perception of what it means to “like reading” depends on the context of what you are reading and also what sources of reading are available to you. For example, since the UNAM library, which stocks only academic books, is the only one the majority of them have access to, one can assume that the books they refer to in the context of this question, are all academic and therefore compulsory reading. If participants really enjoyed reading so much for pleasure, their reading scores in the pre-test should have reflected this, as extensive reading improves reading abilities. As indicated in Chapter 3, of those students who wrote the pre-test 50% read at frustration levels, 25% were borderline readers and only 25% were readers reading at instructional levels.

All in all, the fact that students seemed to like reading from the outset seemed promising as “low reading abilities or an inappropriate socio-cultural environment can be compensated for by second language reading attitudes and appropriate materials” (Day & Bamford 1998:29).

According to the interviews held with some participants in the intervention group, all of them seemed to have found the reading intervention beneficial and felt that they had improved in their reading skills, and also in the UCE and their other academic courses. According to their posttest results (cf. Tables 4.8-4.9), they did make a significant improvement in their reading scores as a result of attending the intervention ($p < 0,025$), compared to the control group. Moreover, when one compares the UCE scores of the two groups, participants in the intervention group had a mean of 2.1% higher compared to the mean of those in the control group. It also seemed encouraging to note that when one looks at the range of scores of the two groups (cf. Table 4.15), the intervention group had no failures for UCE (50%- 78%)

while the control group clearly did (34%-78%).

On a less positive note, it is important to note that although participants in the intervention group did show a significant improvement in their results, most of them are still very weak readers. For example, the student with the lowest pre-reading score in the intervention group improved with 25% (from a pre-reading score of 18% to a postreading score of 43%), but she was still reading at the frustration level and needed more intensive instruction in reading to improve her reading levels. Similarly, prior to the intervention, 55.5% of all participants in the intervention group read at frustration levels, 41% at borderline levels and only 4% at instructional level. After the intervention 26% still read at frustration levels, 70% were borderline readers and 4% at instructional level. As indicated in Chapter 2 §2.1.3, readers reading at frustration and borderline levels need intensive reading instruction, and readers reading at the instructional level can also still benefit from additional instruction. So although most participants in the intervention group did improve their reading levels and even move up from reading at frustration levels to being borderline readers, they still need explicit reading instruction to get them to the independent level so that their reading scores can fully impact on their academic performances.

Additionally, all students reported to have joined the intervention group because of the benefits it could bring them in terms of improvement in their other courses, but of those, 80% also joined because of the results of the pre-test. This indicates an awareness of the benefits improved reading may have to them, and could have also attributed to the success of the intervention (based on their posttest results) as “motivation, perseverance and dedication” to a task are also important for success (Pretorius 2002).

They seem to have found all the aspects dealt with in the intervention very useful, with 100% favouring the sections dealing with anaphoric reference as well as semantic clues (perhaps because this was very new to them), while 80% indicated vocabulary and 50% indicated word formation to be the most informative sections dealt with during the intervention. In the light of their increased performances in the

posttest compared to the participants in the control group, (cf. Table 4.8), one can indeed see an improvement in their overall results, but a breakdown of results in the different categories in the tests was not determined, as not enough questions were constructed for each category in the tests that were written. (The reasons for this were outlined in Chapter 3 §3.2).

The control group, on the other hand, also felt that they had improved their reading skills since attending the UCE course, but they all felt that they needed more practice in guessing vocabulary in context as well as in inferencing skills. As explained in Chapter 1, these are the areas most of our students struggle with. They reported to have had various reasons for not attending the intervention group, such as timetable clashes (30%), practicals in the afternoons (40%), too many domestic obligations (30%), being satisfied with their reading abilities (20%) and not being interested (10%). Interestingly enough, the student with the highest score in the pre-test (80%) did not participate in the reading intervention, and obtained a lower score in the posttest (68%). Similarly, another student in the control group who scored 70% in the pre-test obtained only 54% in the posttest. Finally, the overall mean reading scores of the control group showed a decrease while the mean reading scores of the intervention group improved (cf. Table 4.13).

It was not possible to conduct interviews with the participants at the end of the second semester, as the groups were no longer intact as they had been at the time the research took place. However, it was encouraging to note that many participants, especially from the intervention group, still regularly came back to me to ask for books to read for pleasure, as I had started building a “mini-library” during the period of the current research to lend books to students who were unable to find their own.

Additionally, some participants from the intervention group also attended my UCA classes during the second semester, during which I noted that many did not struggle so much with critical reading, inferencing and summarising compared to those who had not attended the intervention.

4.5.3 Effects of explicit vocabulary instruction on L2 readers

Already during the pre-test phase when the questionnaire was administered to participants, many acknowledged that they struggled with all the unknown words that appear in texts. This could be attributed to the low availability of reading sources to them, given the fact that reading develops vocabulary. It has been established (Corson 1997 in Cummins 2000) that exposure to printed text provides students with 50% more low frequency words than television shows or undergraduate conversations. Moreover, it is also rightfully acknowledged that vocabulary development is not given proper attention in schools.

Various researchers abroad (e.g. Curtis & Longo 2002), in South Africa (e.g. Cooper 1999; Perkins 1991) and in Namibia (Rickerts 2000) have found that many students identified as weak readers at tertiary levels were unable to cope with the vocabulary demands of their textbooks, which are examples of expository prose (cf. §2.5). As a result of her research, Cooper (1991) suitably claimed that vocabulary plays an important role in the academic context, and that the majority of L2 students' overall understanding of basic, academic and advanced vocabularies are not enough to assist them to cope with the lexical demands of their prescribed reading materials.

It is advised that about 95% of the running words in texts should be understood for comprehension of a text to occur (cf. §2.7). If one considers that the 2 000 high frequency words alone constitute about 80% of all words in a text and that the approximately 800 words in the academic word list covers roughly 10% of texts, then only about 5% of the words from the 123 000 low- frequently words and 1 000 - 2 000 technical words for each subject should be known. The implication therefore, is that increased vocabulary of tertiary students (especially high frequency and words on academic word lists) will aid in increased reading comprehension.

From their responses to the informal questionnaires, it was clear that participants in both groups realised this shortcoming in their reading comprehension abilities. I explained to the students that they had to work on this shortcoming by reading more,

but also by applying strategies that were explained in the classroom. As explained in Chapter 3 (§3.3.2), the vocabulary section in the current reading intervention attempted to assist students in improving their vocabulary by focusing on strategies to guess vocabulary in context, and having knowledge of roots, prefixes and suffixes, antonyms, synonyms as well as various word lists. Afterwards, participants in the intervention group indicated to have found the vocabulary lessons very beneficial while those in the control group wanted more lessons in vocabulary development. Interestingly enough, I realised that for my students in the intervention group, not understanding the relationships between words and paragraphs in texts could largely be attributed to their lack of understanding the meaning of anaphors and semantic clues, hence their poor vocabularies.

Since student scores in the various sections of the pre- and posttests were not compared for individual gains (contrary to Phillips 2004), it was not possible to establish the difference in the scores participants obtained for the vocabulary section. However, the fact that the intervention group showed an overall increase in reading performance compared to the control group, suggests that the intervention group may have indeed benefited from the vocabulary instruction component of the intervention.

4.5.4 Effects of understanding grammatical structures of the target language among L2 readers

“Reading requires a relatively high degree of grammatical control over structures that appear in whatever readings are given to students” (Eskey & Grabe, 1988:226).

As reading comprehension becomes easier when the grammar of the target language is understood, and as reading is essentially only improved through reading, this particular problem experienced by the respondents to the questionnaire could be attributed to the fact that they do not read enough. Although not an aspect directly addressed in this current research, it was hoped that through more extensive reading participants would improve their understanding of grammatical structures of English. This is an aspect especially problematic for L2 readers who are also not proficient

readers and writers in their own L1s, or in the academic skills that develop CALP. As a result, they cannot rely much on their L1 to assist in L2 acquisition (cf. §1.3). Snow et al. (1991), however, caution that this interdependence between L1 and L2 can only occur once relatively high levels of proficiency in the L2 are acquired. This is an area that needs to be further investigated, especially in the Namibian context.

4.5.5 Effects of instruction in keeping track of main ideas

With regards to keeping track of main ideas, remembering what they have read when coming to the end of a page, and reading rate, it initially seemed encouraging to have noted that many respondents to the questionnaire indicated that these impediments to reading did not really hamper their own reading abilities (cf. Table 4.5). Therefore, based on these answers, and based too, on what is known about good readers (cf. §2.5), one would have expected them to be fairly good readers. A possible explanation for this could be that their perceptions of what it meant to be good readers may not have been accurate.

A reader has to apply various reading skills and strategies in order to be able to follow the main arguments in a text. Besides understanding about 95% of the running words in a text, knowledge of anaphoric resolution and semantic relations between sentences and paragraphs are also pertinent to comprehending links between and across sentences and phrases in order to construct main ideas in texts. These were the other aspects the current reading intervention focused on, and since the overall reading performance of the intervention group increased, one could claim that this was partially as a result of the explicit instruction of anaphoric resolution as well as semantic relations.

Although the reading scores of the intervention group did show a significant improvement, and although their responses to the questionnaire led one to believe them to be good readers, one should keep in mind they had very low reading levels both prior to and after the intervention (cf. §4.14). This issue will be taken up again in the next section.

4.5.6 Differences between good and poor readers in developing countries

Although various researchers (Aebersold & Field 1997; Anderson 1994; Carell 1996; Coady 1997; Grabe 1991; Kitao & Kitao 2002; Nation & Newton 1997; Urquart & Weir 1998) established clear differences between good and poor readers in developed countries (cf. §2.6.1), not much research has been done to understand the profiles of good and weak readers in developing countries. These are the countries in the world where many readers grow up in economically and educationally disadvantaged circumstances and are print-impooverished, such as rural parts in Namibia (cf. Table 4.2).

In the current research where participants were representatives of subjects from a developing country, most of the responses to the questions of the strategies they apply before, during and after reading (cf. Tables 4.6), gave the impression that they were good readers (Aebersold & Field 1997; Cohen et al. 1996; Devine 1996; Kitao & Kitao 2002). This impression was created as the majority of them indicated that they did not read slowly, did not find reading for main ideas problematic, could remember what they read when they came to the end of a page, kept thinking about pictures to see their relation to the text, made guesses to see what was going to happen next, underlined main ideas, thought about how new information relate to situations and why it was important (cf. Tables 4.6).

Although they indicated that they were good readers, their responses to other questions in the questionnaire and my own observations in class highlighted various discrepancies. For example, pre-reading, a very important stage in reading as this activity activates background knowledge and allows the reader to make predictions based on textual details, for example by using headings and subheadings (cf. §.2.10.1), is a reading strategy good readers regularly employ when reading. Yet, a meagre 35.2% of the respondents indicated that they make guesses about the content of texts prior to reading, an important pre-reading activity for good readers. Moreover, only

39.8% of them indicated that they continuously monitor what they were reading to see if their predictions were correct, an important activity *while* reading that shows metacognitive awareness. My own observations in the UCE class and also during the reading intervention, proved that most students did not know about pre, while and postreading activities prior to the intervention, read in a linear fashion and did not continuously monitor their comprehension. Furthermore, after this had been explained to them, I had to remind them during each reading lesson to apply the various steps involved during each phase to facilitate their own comprehension.

Another discrepancy occurred regarding the use of dictionaries. Good readers are generally not too reliant on dictionaries, although they will look up definitions of recurring unknown words. They also do not deem it important to know and to understand every word that appears in a text, as long as the overall understanding of the text is not compromised (Aebersold & Field 1997; Cohen et al. 1996; Cooper 1999; Curtis & Longo 2001; Devine 1996; Kitao & Kitao 2002; Perkins 1991; Pretorius 1996; Rickerts 2000). 25,9 % of participants in the current research indicated that they look up the meanings of words before reading, 56,2% while reading and 47,2% after reading. This generally indicates their over-reliance on dictionaries. Dictionaries can be useful tools, but looking up too many words can slow down the reading process, result in not remembering what was read and eventually cause readers to lose interest in reading. They should mainly be used to look up the meanings of words that impede comprehension, something good readers are aware of.

However, from my own observation in class, most students never seemed to remember the meanings of the words they have looked up. I have also observed that when they looked up the meaning of unknown words, they did not write the meanings down and seemed to rely on their memories for remembering new definitions. As a result, they rarely remembered new words encountered in texts. The effects the use of dictionaries have on the vocabulary levels of L2 readers is definitely an area that could be addressed in further research.

Because only one significant difference between the competent and weak readers was

established, **H1 was only very partially accepted**. The one significant difference between competent and weak readers highlighted in the current research is the fact that participants in the former group said every word in their minds to make sure it is understood, compared to participants in the latter group who do not pay much attention to this aspect while reading. While reading slowly can be an indicator of over-reliance on decoding and not enough monitoring of comprehension, something poor readers do, I think in this case, it implied that the better readers read more strategically and were more aware of new concepts introduced that needed to be understood for overall comprehension to occur. This difference ($p=0.051$) may indicate greater metacognitive awareness of the competent group. Metacomprehension (Kaplan- Dolgoy 1998), the control an individual has over his/her cognitive processes in order to construct meaning while reading, ensures achievement of required goals when reading. This aspect relates to an awareness of how cognition occurs and also how to restore it, should a breakdown in cognition occurs. As readers need to know about 90% of all running words in a text (cf. §2.7), competent readers who have metacognitive awareness will be aware when comprehension breaks down as a result of words not understood. For them, attending to the meaning of unknown words may reflect their desire to restore a breakdown in comprehension. As they are also assumed to have larger vocabularies, they are also more likely to be aware of unknown words in a text.

In contrast, weak readers display lower metacognitive awareness and have smaller vocabularies, compared to better readers. They tend to read aimlessly and without fully understanding their texts, as they do not employ various methods to enhance text comprehension. Daneman (1991) contends that weak readers often encounter the same unknown words over and over in texts without attempting anything to remedy the situation. The findings that better readers continuously think about the meanings of words they read, could perhaps reflect that whereas poor readers do little to find out the meanings of unknown words in texts, better readers, on the other hand show metacognitive awareness by being aware of unknown words and attempting to find out what words mean that they encounter frequently.

There are generally clear differences between the reading habits of good and poor readers (cf. §2.6). However, in most of the studies mentioned, the “good” and the “poor” readers were not from similar backgrounds and culture. For example, although being from a developed country, their students should have had more exposure to literacy compared to students in the current study reported on, Kitao & Kitao (2002) classified their students as being poor readers in English. In the current research, both poor and good readers were from the same background and culture, hence had more or less equal exposure to and opportunities to develop their literacy levels. This could be one of the reasons why so few differences between the competent and weaker groups were reported. Another reason, possibly the most important one, could be the fact that there were not big differences in terms of reading abilities between the two groups, as explained in Chapter 3 §3.2. More research could be done on this topic as it would be interesting to find out why, despite similar backgrounds, some students are better readers than others.

4.5.7 Effects of the duration of intensive reading programs on L2 reading

As explained in Chapter 3, the current reading intervention reported on focused on various reading skills to assist participants to improve their comprehension of texts. This was done through intensive as well as extensive reading (cf. § 2.10).

Immediately after the 10-week intervention program, the posttest results indicated an overall significant improvement in the scores of the experimental group, compared to the control group that did not show an improvement in their reading scores. **H2 was therefore accepted.** In addition, the intervention group also appeared to have done better in the UCE examinations compared to the control group (cf. Tables 4.10 & 4.11). This examination was written two weeks after the end of the reading intervention programme.

Six months later, during which participants had no reading support other than attending the UCA lessons, the correlations between the academic performances of the participants in the intervention group were compared with the correlations between

academic performances of those who were in the control group. The results (cf. Table 11) indicated that for the intervention group there was a significant high correlation between academic scores ($p < 0.001$) and pre-reading scores, but not between academic scores and posttest reading scores. In contrast, the results indicated a significant correlation between academic scores and post-reading scores for the control group ($p < 0.05$), but not between academic scores and pre-reading scores.

When looking at the overall correlation between academic performance in pre- and posttest scores for both groups, the results indicate a significant correlation between academic scores and pre-test results ($p < 0.05$) but not for posttest scores. In other words, the **H₀ for H3(A) was only partly accepted**. The overall significant correlation between the pre-reading scores and academic results indicate that although the reading intervention was successful, it may have been too short to have made a sustainable impact on their academic performance.

On closer examination, no significant differences within the academic groups of those who attended the intervention were found. The **H₀ of H3(B) was therefore accepted**. What did transpire, though, when comparing their academic scores with their reading scores, was that students who obtained below 50% for reading (in the pre-test) also had less than 50% for academic performance, i.e. in Group 1 (cf. Table 4.15). In other words, a low reading score was an indicator of poor academic performance. The same was observed in their postreading scores of students in Group 1. In other words, students who were reading at frustration levels (cf. §2.1.3) also failed the examination in one of their academic majors. This same pattern between the academic and reading scores of students in Groups 2 and 3 was not observed. Based on their pre- and posttest reading scores, students in groups 2 and 3 were clearly borderline readers, and those in group 3 weaker readers compared to those in group 2. Yet, the 'weaker readers' managed to perform better academically (60% and more). To sum up, although the null hypothesis for H3(A) was only partially accepted and the null hypothesis for H3(B) accepted, the results did show that students who read at frustration levels (below 50%) would probably fail their academic courses.

A possible reason for the low correlations between academic scores and post reading results of the intervention group could be ascribed to the heterogeneity of the participants in the current research (cf. §3.2). Due to reasons beyond my control I had students from various faculties in one group and could therefore not use specific field-related texts in the intervention, compared to other studies. For example, Phillips (2004) used a group of science students and included science-related texts and vocabulary in her reading intervention, and Pretorius & Bohlman (2003) focused on mathematics students and selected their teaching materials accordingly. It could therefore be argued that the reading intervention could have had more meaningful effects on the academic performance of students in the reading intervention program if the group was homogeneous in terms of their field of study. If so, more specific subject-related vocabulary, for example, could have been concentrated on to assist students to understand texts better and as a result also enhance their academic performances.

Another possible reason why the reading intervention program did not make a significant impact on the academic performances of participants could be the fact that, even though readers (in the intervention program) did improve their reading levels, they were still very weak readers and still needed a lot of assistance to cope with the academic demands of their courses (cf. §3.2). As stated earlier, prior to the intervention, 55.5% of all participants in the intervention group read at frustration levels, 41% at borderline levels and only 4% at instructional level. After the intervention group, 26 % still read at frustration levels, 70% were borderline readers and 4% at instructional level.

Furthermore, in the six months between the time the participants wrote the posttest and the time they wrote their final examinations, no contact was made between the researcher and the participants and no follow up sessions were held with them. As a result, participants were no longer exposed to additional instruction or compulsory extensive reading activities or even constant encouragement from the researcher.

An added possibility for the partial acceptance of the null hypothesis of H3(A) is that

a 10-week reading intervention period is too short to expect long-term effects on the academic results of students. Compared to other studies, 10 weeks are too short to expect any significant effects of an intensive reading program on academic scores of participants.

Phillips (2004) could not find any significant statistical differences between the reading scores of the intervention and control groups after a reading intervention program of *eight months*. However, her study did establish a significant relationship between the reading abilities and academic performances of the participants in her research ($p < 0.001$). She attributed the fact that the study could not establish significant differences between the reading scores between the intervention and control groups to the fact that “one academic year was not possibly long enough to show the benefits of a reading program” (Phillips 2004: 106). This view is supported by Pretorius and Bohlman (2003) who warned that reading is a skill that develops over time. Moreover, Cummins (2000) contended that it takes at least 5-10 years to develop CALP skills in an L2 (cf. §1.3). When one considers that many participants in the current research reported on probably had insufficient CALP development when they arrived at UNAM, an intervention period of 10-weeks was probably not enough to expect any long-term effects on their academic results.

In a study on the effects of ‘book flooding’ (Elley 1991) on the L2 development of primary school children in Fiji, it was established in one study that the positive effects were mostly observed in the reading and listening skills of learners after the *first year*. Only in the *second year* were positive gains made in writing, vocabulary and their other academic courses. These findings underscore the importance of developing reading skills over time.

Other intervention studies reported on in Chapter 2 indicated various success rates and also took place for various time durations. However, unlike the current study where the low reading levels of participants prior and after the reading intervention program are established, some studies do not mention the reading levels of their students.

Slater et al. (1988) carried out a successful *9-week* intervention study to examine the effects that explicit teaching of discourse structure have on the reading comprehension and recall of first year university students (cf. §2.5). However, no reference is made to the reading levels of participants in this study and the effects of the reading improvement on their academic studies were not established.

In another study, Rickerts (2000) reported on a *14-week* intervention program (cf. § 2.7) that aimed at improving reading comprehension, reading speed and vocabulary of students to help them to improve in English Communication Skills. No reference was made to the reading levels of participants prior to or after the intervention took place, but the end results showed an overall improvement in the last two aims, but not in their comprehension skills. It was argued that the poor performance and small gains of students were as a result of absenteeism and a lack of commitment. Also in this study, no reference was made of the long-term effects of the intervention program and the effects of the intervention on the academic performances of participants were not established.

Curtis & Longo (2001) reported on a *16-week* intervention study to measure the effect of increased vocabulary development on their participants. The results indicated an overall increase in the reading achievements of the students (cf. §2.5). Once again, no reference is made of measuring the long-term effects of the intervention program and the effects of the intervention on the academic performances of participants were not established.

Pretorius & Bohlman (2003) examined the effects of a *22-week* reading program on full time Mathematics students at UNISA. Similar to the current study, theirs included both intensive and extensive reading and they also had very weak readers in their study. Although it was not possible to compare the control and intervention groups as only the pre-test was administered to the control group due to an oversight, the researchers found that in the intervention group, there was a significant correlation between Mathematics performance of students and their reading scores. They could

not assess the effect of the reading intervention program, but concluded that reading improves reading. Furthermore they warned against expecting too much from reading intervention programs carried out over too short periods.

A study by Cooper (1999) (cf. §2.7) seemed successful in supporting the hypothesis that there is a positive correlation between academic vocabulary and academic success ($p < 0.001$). Students with larger vocabularies were students who performed better academically.

Based on the above, possible explanations for the partial acceptance of H_0 for H_3 (A), could be that participants were not homogeneous in terms of field of study and although participants in the intervention group did improve their reading levels significantly, they were still classified as weak readers after the reading intervention program. Even so, it seems as if the major contributing factor why reading levels did not impact on the academic performance of participants is the fact that the 10-week intervention period was too short to expect sustained improvements in the reading progress made by participants. Although participants did improve their reading scores, the gains they made were not enough to impact on their academic performances. These are factors to be considered for any further research of this nature still to be conducted.

4.5.8 Extensive reading at tertiary level

“Reading [for pleasure] is like an infectious disease. (And you can’t catch it from someone who hasn’t got it...)” (Nuttall, 1983 in Aebersold & Field, 1997 : 5)

Another possible explanation for the improvement in the posttest results of the intervention group, compared to those of the control group could be as a result of the extensive reading program that was carried out in conjunction with the intervention program (cf. § 3.5.3). Cummins (2000) is of the opinion that L2 readers need to engage in extensive reading of written texts in order to catch up with native speakers and also to increase the proficiency of their academic register.

According to various research carried out to measure the effects of extensive reading on students' reading gains, it was reported that in general, students increased their reading ability in the target language, became more positive towards reading, were more motivated to read and finally, became more proficient in the target language in terms of vocabulary improvement, linguistic competence, spelling and writing (Day & Bamford 1997). Similarly, another study (UNISA 2005) reported that students who regularly took books out of the school library for pleasure reading showed an overall increase in their reading skills and reading speed (cf. §2.10.2).

In the current research, extensive reading was not only encouraged but participants were also provided with literature to read. Written responses to articles and books were regularly expected and monitored by the researcher (cf. §3.3). Although the effect of extensive reading *alone* on the performances of the reading scores of the intervention group compared to the reading scores of the control group was not established, one could conclude that extensive reading was one of the factors responsible for a significant improvement in reading scores of the intervention group compared to the reading scores of the control group. Through interviews with participants as well as observations, their enjoyment of this aspect of the reading intervention was evident. Their print-impooverished backgrounds became apparent when one student asked me the following question while I was explaining that I could make books available to those who did not have their own: “ Does this mean I won't have to share a book?”.

Even after the reading intervention program students would (and still do) come to ask for books to read, especially over weekends and during recess periods. This trend to borrow books even after the reading intervention program has unfortunately only been observed among the better readers. Therefore, ways to motivate weaker readers at university level to do more leisure reading is certainly an area that could be further explored.

4.5.9 The role of university lecturers in L2 reading instruction

Teachers at all teaching institutions should realise that reading is a process that continues throughout as well as after a students' school career. As a result, the responsibility of teaching reading should not be relegated to primary school teachers only. Spingies (1993) is of the opinion that teachers not teaching at primary schools should have a change in attitude towards reading instruction. They should become aware that improved reading instruction abilities among students can only be achieved when teachers are trained to teach them strategies and skills to become more comprehending readers. Teachers who teach reading should therefore make time available for reading in classes, select and also provide suitable reading materials for students, motivate students to read more set an example by being enthusiastic about reading and in addition, equip students with different kinds of reading skills and strategies (Spingies 1993). In the same vein, Cummins (2000) argues that the failure or success of any reading program depends on the quality of the teacher, who should also incorporate reading into his/her instructional program.

An important aspect of being an effective reading teacher is to know who your students are as well as being aware of the basic reading competencies that they have mastered (Aebersold & Field 1997). By doing so, one can understand their attitudes and motivation (Day & Bamford 1998), and one can also design and plan more effective reading lessons in order to systematically increase their cognitive abilities to interpret meaning in context-reduced situations (Cummins 2000). This, in turn, can be fostered through the effective teaching of reading.

From the responses to the questionnaire it was encouraging to observe that the four lecturers at the Language Center at UNAM who completed the questionnaire are avid readers who see themselves as average to highly skilled readers who enjoy reading. As a result, they can be good role models for their students. Although they motivate students and motivate them to read, only two of the respondents indicated that they make class time available for reading. Additionally, only one of them indicated that he/she provides students with reading material, while the others tell them about the

value of reading (two) or refer them to interesting articles to read (one) (cf. Table §4.15). This information could indicate that some lecturers at the Language Center may not be sensitive to the fact that our students have limited access to books and other sources for extensive reading (cf. § Table 4.2). This response indicates that more could be done to find out more about the backgrounds of students at the Language Center.

Furthermore, not everyone seems to understand the importance of research shaping their teaching styles, yet it is a very important aspect to be aware of in order to create active readers who can create meaning in context-reduced situations (Cummins 2000). For example, lecturers need to know how to help learners to develop skills to deal with unknown words, to read for main ideas and to be able to write summaries, as these are very important skills for any student to perform at any university. Aebersold & Field (1997) contend that teachers who teach reading should not only know about strategies to become better readers, but should also know how to promote understanding of these strategies in the L2 classroom.

Rickerts (2000) maintains that many teachers teach the way they were taught. This is a reality, but a worrying scenario in the Namibian context, especially if one considers that many teachers themselves have also been exposed to poor teaching methods. As a result, they were not made aware of the value and importance of reading instruction or about ways to create meaningful reading lessons. Therefore, Buchorn-Stoll (2002) advocates for more in-service-teacher-training sessions to teach teachers of reading how to present interactive reading lessons. Elley (1991) has established that not only students, but also teachers appeared to have found reading interventions beneficial, especially those who were poorly qualified.

In the current research, only two of the respondents claimed to teach reading strategies and although all the respondents indicated that our students do not know how to read, only one did not think it was his/her responsibility to improve reading skills among UNAM students (cf. §Table 4.15). This is surprising, as developing reading skills among our students is one of our aims at the Language Center. Moreover, only one

lecturer indicated that he reads to his children often while the rest do that only sometimes. This could be an indication that not everyone realises the importance of storybook reading of children and therefore not aware of the research on this topic.

All in all, it seems as if lecturers at the Language Center are aware of the reading problems our students experience, but more could be done to improve the students' reading abilities and to provide them with more opportunities and sources to read. Furthermore, more attention could be paid to keeping themselves informed about the ongoing research regarding teaching reading as an academic tool to L2 readers.

4.6 Summary of Chapter 4

In this chapter the results were presented and discussed. The current research was undertaken to see if the teaching of explicit reading comprehension skills could improve the reading abilities of a sample of first year students at UNAM, and as a result their academic performances too. At the same time, it also aimed at finding out more about the background and reading attitudes and habits of participants and staff teaching at the Language Center. Informal interviews with participants in the control and intervention groups were carried out in order to obtain their views on the intervention program and also to supplement data yielded from pre- and posttest scores and to increase test validity.

The statistical tests employed were t-tests, ANOVA, correlation, standard deviations and frequency tables. The main findings were as follows:

- Reading profiles of students

The majority of participants in the research were from a rural background, had very little parental involvement during the early years of acquiring literature in English as well as in their L1, appeared to enjoy reading, but do not have much access to many sources of books other than the UNAM library where they are compulsory members and can only access academic books. Some inconsistencies that were perceived in their reading habits gave the impression that they may experience some reading problems. However, the majority seemed to have very positive attitudes towards

reading and recognized the need for them to be good readers in order to excel academically at UNAM.

- Differences between competent and weak readers

Because only one significant difference was clear, H1 was only very partially accepted by establishing that competent readers in the study read more strategically and were more aware of new concepts introduced that needed to be understood for overall comprehension to occur. This difference ($p=0.051$) may indicate greater metacognitive awareness of the competent group.

- Attitudes of participants in the reading intervention program

The majority of the participants in the intervention group indicated to have found it beneficial in all areas.

- Attitudes towards teaching of reading among staff at the Language Center

The representatives of the staff at the Language Center at UNAM appeared to be enthusiastic readers themselves. However, not everyone realises the importance of being informed lecturers of reading who have to impart their own knowledge of reading skills and strategies upon their learners. Also not everyone seems to be aware of the specific needs our students have in terms of the availability of literature for extensive reading.

- Reading skills of students

The reading intervention program has proven to be successful as there was a significant difference between the posttest and pre-test scores. The research hypothesis for H2 was therefore supported. However, the long-term-effects of such a short reading intervention period is not clear. Furthermore, there is uncertainty concerning the effects of the intervention programme on the intervention group due to the extra exposure they received. As elaborated on in §3.4, this was due to reasons beyond the control of the researcher.

- Reading and academic performance

Highly significant correlations existed between the academic scores and pre-reading scores of participants in the intervention group, but not between their postreading scores. Concerning the control group, no significant correlations were observed between their academic scores and pre-test scores, but did appear between the academic scores and posttest scores. It appeared as if attending the reading intervention program did not cause any significant improvement on the academic performances of the intervention group compared to the academic performances of the control group, partly due to the short intervention period of 10-weeks. The null hypothesis for H3(A) was therefore partly accepted. Furthermore, the null hypothesis for H3(B) was accepted as significant differences between the academic groups in the intervention group were observed.

Chapter 5

Conclusion

5.0 Introduction

This chapter serves as a review of the major aims and findings of the information presented in the previous four chapters. It also elaborates on the contribution and limitations of the current study as well as implications for further research in reading.

5.1 Review of the aims of the current study

In an attempt to contribute to the ongoing research on reading, especially in developing countries, the current research had the following six aims: Firstly, an attempt was made to gain more information regarding the general literacy background of the participants and the differences in reading habits between good and poor readers in the Namibian context. Then, a quasi-experiment was carried out and pre- and posttest results were used to examine the effects of an intensive reading programme on a group of first-year university students over a period of 10-weeks. In order to see if there was any relationship between reading skills and their academic performance, the relationship between the academic results of participants in both control and experimental groups and their reading scores was examined. Then a one-way ANOVA was applied to see if there was a significant difference in the mean reading scores of the pass, at risk and fail groups of students in the intervention group in terms of the academic performances. Further, throughout the intervention process, informal interviews were conducted with participants from the control and intervention groups to gauge their views on the usefulness of the reading intervention program. Finally, the general reading habits and views on the teaching of reading among lecturers teaching at the Language Center at UNAM were explored.

The relevant information pertaining to the research is contained in the following chapters:

Chapter 1 presented the background to the study in the Namibian context. Furthermore, the processes involved in reading were explained and most importantly, the relationship between reading and academic performance was explored. The chapter also presented the three research questions and three hypotheses that formed the backbone of this current research.

Chapter 2 reviewed the literature pertaining to this current study. Research regarding the various aspects addressed in the current study were presented and their relevance highlighted. Various requirements for successful reading intervention programs were also identified. It was noted that although many reading intervention programmes have been carried out thus far, not much has been done to measure the long-term effects thereof, especially in terms of measuring to what extent improved reading impacts on the overall academic performance of participants.

Chapter 3 dealt with the research framework and procedures adopted for this current research. The research was analytical as the data collected were mostly quantitative, but some were also qualitative. The study consisted of a pilot study in 2003 that was mainly aimed at piloting the questionnaires and tests and determining the length of time participants would need to complete these. Due to a lack of time, the reading intervention program itself was not piloted during the pilot period. The pilot study was followed by a 10-week reading intervention programme in 2004.

A quasi-experiment method was employed with two intact groups from UNAM that became the intervention and the control groups respectively. The two groups wrote the same pre- and posttests and their academic scores at the end of the year were collected. Questionnaires were also administered to participants as well as to lecturers at the Language Center and regular informal interviews were held with participants in both groups.

Chapter 4 presented the results of the main study as well as the analysis and interpretation thereof.

5.2 Summary of the main findings

The aim of the first research question was to establish the literacy profiles of the students who participated in the current research. From the questionnaire it was established that the majority of these students, who represent a sample of the UNAM student population, was from rural areas in Namibia and had very little exposure to books in their homes and to some extent, also schools. Given their ages and schooling history, it was further concluded that they have probably been exposed to submersion during the phasing in of English as MOI in Namibia during the past decade.

It was further established that currently, these students have little access to sources for leisure reading, that most of them only read their course material, and that the majority also experience problems with reading, typical of struggling or poor readers.

In an attempt to determine whether there was a difference between the group classified as competent readers and those classified as poor and struggling readers, according to their pre-test results, only one significant difference was found. This was in terms of reading strategies employed to cope with unknown vocabulary while reading texts. The difference between these two groups implied that the competent readers were more aware of the application of cognitive processes while reading; hence they seemed to have more metacognitive awareness. As outlined in § 4.5.6, metacognition is a repair strategy that alerts the readers to apply certain reading skills when full cognition does not take place. A possible reason why so few differences between the two groups of readers were found could be that readers in the 'competent group' were actually also poor readers as they were mostly reading at borderline levels at the time the pre-test was written. Reasons for their classification as good readers are outlined in Chapter 3, §3.1.2.

When the pre- and posttest results from the control and intervention group were compared, the results showed a significant improvement in the reading scores of the intervention group, compared to the control group that showed no improvement. In fact, the mean reading scores of the control group decreased with 1.12%. Hence, the H_0 of H2 was rejected. The gains of the intervention group in terms of their reading were also reflected in their UCE scores (cf. § Table 4.14). This finding indicates that, although participants in the intervention study were still relatively weak readers after the reading intervention program, L2 readers can be assisted to become better comprehenders by explicitly teaching them comprehension strategies.

On the other hand, when the correlations between the reading scores of participants in both groups and their academic performances were established, H_0 of H3(A) was only partially accepted. For the intervention group, a highly significant correlation was established only between the academic and pre-test scores of participants, while the control group only showed a significant relationship between the academic results and posttest scores. In the overall correlation between academic scores and reading scores of both groups, only a significant correlation between academic scores and pre-test scores was observed.

Additionally, no significant differences in the mean reading scores of the intervention group of students in the three academic groups were established, hence the acceptance of H_0 of H3(B).

A possible reason for the low correlations between the academic scores and posttest results of participants could be that a 10-week intervention period is too short to have a sustained impact, especially on poor readers who need continuous motivation and long-term instruction. This is especially true of the participants in this research, as even after the intervention participants in the intervention group were still very weak readers.

From the responses to the questionnaire it transpired that lecturers at the Language Center are keen readers who therefore have the potential to be excellent role models for students at the Language Center in terms of becoming better readers. However, not everyone seems to realise the importance of current research in reading. It also transpired that not all lecturers are aware of our students' poor literacy backgrounds as well as the fact that they do not have much access to material for extensive reading.

Qualitative data suggests that most participants in the intervention group found all sections of the program very beneficial and could perceive an improvement in their other courses as a result of attending the reading intervention program. Participants in the control group reported that they had also gained from attending the UCE course, but wanted more vocabulary instruction.

5.3 Main contributions of the study

In order to fully appreciate the contributions this study has made towards the ongoing research about education, with particular reference to reading in Namibia, it was decided to divide the contributions into the following three sub-sections:

- General contributions
- Implications for developing literacy levels at schools
- Implications for developing literacy levels at UNAM.

5.3.1 General contributions

Although the main focus of this current study was to report on the effects of promoting reading comprehension skill among UNAM students, various other vital aspects pertaining to the reading performance of L2 university students were also underscored. This was done with particular reference to the Namibian context and it is therefore hoped for that this study has contributed to the ongoing research about reading in Namibia.

This study has, hopefully, highlighted the importance of reading in the academic contexts, especially among UNAM students. Additionally, it has drawn attention to

the poor reading levels of first-year university students mainly as a result of the print-impooverished backgrounds of Namibian children. This, in fact, may be the real reason for the poor scholastic performance of scholars, rather than the Language Policy debate according to which English, the L2 for most Namibians, is used as MOI at schools as well as tertiary institutions. Exposure to books (in any language) allows children to develop their CALP, in other words, the cognitive skills that allow them to communicate in context-reduced situations (cf. §1.3).

In an attempt to find differences between poor and good readers in developing countries, such as Namibia, the one discernable difference indicated that better readers are aware of the way comprehension of texts take place and implement repair strategies, when there is a breakdown of communication. This indicates as increased metacognitive awareness among good readers (cf. § 4.5.6). A possible reason why not more differences were found between the two groups of readers (those with 59% and less compared to those with 60% and more) could be that readers in both groups were still reading below their maturational levels and most of them were, essentially, poor readers. The reasons for using these percentages to categorise readers as good and poor are given in Chapter 3 §3.2.

Moreover, the current study has confirmed that the reading skills of poor readers can successfully be improved, but since most readers in the intervention group were still reading below maturational levels a 10-week reading intervention is deemed too short to have any significant long-term impacts on their academic scores. This, and the fact that there was a highly significant correlation between the academic results and pre-test scores of participants in the intervention group seem to indicate that reading does predict academic performance. It also transpired that readers reading at frustration levels would probably fail their academic courses.

5.3.2 Implications for developing literacy levels at schools

The information regarding the low literacy levels of students that transpired from the questionnaire should not be seen as a duplication of other studies regarding

submersion in Namibia (e.g. Clegg 2000; Harlech-Jones 1998 & 2000; Swarts 1995 & 2000). It should rather be viewed as a warning to stakeholders in education that the possible academic achievements of our learners are being compromised due to insufficient attention paid to development of their literacy levels. Low literacy levels among learners are largely as a result of little or no exposure to books at home and/or at schools. It became apparent that almost half of the respondents to the questionnaire have fewer than 10 books at home - some even none. Many have been taught by poorly qualified teachers, especially in rural areas and as a result, were exposed to poor teaching practices. Some of these practices include rote-learning and an inability of teachers to construct meaningful, interactive lessons to develop the cognitive abilities of students. The truth is that in many rural schools, learners have little exposure to books other than their textbooks (which are also sometimes shared) and many schools do not have operating libraries. As a result, the reading abilities of many Namibian scholars do not develop sufficiently. Reading gets developed through exposure to reading as well as through appropriate reading instruction. In turn, CALP abilities develop the academic skills that students at university need in order to create meaning from context-reduced situations. These are the skills they require, for example, to read academic texts, to write academic assignments or to have a discussion about their courses.

Although this study was carried out on a very small scale, the results of the pre-test (and posttest) clearly indicated that first-year UNAM students are coming into the university with low reading levels. UNAM students are products of print-impooverished environments, more specifically schools. Although home environments have an important role to play in increasing literacy levels of learners, one can neither change nor blame the socio-economic conditions in those households who do not assist learners in developing literacy skills. However, schools need to play a more active role in literacy development of students.

This current research does not attempt to blame parents or students for their poor reading skills, nor does it protest for the change of the language policy. What it does

advocate is for more “book flooding” (Elley 1991: 401) to occur in Namibian schools, as well as for more incentives for teacher training. Educators need to be alerted to the importance of developing suitable classroom environments to stimulate learners to become comprehending readers. If not, the Matthew effects in reading will prevail (cf. §1.4).

Changing the medium of instruction might make classroom teaching and learning easier for many learners and teachers, but that alone will not make learners more literate. What will improve literacy levels among learners is access to a variety of books, good instructional practices and more time for reading (Pretorius & Bohlman 2003). Given the fact that learners spend most of their days at school in the presence of their teachers, this study wishes to appeal to educational authorities to invest more in changing schools into literacy-rich environments. Doing this will not only create better readers, but also aid in preparing learners for the academic demands they will be faced with at university.

5.3.3 Implications for developing literacy levels at UNAM

Since the Language Center at UNAM was established to assist students to perform better in their other courses, the results of the current study has direct implications for the instruction of reading, particularly in the UCE course.

In the first instance, the study has drawn attention to the fact that many students at the Language Center are in fact very weak readers. Prior to the intervention, 55.5% of all participants in the intervention group read at frustration levels, 41% at borderline levels and only 4% at instructional level. After the intervention 26% still read at frustration levels, 70% were borderline readers and only 4% were at instructional level. It has transpired that one of the main reasons for the poor reading levels of our students is not the fact that they receive instruction through the medium of an L2, but due to a lack of exposure to printed texts.

A major contribution of the study is that the reading intervention program has shown

that the reading skills of university students can be improved successfully through a deliberate attempt in the form of a reading program that consisted of an intensive as well as an extensive reading component (cf. §2.10). However, the fact that reading is a skill that develops over time was highlighted as it was concluded that the 10-week reading intervention study was too short to impact significantly on the academic performances of participants in the intervention group. Lecturers at the Language Center should realise that it takes time to develop reading skills and as a result, the intensive instruction of reading should take place in both the UCE and the UCA courses. In this way, students enrolled with us would then have a full year of intensive reading instruction, and not only while attending the UCE course. Reading and writing skills should be taught concurrently, but it should be realised that reading ability is fundamental for the ability to write.

Additionally, the study has highlighted the importance of lecturers to become aware of the importance of reading in an academic environment and to understand the importance of equipping our students with the necessary reading skills in order to cope with the academic demands of their courses. Lecturers should become aware of the severity of the reading problems our students have and realise that UCE scores are by no means a true reflection of students' reading skills. The final UCE mark is only an indication of the language proficiency of students, and research (e.g. Pretorius & Bohlman 2003) has indicated that language proficiency is not always a reliable indicator of reading ability. It is rather attention to reading that improves the former. As can be seen from the pre- and posttest results, at the end of the reading intervention program, although they had improved their reading scores, most readers were still considered as very weak. Yet, everyone in the intervention group managed to pass the UCE course. It should be kept in mind that whatever intervention courses offered at the Language Center should be carefully monitored and the results statistically analysed to see whether the interventions actually impact on the academic performance of students.

Although the reading intervention program did not address all the reading skills that tertiary level students require for academic success, it did seem to address aspects

deemed important for students at university level, as revealed by the literature review. It could be worth considering including these aspects of reading to the contents of the current UCE course. UCE tests and examinations should also challenge learners to apply these skills when reading, and not simply focus on literal questions that can be answered simply by decoding a text. In such a way, students may be more prepared for the reading challenges of the UCA course.

The current study has also highlighted the fact that although teachers of reading may be aware of the reading problem of students in Namibia, they are either not aware of the little exposure our students have to reading material, or they do not realise the importance of their roles of in assisting students to improve their reading abilities. Many lecturers encourage students to read more, but they should also make more effort to provide them with appropriate reading material, as the UNAM library only stocks academic literature.

Additionally, the current study has also established the role and value of extensive reading in the L2 classroom, especially with students with little exposure to literature after school. Although not confirmed, it is assumed that students in the intervention group obtained better reading scores as a result of the extensive reading component. It has further been confirmed how much students appreciated the fact that books were provided for them, as many only had their textbooks to read. Although the Language Center does provide some reading material to students in the 'Self-Access Area', a venue where our students can watch television and read daily newspapers, more could be done to supply them with more up-dated and interesting reading material. For example, all lecturers at UNAM, not only those teaching at the Language Center, could be approached to donate magazines or popular literature they have finished reading.

Another suggestion to improve the reading levels of students at the Language Center would be to make more time available for reading in class and perhaps introduce a compulsory extensive reading component to count towards the year marks for both UCE and UCA courses. This may also signal to students that reading is regarded in a

serious light. Thus, making it compulsory for students to read, even those who do not like reading, may change their views when they (hopefully) realise that reading can be an enriching experience.

From responses to the questionnaire it was clear that the UNAM library is the only one our students are members of. As this library stocks only books of an academic nature, another suggestion is to encourage a reading culture among students all over UNAM, and to open up a wing in the main UNAM library that would stock only books students could borrow for pleasure reading purposes.

5.4 Limitations of the study

The biggest limitation of the current research is the fact that the while the students in the intervention group received four hours of extra instruction (in other words, 8-hours a week), those in the control group only had four hours of instruction per week in the UCE class. Due to timetable clashes of students in the control group as well as my own heavy teaching load, it was not possible to fit in an extra four hours a week to meet the control group. In order to test the efficacy of an intervention, one should ideally have a control group that receives the same amount of instruction as the intervention group, but does something different. For example, in my case, the control group could have had instruction in grammar. However, the fact that my control group had fewer hours of instruction compared to the intervention group was due to reasons beyond my control. Future intervention studies to be conducted should keep this in mind.

In addition, again due to certain factors beyond my control (cf. §.3.2), the students in the current intervention and control groups were from mixed fields of study. This lack of homogeneity, created problems firstly in terms of selecting one course for selection of materials to use in the intervention, and secondly, to select one major course to use for the comparisons of their academic results. In the current research, I had to compare various main subjects, depending on the field of studies of the participants. For some courses, very little reading needs to be done (such as Accounting) and for others, a lot

more (such as Education). If a more homogeneous group of students, all studying the same course had been used, more course-specific materials could have been used in the intervention program. As a result, more content related texts and vocabulary may have resulted in a greater effect on the academic results of students. This lack of homogeneity could therefore also be a possible reason for the acceptance of the null hypothesis of H3.

Another limitation refers to the way questions were asked in the questionnaire. Questions did not refer to English specifically, but to languages in general. In this way it was not always clear whether responses related to literacy in English or the MT. Another limitation related to the questionnaire is the halo effect in research (Tuckman, 1998:224). It relates to the responses of participants in the sense that participants may often give answers based on what they think the researcher wants to hear. This possibility should be kept in mind when questionnaires are used as probing methods and more needs to be done to establish the authenticity of responses, such as through follow-up observations and interviews.

Additionally, due to the lack of standardised reading tests in Namibia, I set the reading tests used in the current research myself. Although the design of this test was theoretically informed from previous research on reading, the tests I developed to determine the reading scores of students should have included more questions within the different sections. This would have allowed me to give more detailed differences in performances in each section, rather than having just a general mark for improvement or not. One would then have been able to see which sections students benefited from the most and this could have been used for further research. In order to compensate for these factors, to some extent, regular informal interviews were held with participants in the intervention group to establish their views on the various parts of the intervention.

Due to a very full timetable for students and my own heavy teaching schedule, tests could only be administered during class time. As a result of absenteeism during UCE lessons, not all students that answered the questionnaire wrote the tests. Similarly, not

all those who wrote the pre-test also wrote the posttest, and only the scores of those who wrote both were finally used in the comparisons. This resulted in a decrease of 53 participants from the original sample of 108.

Admittedly, an overall shortcoming in the current research is that 10 weeks are very short to develop reading skills in such a way as to have a durable effect on participants. As a result, it was also not possible to include a test on the reading rate improvements of participants. Future researchers should keep this in mind.

An added limitation is that this was a small-scale study that used only a small sample of the UNAM student population. Further research should be done on a larger scale to establish the reliability of the results obtained.

5.5 Implications for further research

This study mainly demonstrated that reading skills among students could be improved through an intensive reading program. However, two main considerations for future research emerged from it. Firstly is the fact that a reading intervention program should ideally take place over a longer period of time, especially if one wants it to impact on the academic performance of students. Secondly, if only a short time is available for reading interventions, it should rather be concentrated on fewer aspects of reading. In such a way, researchers could pay more attention to developing specific aspects of skilled reading.

From the responses of students about which of the aspects of the intervention they found the most useful as well as my own observations over the years, it appears as if the one area many Namibian students need special assistance with is vocabulary development. As mentioned earlier (cf. §4.5.3), most students could only really comprehend the other aspects that the intensive reading component focussed on after certain terms were explained to them. More research needs to be done in teaching students strategies to cope with unfamiliar vocabulary, as well as examining the effects of introducing them to the various word lists available (cf. §2.7).

If future reading intervention programs focus on various skills, more attention should be given to designing more items that tap into specific aspects of reading (e.g. anaphoric resolution, understanding semantic clues, etc.) in order to compute the effects of each reading skill on the overall reading progress of participants. This would assist lecturers at the Language Center to establish which sections of reading students benefit more from, as well as which aspects of reading they need the most assistance in. Knowing this would allow course designers to create courses that students would benefit from more tangibly.

It would be of great interest to examine the effects of teachers on the reading performance of learners at schools. Similarly, the effects of parental involvement in providing children with more pre-literacy experiences is an area that also merits research in developing countries.

Researchers that make use of questionnaires in studies about reading should be aware of the 'halo-effect' and perhaps complement responses from questionnaires with informal interviews in order to ensure the authenticity of responses.

Finally, since the ultimate aim of teaching reading at university is to assist students to do better in their academic courses, more comparisons between the reading scores of students and their academic performances are needed. Similarly, the correlations between reading and writing skills, writing skills and academic performance, UCE results and academic performance and UCA results and academic performance could also be determined to get data about the value of the courses offered at the Language Center. In such a way, it could be established if the Language Center meets its aims in terms of assisting students to perform better in their other courses.

5.6 Conclusion

Reading is not only important for academic success, it is the very process whereby learning occurs. Due to underdeveloped literacy skills, many university students cannot read at acceptable levels to cope with the lengthy expository texts that they

need to comprehend in order to perform academically. Reading has been singled out as the most important skill, as research consistently shows that better readers also perform better academically. It is only once students can read with comprehension that they will be able to produce quality assignments and obtain good grades in tests and examinations, as reading essentially develops the ability to read to learn.

However, as the main reason for the establishment of the Language Center was to assist students at UNAM to cope better in their academic courses, lecturers who teach reading should become aware of their role in assisting students to become better readers. Although this role has traditionally been assigned to primary school teachers, reading is a process that develops over the years, and we should do everything in our abilities to mature and develop the literacy levels of our students to their full potential.

In the mean time, it is imperative for stakeholders in the Namibian primary education phase to realise that something needs to be done to remedy the situation at print-impooverished schools in order to assist out learners to develop their CALP skills from an early age.

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Appendix A

Letter of permission from Head of Department

18 January 2004

To Whom it May Concern

I, the undersigned hereby hereby wish to confirm that Ms L Willemse has permission to make use of volunteers from her UCE classes to participate in her proposed research. She may also be allowed to instruct three UCE classes for this semester for the purposes of her research.

Ms O Ipinge

A handwritten signature in black ink that reads "O. Ipinge". The signature is written in a cursive style with a large, looped 'O' and a trailing flourish.

H.O.D. Language Centre

Appendix B
Contents of the Contents of English Communication and
Study Skills: UCE 3119

English Communication and Study Skills: UCE 3119

The UCE is intended to cater for those students who arrive at UNAM with the minimum of a C symbol in English at the IGCSE level.

Contents:

Language functions (language use in various contexts)

Basic concepts in language usage

Dictionary skills

Vocabulary development

Basic reading, skimming and scanning

Writing sentences and coherent paragraphs

Listening to lectures and taking short notes

Giving oral presentations on general topics

Library information skills

(UNAM prospectus: 2002).

Appendix C
Sample of questionnaire to students

Reading questionnaire

Dear Students,

I would like to find out more about the reading habits and attitudes of our UNAM students. Please help me in this regard by doing the following:

- i. Complete the Reading Questionnaire .
- ii. Answer the questions in the spaces provided.
- iii. Please try to answer each question as well and as **honestly** as you can, and give **your own** answers. I am interested in finding out what **your** attitudes, interests and habits are with regard to reading - it won't help me if you make up answers or give us answers that you *think* I will like!
- iv. Please return the completed questionnaire to me.
- v. Please remember to write your name and student number in the spaces provided.

Thank you for your assistance and cooperation.

Best wishes

L Willemse

2063892

16. List two books (title and author) that you have recently read that you found interesting or enjoyable.

19. How many books (approximately) do you have in your home?

about 50

about 20

about 10

none

23 When you come to a word you do not understand in your study unit or prescribed book, what do you usually do?

I usually try to guess the meaning from the context.

I usually look it up in a dictionary and try to remember it.

I usually look it up in a dictionary and write the meaning above the word in my book.

I usually skip the word and continue reading.

I usually ask someone what it means.

24. How would you classify yourself as a reader, generally?

I'm a fast, highly-skilled reader and I seldom have problems understanding what I read.

I regard myself as an average reader - I understand most of what I read.

I read quite slowly but I usually understand most of what I read.

I read quite slowly and I often have problems understanding what I read.

I struggle with my reading. I read slowly and most of the time I don't really understand what I'm reading.

25. When reading your textbooks and course guides which of the following things do you do *before* reading? Tick as many options as are relevant.

See how many pages I must read.

Look up all the difficult words in the dictionary.

Make some guesses about what the reading is about .

Read the title to see what the chapter is about.

Look at pictures , headings and subheadings to get a general idea of what the reading is

Check to see that no pages are missing.

Thank you for your cooperation.

Appendix D

A sample of the reading tests

PRE-TEST ONE

Name: _____

Student Number: _____

Slot: _____

Instructions to candidates:

This test includes three sections.

Please answer all questions on the answer sheet provided for you.

Section A

Look at the following example carefully:

Male domain refers to the mistaken idea that some school subjects are exclusively for males and that females should not take **them**.

This has led to many females shunning these subjects, and consequently careers in which **these** subjects are a pre-requisite in favour of **those** they believe are appropriate for females. **It** has also been extended to employment where some jobs, especially **those** that require manual work, are regarded as masculine and not for any respectable lady to do.

From Introduction to Issues in Education, Module 3.

Now, read through the following paragraphs and do the same. In other words:

- Underline the words to which the words in bold refer to.
- Draw arrows to show how these words are linked.

In March 1898 representatives of several illegal Marxist groups met in Minsk to establish the Russian Social Democratic Workers' Party. **Its** leaders, however, were almost immediately arrested by the police, and the Social Democratic movement took political shape among Russian exiles in Western Europe. **At its** second congress in 1903 there appeared a rift between the followers of Lenin and the rest. Lenin maintained that the party should be confined to full time 'professional revolutionaries', while others preferred a mass working class party as **their** aim.

Lenin took for **his** faction the name Bolshevik (derived from *bolshinstvo*, 'majority'), because **it** had won a majority in the election of the party's key bodies. **His** opponents became known as Mensheviks (derived from *meshinstvo*, 'minority'). In fact, in the following decade the factions within the movement were extremely adaptable, and no single group for any length of time had clear majority support among the party membership.

The different Populist illegal groups in Russia also made efforts to unite, and at a conference held in 1902 in Switzerland **they** formed a Party of Socialist Revolutionaries S.R.'s). **This** party's leadership came principally from the intelligentsia. **Its** aim was to appeal above to all the peasants, whereas the Social Democrats laid the main on the industrial working class. In practice it was hard to establish contact with peasants, because of **their** scattered distribution and the ease with which the police could observe the entry of strangers into villages. Consequently, the S. R.'s, no less than the Social Democrats found **their** mass support in the cities.

Adapted from : Reading skills for Social Sciences

Section B

Now, please answer the following questions about the text above:

- 1 In your own words, explain why the Bolshevik and the Mensheviks were formed.

- 2 Complete the following sentence by **deleting** the wrong word in brackets:
The Party of Socialist Revolutionaries was formed (before/after) the Russian Social Democratic Workers was established.

The Party of Socialist Revolutionaries (and/ but not) the Russian Social Democratic Workers have most of their supporters based in cities.

PRE-TEST TWO

Name: _____

Student Number: _____

Slot: _____

Instructions to candidates:

This test includes three sections.

Please answer all questions on the answer sheet provided for you.

Section A

In this section, your reading speed will be tested. Please keep the following in mind:

- Do not read the passage on the next page until I tell you to start.
- Read at a comfortable pace so that you will be able to answer the questions based on the passage afterwards.
- When I tell you to STOP reading, draw a circle around the word that you were reading when you stopped.
- Afterwards, continue reading as usual again and answer the questions that follow.

Now, please answer the following questions:

1. A good title for this text would be _____
 - a. The Myths of Old Age
 - b. The Misery of Old Age
 - c. The Joys of Old Age

2. The percentage of elderly people in the American population is increasing because:
 - a. people are living longer
 - b. couples are having fewer children
 - c. both *a* and *b*

3. Which of the following may not actually be lost in old age, although it often appears to be?
 - a. hearing
 - b. memory
 - c. mental speed

4. One advantage of being elderly that is mentioned in this text is that the elderly
 - a. can look forward to the excitement of remarriage
 - b. can afford to pay people to look after them
 - c. often have children who can give them financial and practical support.

5. What percentage of people over 65 in America live in special nursing homes for the aged?
 - a. percent
 - b. 20 percent
 - c. 40 percent

Late Adulthood

The transition to what we are calling late *adulthood* generally occurs in our early to mid-60s. Perhaps the first thing we need to realise is that persons over the age of 65 comprise a sizable proportion of the population in the United States. More than 25.5 million Americans are in this age bracket, and the numbers are increasing by an average of 1,400 per day (Kermis, 1984; Storandt, 1983). Given the fact that people are living longer, coupled with the declining birth rates in this country, it is no surprise that the U.S. population now included a greater percentage of people over the age of 65 than ever before. In 1940, fewer than 4 000 Americans were more than 100 years old, but by 1986, nearly 40 000 reached that milestone. And this trend should continue for some time. By the year 2020, Americans over 65 will make up nearly 20 percent of the population (Eisdorfer, 1983).

Compensating for losses

Ageism is the name given to the discrimination or the negative stereotypes that are formed on the basis of age. Ageism is particularly acute in our attitudes about the elderly. One misconception about the aged is that they live in misery. Yes, there are often some miseries that have to be attended to. Sensory capacities are not what they used to be. But, as Skinner(1983) suggests, 'If you cannot read, listen to book recordings. If you cannot hear well, turn up the volume of your phonographs (and wear headphones to protect your neighbours.)' Many cognitive abilities suffer with age, but others are developed to compensate for most losses.

Apparently memory loss may reflect more a choice of what one chooses to remember rather than actual loss. There is no doubt that mental speed is lost, but the accumulated experience of years of living can, and often does, far outweigh any advantages of speed (Meer, 1986). Yes, death becomes a reality. As many as 50 percent of women in this country over 65 are widows. But many elderly people (3 000 in 1978) choose this time of their lives to marry for the first time (Kalish, 1982).

Yes, children have long since 'left the nest', but they are still in touch, and now there are grandchildren with whom they interact. Moreover, they are more able and likely to provide support for aging parents. In fact, only about 5 percent of Americans over the age of 65 live in nursing homes, and fewer than 20% are unable to get around, to come and go as they please (Harris, 1975). Yes, many individuals dread retirement, but most welcome it as an opportunity to do those things they have planned on for years (Haynes et al, 1978). Many people over 65 become more physically active after retiring from a job where they were tied to a desk all day long.

SECTION B

Read each of the paragraphs below. In each case, a sentence has been omitted (left out) from the paragraph. The omitted sentence is given at the bottom of each paragraph. Indicate in the paragraphs by means of an arrow like this \wedge , where in the paragraph you would insert the omitted sentence.

N.B. The sentence can be inserted at the beginning, anywhere in the body, or at the end of the paragraph.

For example:

Economics is concerned with the production of goods and services. It deals with such factors as the flow of money and the relationship of prices to supply and demand. \wedge Neither do they study business enterprises as social organizations.

Omitted sentence:

Few economists, however, pay much attention to an individual's actual behaviour or attitude toward his or her job or toward money.

Now, do the same with the following paragraphs:

a. Although we often assume that old age brings with it the curse of poor health, a 1981 Harris survey tells us that only 21 percent of the respondents over 65 claimed poor health to be a serious problem. So although health problems are more common, they are not nearly as widespread or devastating as we may think. It should also be noted that poor health among the elderly is very much related to income and educational levels.

Omitted sentence:

That compares to 8 percent in the 18 to 54 age range and 18 percent in the 55 to 65 age range.

In one case study (Kalish and Reynolds, 1976), adults over 60 did more frequently think and talk about death than did younger adults surveyed. However, of all the adults in the study, the oldest group expressed the least fear of death, some even saying they were eager for it.

Omitted sentence:

Although elderly people may have to deal with dying and death, they are generally less morbid about it than are adolescents (Lanetto, 1980).

As the middle years of adulthood approach, many aspects of life become settled. They have chosen their life-style and have grown accustomed to it. They have a family. They have chosen what it is to be their major life work or career.

Omitted sentence:

By the time most people reach the age of 40, their place in the framework of society is fairly well set.

2 The sentences below all belong in the same paragraph, but unfortunately their order has been scrambled (mixed up). You must try to make sense of each paragraph by re-arranging the sentences into their correct order. Write down the correct order of the sentences, as indicated below. (N.B. Do not write out the sentences, just the order in which they should follow each other.)

- (i) a. These changes can give you a clue as to the possibility of drug abuse.
- b. For example, a change in behaviour, which can be sudden or gradual.
- c. For a person who is a regular user of drugs, there will be noticeable changes in his life.

d. Furthermore, school performance changes.

This paragraph should be arranged in the following way :

1. _____ 2. _____ 3. _____ 4. _____ (4)

(ii)

- a. These may come from the home, the community, peers or from academic demands.
- b. This compounds their difficulties further.
- c. Today, the school-going youth are experiencing a lot of pressures.
- d. At the same time they are in a stage of development, which is characterised by diverse personal problems, which often interfere with all the others.

This paragraph should be re-ordered in the following way :

1 _____ 2 _____ 3 _____ 4 _____ (4)

TOTAL: Pretest 1 + Pretest 2 = 49

Appendix E

Sample of questionnaire to lecturers

READING QUESTIONNAIRE

8 What is your attitude to reading?

I really enjoy reading and I read a lot.

Reading is OK. I sometimes read a book or magazine.

Reading is OK, but I don't really read much. I only read when I have to .

Reading is a problem for me and I don't enjoy reading at all.

9. How would you classify yourself as a reader, generally?

I'm a fast, highly-skilled reader and I seldom have problems understanding what I read.

I regard myself as an average reader - I understand most of what I read.

I read quite slowly but I usually understand most of what I read.

I read quite slowly and I often have problems understanding what I read.

I struggle with my reading. I read slowly and most of the time I don't really understand what I'm reading.

10 Which of these statements best capture your view of the role of theory in the teaching of reading:

“To tell the truth, I really don’t pay much attention to this whole theory business. I’m a teacher so I know what to do in class.”

“Well, I get very confused. I hear them talking about top-down and bottom-up reading and terms like that; I don’t understand it, I just teach from the study guides.”

“The reading course in my own studies was based on theory, so I understand the issues. But I really learned to teach reading in the practicum.”

“It’s important, no doubt about it. I mean, everything that we do has a theoretical foundation. Isn’t that right?”

11 How much do you know about the reading habits of your students?

A lot, since I regularly ask them when I meet them for the first time.

A lot, since I their results in comprehension tests are clear indications of that.

Not so much. I never have enough time to get to finding out about that.

12 What, do you think, is the biggest reason for the poor reading performance of our students?

Lack of back ground knowledge

Difficult vocabulary

Unfamiliarity with the structure of academic texts.

Students do not know how to read.

Any other reasons? _____

13. Do you think it is the responsibility of a university lecturer to teach students how to read? Please provide a reason for your answers.

Yes, _____

No, _____

14 How do you feel about making class time available for students to read the texts in their study guides that are used for comprehension exercises?

Good idea, but they have to read after class or else the syllabus will not be completed.

As much time as they need. I think it is important to make time for reading.

Only a limited time since they have to be able to read fast .

Thank you for your cooperation.

Appendix F

Sample of questions asked in informal interviews with students

Intervention group:

- a. Can you see an improvement in your reading skills since the beginning of the intervention program?
- b. Why did you become part of the experimental group?
- c. Which of the topics dealt with so far do you find the most useful?
- d. Do you think this intervention is helping you in your UCE and other academic courses?

Control group

- a. Can you see an improvement in your reading skills since the start of the UCE course?
- b. Which part(s) did you need more activities in?
- c. Why did you not become part of the experimental group?

Appendix G

Samples of handouts used during extensive reading course

Extensive Reading Course

Reminders:

To every lesson, I need to bring the following:

- My reading file
- My mini dictionary

Every week I need to do the following:

- Read an article from a magazine/journal/newspaper and write it up in my journal.
- Look up and write down the meaning of at least two words from the article.
- Learn 10 new words and their meanings and write them in my mini dictionary (little black book). These words can come from anything I read or hear.
- Exchange my 10 words with my reading buddy. In other words, give him/her my 10 words and get 10 words from him/her.
- Make sure I attend and prepare for my next reading lesson.

Every month I need to:

- Read a new book

Reading Record: Book

Name: _____

Student

number: _____

Date when you started reading the book: _____

Date when you finished reading: _____

Title of book: _____

Type of book: _____

Main Characters: _____

Short summary of

book: _____

List five new words and their meaning that you gained from reading this book:

New word	Meaning

Would you recommend this book to a friend? Why/not?

How would you rate this book?

Boring

Interesting

Thought-provoking

Gripping

Tutor's comments:
