DETERMINING THE ACADEMIC READING NEEDS OF TEACHER TRAINEES OF ENGLISH AT ISCED-HUÍLA, ANGOLA

by

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DECLARATION

I declare that Determining the Academic Reading Needs of Teacher Trainees of English at ISCED-Huíla, Angola 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.

___________________________________________  15/04/2014

(Mr. Joaquim Sapalo Castilho Cacumba)
DEDICATION

I dedicate this dissertation to my wonderful and beautiful wife, Liz, with profound love, respect, admiration and devotion, to our cute daughter, Danny, and to our lovely son, Faby, the two wonders and joys of our lives.
ACKNOWLEDGEMENTS

The long journey of my Master’s study has ended. At this stage of the research process, words are often too short and too simple to carry out our deepest feeling. But, this paper only appears in its current form due to the assistance and guidance of several people. Therefore, it is with great pleasure that I express my deep and sincere gratitude to everyone who, in different ways, has immensely contributed to the successful completion of this dissertation.

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ABSTRACT

The purpose of this dissertation was to implement a needs analysis and on the basis of the findings come up with a framework consisting of practical stages and processes, for determining the academic reading needs of teacher trainees of English, at Instituto Superior de Ciências da Educação da Huíla (hereafter, ISCED-Huíla), a higher teacher training institution in Lubango, in southern Angola. The investigation was initially prompted by the lecturers’ perceptions that the academic reading level of undergraduate teacher trainees in Angola was inadequate for the demands of tertiary level study. A scientific approach to investigating the needs of these students was thus adopted. A needs analysis was undertaken in order to determine, in a systematic manner, the academic literacy levels of the students, their attitudes towards reading, the reading strategies they claimed to use when reading academic texts, their academic reading lacks and needs, and the teacher trainers’ perceptions and opinions on the students’ reading competence in specific reading sub-skills, and on university needs analysis procedures. In all, 45 first-year teacher trainees and 5 teacher trainers were involved in the main study. The teacher trainees were required to answer the Accuplacer test, an academic literacy standardized assessment. Both teacher trainees and teacher trainers completed a corresponding questionnaire survey. The findings showed that, among others, first, teacher trainees’ academic literacy levels were below expected from a tertiary level reader; second, there were certain discrepancies between what teacher trainees and teacher trainers considered to be the needs, skills and lacks of the teacher trainees; and third, academic literacy and academic reading skills should be developed in both L1/Portuguese and L2/English. Therefore, a framework for determining the academic reading needs of teacher trainees, for syllabus and programme development and evaluation is presented. It is hoped that the results of the study will be of assistance to English for Academic Purposes (EAP) reading professionals and to teacher educators, especially those in developing countries, involved in selecting, adapting and designing teacher training programmes, materials and tasks in order to improve academic literacy levels in their countries, schools and universities where English is taught as a foreign language.

Keywords: Angolan EFL context; ESP; EAP; Needs analysis; Needs analysis framework; Reading; Academic context; Academic literacy; Academic reading needs
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LIST OF ABBREVIATIONS

AL – Additional Language

BC – British Council

EAP – English for Academic Purposes

EEP – English for Educational Purposes

EFP – Escola de Formação de Professores

EGAP – English for General Academic Purposes

EGP – English for General Purposes

ELT – English Language Teaching

EOP – English for Occupational Purposes

ER – Extensive Reading

ESAP – English for Specific Academic Purposes

ESP – English for Specific Purposes

ETETP - English Teacher Education and Training Project

IMNE – Instituto Médio Normal de Educação (Currently EFP)

INIDE – Instituto Nacional de Investigação e Desenvolvimento do Ensino

IoL – Institute of Languages

IR – Intensive Reading
ISCED – Instituto Superior de Ciências da Educação

ITTP – Initial Teacher Training Project

LoLT – Language of Learning and Teaching

SORS – Survey of Reading Strategies

NA – Need Analysis

ODA/ DfID - Overseas Development Administration/ Department for International Development

RS – Raw Score (of the Accuplacer test)

SS – Scale Score (of the Accuplacer test)

TEFL – Teaching English to Speakers of Other Languages

UAN – Universidade Agostinho Neto
CHAPTER 1: GENERAL INTRODUCTION TO THE STUDY

1.0. INTRODUCTION

The main objectives of this chapter are to identify the research problem, briefly outline the theoretical framework to the research problem, to provide information on what prompted this study, to describe the research context and to embed it within education developments in Angola, to present the statement of the research problem, to outline the methodology of the research, and finally to indicate the structure of the rest of the dissertation.

1.1. BRIEF THEORETICAL FRAMEWORK

According to Mei-Yun (1994: 182) “… the first thing for the teacher of … reading to do is to find out the weaknesses or problems of her students.” In fact, it is often believed that courses should be designed with the idea of addressing academic literacy problems faced by students. Despite the lack of research in this area in the local context, my own experience tends to show that reading problems in the Angolan educational system range from primary school to university level, both in Portuguese and English. I could also notice that as to the English language, this problem can be considered as a carry-over malady from lower to higher levels, even in institutions like ISCED-Huíla where the language is used as a medium of instruction for most of the subjects of the course in Teaching English as a Foreign Language (TEFL). In order to mitigate that, the TEFL teacher training curriculum at ISCED-Huíla (the institution where I teach) includes not only subjects which aim at the development of teaching skills but also of the English language, for academic and general purposes.

It is by now axiomatic that studying or working in English-dominant contexts requires high levels of English proficiency. Increasing numbers of adults must learn English as an Additional Language (AL) both as an object of study and as a means for learning and doing other things, such as studies, work, and interpersonal communication (Benesch, 1996; Holme and Chalauisaeng, 2006; Spector-Cohen, Kirschner and Wexler, 2001; Tajino, James and Kijima, 2005; Waters, 1988). The study context requires not only proficiency in English as a language of learning and teaching, but also an ability to read academic texts fast and effectively. As far as English for Academic Purposes (EAP) is concerned, Carrell (1988: 1) stresses that

In … teaching/learning situations for academic purposes, especially in higher education in English-medium universities or other programs that make extensive use of academic materials written in English, reading is paramount. Quite simply, without solid reading
proficiency, second language readers cannot perform at levels they must in order to succeed, and they cannot compete with their native English-speaking counterparts.

Considering the above role of reading, several higher institutions all over the world aim to prepare non-native teacher trainees for English-medium academic reality. For example, in Angola in 1997 the department of English at ISCED-Huíla in Lubango started reviewing the teacher training programme by introducing English as the medium of instruction for the so-called nuclear subjects of the course, like Literature, Linguistics, Sociolinguistics and Educational Management, which had been taught in Portuguese until then. This process was only completed in 2004. After 2004, teacher trainees were obliged to study most subjects in English. At ISCED-Huíla of the total number of 35 subjects that are part of the 4-year undergraduate English Language Teacher (ELT) education course, 22 (almost 70%) are taught in English, 10 are taught in Portuguese and 3 in French. In other words, the language teacher trainees of English at tertiary level at ISCED-Huíla are now constantly engaged in EAP reading activities because they are required to read content-area textbooks and other genres that are necessary in their field of study and which contain a substantial amount of specific conventions and terminology. Therefore, they are expected to be familiar with the specific conventions of English academic discourses in order to successfully acquire and learn their disciplinary knowledge. Needless to say, they are not only expected to read and comprehend in English for their subject courses, but they are also expected to accomplish tasks using academic reading skills in English. In fact, in any academic or higher learning context, reading is perceived as the most critical academic language skill.

In addition, the emergence of the communicative language teaching approach and the task-based teaching in the last 40 years have had implications for the design and flexibility of curricula, course contents, and interactivity of the learning process. One of them is the growing need to encourage higher education institutions and academic staff to place students at the centre of their thinking and at the heart of the teaching and learning process. Teachers and course designers must design more effective AL programs.

To this day, the catchword in ELT and English for Specific Purposes (ESP) contexts is both learner-centered and learning-centered, i.e. with the student squarely at the centre of the approach to second/foreign-language teaching and learning. Identifying and analyzing language-learning or student needs are viewed as important in achieving the success of this paradigm (Belcher, 2006; Brindley, 1989; Long, 2005; Richterich and Chancerel, 1980; West, 1994). Richterich and Chancerel (1980: 4-5) state that:
Everything starts from him [the student] and everything goes back to him. It is not merely in relation to him, but with him, and depending on his resources (time, available cash, personality, etc.) that his learning objectives will be defined, that the methods of judging when and how they have been attained will be selected, and that a curriculum of learning (by curriculum we understand all the means employed to attain the objectives: teacher, teaching materials, technical aids, methods, timetable, etc.) will be made available to him.

The corresponding assumption in teacher education is that students will eventually teach in the way that they were taught (Johnson, 1995). In other words, putting the student at the centre of the learning process should be practised in both classrooms: the pre-service classroom for English language teacher trainees and the school classroom for English language learners. Nowadays, rather than simply focusing on language delivery methods, more attention should be given to the ways learners acquire language and the differences in the ways that language is acquired (Hutchinson and Waters, 1987: 18-9).

This focus on learner- and learning-centredness led to the discipline of needs analysis that is expected to be used at the stages of curriculum adaptation, creation, emendation, alteration and implementation. The importance of needs analysis is mentioned by several specialists (Brown, 1995; Hutchinson and Waters, 1987; Jordan, 1997; Kaewpet, 2009; Robinson, 1991; Spector-Cohen, Kirschner and Wexler, 2001).

According to Brown (1995: 21), a logical outcome of a thorough study of learners’ needs in a language program should be twofold. First, goals should be specified so that general statements can be made about what is to be accomplished. Second, precise statements about what content or skills students must master to attain those particular goals should be made.

In sum, the above factors, namely my own experience with Angolan students, the crucial role of reading for academic success and for becoming a teacher, and the importance of needs analysis in curriculum design, were all reasons that prompted the need to conduct this research study.

1.2. MOTIVATION FOR THE RESEARCH PROBLEM

The motivation for this study originates from a desire to update and improve an existing English for Specific Academic Purposes (ESAP) reading programme which I present to teacher trainees. I thus assume the role of teacher/lecturer researcher. The study bases its theoretical and practical perspectives on some fundamental features of ESP, EAP, reading, needs analysis and frameworks of needs analysis.
There are several ways to determine whether or not a [research] problem really exists. Reid (2000: 72) proposes four effective ways to determine its existence: (a) informally asking other people in the institution, city, or classroom whether or not they are aware of the problem; (b) designing a survey to ask about the existence of the problem formally; (c) asking students at other colleges or universities or through the Internet, whether or not the problem exists on their campuses; and (d) searching library resources and/or the World Wide Web for information about the problem. After having done all the above, I can affirm that my experience as an ELT professional deepened my understanding of the role of reading for academic success and the role of reading for a teacher trainee, as well as the role of needs analysis in programme design.

In fact, this dissertation emerged from my involvement since 1993 in English language teaching, teacher preparation and administration at lower secondary school (Grades 7 and 8), higher secondary schools (Grades 9 to 12) and undergraduate university institutions (Years 1 to 4), all in Lubango, Angola. In these institutions I taught several subjects including English, ELT Methodology, Teaching Practice, ELT Teacher Training Methodology, Academic Reading Skills, Academic Writing Skills, Educational Administration and Management. Related activities while working at university included working as a syllabus designer, curriculum innovator and designer. The needs analysis (NA) reported in this study represents the first attempt in the Angolan educational context to implement a NA in a scientific manner.

1.3. RESEARCH CONTEXT
To properly contextualize the study, this section first describes the broader Angolan situation very briefly, its educational system since 1975, higher education in Angola, and finally it sketches the Teaching English as a Foreign Language (TEFL) course at ISCED-Huíla.

1.3.1. Brief description of Angola
This subsection gives a brief outline of Angola as a country, namely, its geography, demography, history, economy, culture, and its languages.

1.3.1.1. Geography
The Republic of Angola is located on the western coast of Southern Africa, south of the Equator. It is bordered by the Republic of the Congo (Brazzaville) to the north, by the Democratic Republic of the Congo (DRC) and the Republic of Zambia to the east, by the Republic of Namibia to the south, and by the Atlantic Ocean to the west. It is the fifth largest country in
Africa. The country is divided into 18 provinces and 163 municipalities. Figure 1.1 on page 5 gives further details of Angola, its main cities and boundaries.

![Administrative map of Angola](image)

Figure 1.1: Administrative map of Angola (Nations Online Project, 2013)

### 1.3.1.2. Demography

The size of the country’s population is not really known, given that Angola has not had a census since 1970 and also due to the disruptions of a 30-year civil war. However, according to the revision of the World Population Prospects (2011) the total population was around 19,082,000 in 2010, compared to only 4,148,000 in 1950. The National Institute of Statistics (Instituto Nacional de Estatística - INE) estimated the population to be 16,000,000 in 2010 with a growth rate of 2.8% per year (INE, 2009).

By 2010, about 46.6% of the population was aged younger than 15 years, approximately 50.9% was between 15 and 60 years of age, while 2.5% was 60 years or older (World Population Prospects, 2011). In 2007-2008 the INE (2009) carried out a Joint Multiple-Indicator Cluster Survey and Household Income and Expenditures Survey (Inquérito sobre o Bem-Estar da
População - IBEP). The findings tend to show that 54% of the population is under 18 years old and 55% live in urban areas. Luanda is the capital city of Angola (with about 5 million inhabitants) and the other three largest cities are Huambo, Benguela and Lubango.

ISCED-Huíla, where this study took place (see §1.2.3 and §1.2.4 below), is located in Lubango, the capital city of the province of Huíla, in south-western Angola. Lubango is the fourth largest city of Angola, with a population of about 1.5 million inhabitants. It is on the Namibe Railway and it is served by an international airport and roads which link it with neighbouring cities of Huambo, Benguela, Ondjiva and with Namibia and other foreign countries.

1.3.1.3. History
Angola attained its independence from Portugal on 11th November 1975, after 500 years of colonization and 14 years of armed struggle. Just after independence, fighting between the Popular Movement for the Liberation of Angola (MPLA) and the National Union for the Total Independence of Angola (UNITA) broke out and Angola went through a devastating civil war. Peace seemed imminent in 1992 when Angola held the first democratic national elections, but the fighting was renewed after the publication of the results from the polls. During this fratricide war which lasted about 27 years, up to 1.5 million lives may have been lost, approximately 4 million people internally displaced, with 30,000 refugees in neighbouring countries, many people maimed, there are mine victims, a considerable number of orphaned and abandoned children, an increase of poverty, and destruction of the socio-economic infrastructures (De Souza, da Silva, Dillman, Guedes and Leite, 2011; Foley, 2007; FAO, 2002).

However, the war came to an end in April 2002, with the signing of the cease-fire agreement. Since then, Angola has entered the road to stability. The country is rapidly rebuilding and the reconciliation between previously warring factions has basically been achieved. We are currently witnessing a postwar reconstruction boom, and the resettlement and reintegration of displaced persons. This has led to high rates of growth, mainly in education, health, agriculture and construction.

1.3.1.4. Economy
Angola is one of the wealthiest countries of the African continent in terms of natural resources - gold, diamonds, extensive forests, Atlantic fisheries, and large oil deposits. It is the second-largest oil producer in sub-Saharan Africa, after Nigeria, and an important supplier to the United States of America. Despite the fact that the country's infrastructure and economy were mostly destroyed by the civil war, they have been gradually rebuilt since the end of the war in 2002.
Therefore, due to the country’s vast supply of these natural resources, Angola is considered to be a forward looking nation with a growing economy.

According to the United Nations Development Programme (UNDP, 2011), Angola’s Human Development Index (HDI) value for 2011 was 0.486 - in the low human development category - positioning the country at 148 out of 187 countries and territories. Between 2000 and 2011, Angola’s HDI value was above the African average and increased from 0.384 to 0.486. With reference to the HDI indicators, between 1980 and 2011, Angola’s life expectancy at birth increased by 10.9 years and expected years of schooling increased by 4.9 years. Angola’s Gross National Income (GNI) per capita increased by about 91% between 1990 and 2011. According to INE (2009), 36.6% of Angolan families live below the national poverty line. However, according to Bertelsmann Stiftung (2012), “most institutions in the country involved in social work believe the actual percentage to be much higher.” A study conducted by the United Nations Children’s Fund (UNICEF, 2012) claims that “only 24% of the population in rural areas has access to safe water while the corresponding figure for urban areas is 59%, and, only 31% of the population in the rural areas has access to adequate sanitation, versus 85% for urban areas”.

The African Development Bank (2012) states that “Angola’s real Gross Domestic Product (GDP) growth increased slightly from 3.4% in 2010 to an estimated 3.5 per cent in 2011, driven mainly by rising oil prices, and a strong non-oil sector real growth of 7.7% which helped to offset the effects of production problems in the oil sector.” Growth is projected to expand to 7.1% in 2013. The government’s efforts in reviving and maintaining political and economical stability are gaining interest from foreign investors and helping to open up the country to increasing international business opportunities.

My teaching experience suggests that these levels of poverty have had a severe impact on literacy levels. For example, very few public and school libraries exist throughout the country and those that exist are poorly equipped. For a country recovering from the ravages of war, reading is rarely encouraged and nurtured at the family, school and broader society levels.

1.3.1.5. Culture

Angola is a blend of ancient African traditions of the central Bantu people, the ancient kingdom of Kongo and of colonial Portuguese influences. Angola is now considered to be a multi-ethnic, multilingual and multicultural country. According to the Economy Watch (2010), the majority of Angolans are Roman Catholics (38%). There are also numbers of Protestants (15%), Adventists and peoples who practice traditional religions exclusively (47%). The Angolan major ethnic
groups or tribes are Ovimbundu, Ambundu, Bakongo, Lunda-Cokwe, Ngaguela, Nyaneka-Humbe, Ovambo, Hereros and there is a small minority of non-Bantu people, the most prominent being the Kung (Bushmen or San). For more details see next page, Figure 1.2, though with some orthographic differences.

1.3.1.6. Languages

One of the impacts of colonialism is the fact that Portuguese has been the official language in Angola since independence in 1975, and spoken by most Angolans as a first or second language, together with Bantu and other African languages. According to Lewis, Simons and Fennig (2013) the “number of individual languages listed for Angola is 39. Of these, 38 are living and 1 is extinct. Of the living languages, 6 are institutional, 16 are developing, 12 are vigorous, and 4 are in trouble.”

The composition of the biggest language groups can be distributed as follows: the Ovimbundu (37%), who speak Umbundu, the Ambundu (25%) who speak Kimbundu, and the The Bakongo (13%) who speak variants of the Kikongo language. Other groups include the Lunda-Cokwe, the Ngangela, N’yaneka-Humbe and Ovambo (22%). A small but significant minority of mestiço, i.e. mixed European and native African (2%) and a small percentage of European (1%) can also be found in Angola most of whom live in larger cities (Lewis, Simons and Fennig, 2013). For further details see Figure 1.2 and Figure 1.3. Most of these languages have corresponding dialects which are internally but not externally intelligible and have their own orthographies.

Figure 1.2: The tribes of Angola (Wikimedia Commons, 2012)
However, most of them do not have the same status as Portuguese because the vast majority of urban children start learning the official language at home, and will continue doing so at school. Even those whose mother tongue is an indigenous language, as soon as they move to school they shift to Portuguese, the sole medium of instruction, and only use their own languages among themselves in informal domains, like family and friendship. According to Article 19 of the Constitution of the Republic of Angola of 2010, the “state shall value and promote the study, teaching and use of other Angolan languages, in addition to the main international languages of communication” (Assembleia Nacional, 2010). Before that, the Ministry of Education had been working hard to introduce some of the mother tongues to be taught as subjects, since 2005. Unfortunately, to date and despite this Ministry’s and other efforts from several sectors of the Angolan government and state, no language planning policy has been officially designed and implemented. Apart from that, access to print materials in these languages is basically non-existent or very scarce. As to foreign languages, English and French are the only other taught languages in the official educational system from Grade 7 up to university level.

Figure 1.3: The major languages spoken in Angola (Lewis, 2009)
1.3.2. The Angolan educational system

After Angola became independent the educational system was in chaos. The country inherited an 85% illiteracy rate from Portuguese colonialism. There were very few teaching staff because most Portuguese instructors had left, several schools were damaged, and there were very few instructional materials (Collelo, 1991; Vieira, 2007). In order to respond to this problem, the government gave education high priority based on Marxism-Leninism, as confirmed by a report of the First Party Congress held in December 1977 (MPLA-PT, 1978).

It is also reported after the independence, the government instituted an eight-year compulsory system of free education, from basic education to secondary education, for children between ages seven and fifteen. Unfortunately, at this time there were only about 25,000 primary school teachers, of which less than 2,000 had minimal qualification to teach at primary school level. The secondary schools were mainly in towns and only 600 teachers were available for this level. (MPLA-PT, 1978).

The main objectives of education at the time were, mainly: (a) shaping the “new generation”, (b) developing national consciousness, (c) developing respect for traditional values, (d) training of persons who would be able to contribute to economic development at all levels, and (e) eliminating illiteracy (MPLA-PT, 1978). Since the Portuguese education system had completely ignored the rural peasants, in 1976 the government also established the National Literacy Commission (i.e. Campanha Nacional de Alfabetização) to eliminate illiteracy in these regions.

In spite of the generalised crisis situation and structure inherited from Portuguese colonialism, three years after independence the then single-party government initiated a process of implementing the new education system that gave rise to a school explosion with a primary schooling enrolment rate higher than 200%. During this period the Angolan Educational System was divided into seven levels (Conselho de Ministros da República Popular de Angola, 1980):

(a) **Preschool Education**
(b) **Regular Education** (made up of three levels: Level 1 – Grades 1-4; Level 2 – Grades 5-6; and Level 3 – Grades 7-8);
(c) **Adult Education** (made up of three levels: Level 1 – Grades 1-4; Level 2 – Grades 5-6 and Level 3 – Grades 7-8);
(d) **Basic Technical/Professional Education** (made up of Basic Professional Training in Grades 7-8);
(e) **Pre-University** (initially to be completed in two years until 1987, and then in 3 years after that);
(f) **High School or Medium Level** (made up of Normal Medium Training in education and Technical Education);
(g) **Higher Education** (made up of undergraduate – *Bacherelato* degree with 3 years, *Licenciatura* degree with 1 year or 2 years).

After almost 23 years of the first educational reform, on 31st December 2001, Angolans saw a new Educational Model approved by the National Assembly and subsequently implemented, the Education System Base Law (*Lei de Bases do Sistema de Educação* 13/01, 31 December, 2001 (Assembleia Nacional, 2001). Correspondingly, a new organigram of the Angolan education system was designed, as can be seen in the organigram in Appendix A (INIDE, 2012). This organigram delineates that education is to be conducted through a unified system formed by 6 subsystems:

(a) **Preschool Education** (made up of two cycles - Day Care and Kindergarten): it is the basis for education, addressing early childhood, between 1-5 years;

(b) **General Education** (made up of two cycles – Primary Education – Grades 1-6 and Secondary Education Grades 7-9); the minimum entrance age is 6 years;

(c) **Technical/Professional Education** (made up of Basic Professional Training Grades 7-9 and Medium Technical Training – Grades 10-13); the minimum entrance age is 12 years;

(d) **Teacher Training** (made up of Normal Medium Training and Higher Pedagogic Education – Grades 10-13); the entrance age is 15 years;

(e) **Adult Education** (made up of primary education, which consists of literacy development, and secondary education which consists of the first and second cycles); beginning at 15 years of age;

(f) **Higher Education** (made up of undergraduate – *Bacherelato* degree with 3 years, *Licenciatura* degree with 1 year, and post-graduate – Masters and PhDs).

This means that the ISCED students (i.e. teacher trainees) belong to this sixth level and they are being prepared to work at the other five lower levels.

From this educational reformulation, we can see that primary education lasts for six years and is compulsory for children aged six to eleven. The official age of entry into the secondary education is twelve years. The secondary education system is divided into two cycles of three years each leading to tertiary or higher education (see some examples in Bauduy, 2008: 12-16). There is a parallel technical education system divided into three years of vocational education (after primary school) and four years of middle technical education lasting for four years.

The Education System Base Law provides for compulsory and free basic education for all. These principles are further developed in the Integrated Strategy for the Improvement of the Education System (*Estratégia Integrada para a Melhoria do Sistema de Educação* (2001-2015) (Ministério da Educação e Cultura, 2001a) and the National Plan of Action for Education for All (*Plano Nacional de Acção da Educação para Todos* (2001-2015) (Ministério da Educação e Cultura, 2001b). These documents basically followed the Dakar Declaration of 2000 and the Millennium Development Goals (MDGs). Access to education is also constitutionally granted to every
citizen, without any discrimination (Assembleia Nacional, 2010). According to the Education for All movement of the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Angolan share of children enrolled in nongovernmental schools is around 2% only, a figure that reflects the willingness of the government to provide all children with free education (UNESCO, 2012).

The Integrated Strategy for the Improvement of the Education System (2001-2015) is also a national plan of action for improving the education system which defines the strategies, the objectives, the actions and goals to be reached in the domain of the Angolan education as a whole up to 2015. As part of this plan the government aims to construct 2000 classrooms and recruit 4000 new teachers every year until 2015. These two documents, coupled with the end of the protracted armed conflict in 2002, enabled the rapid development of education throughout the country. Between 2001 to 2010 the country witnessed a significant rise in the number of secondary and post-secondary or vocational colleges. Around 34,800 new classrooms were built, pupil enrollments tripled from 2 million in 2001 to 6 million in 2010 and teaching staff increased from 58,000 in 2001 to 200,000 in 2010. According to the governing programme for 2013-2017, by 2012 more than 50000 new teachers had been recruited (MPLA, 2012).

Access: Although Angolans access to primary school has substantially improved, completion rates are still poor, at just 47% in 2010. From 71% in 2000, the primary enrollment rate reached 126.8% in 2008 for instance, highlighting the long strides taken in making primary education available to all.

According to the Education for All (EFA) report on Angola, about 1.2 million Angolan children are still being deprived of their basic rights to free quality education (UNESCO, 2012). This is in addition to the many youth and adults who were born during the prolonged civil war and missed several years of schooling or whose schooling was delayed, interrupted or denied. According to this report, only 18.9% of 12-17 year olds are in secondary school; 58.5% are in primary school, and many have no means to regain that lost opportunity. Only 51.6% of the population aged 18-19 has completed primary education.

In order to support these out-of-school youth and adults, the Angolan Ministry of Education conceived and developed the Accelerated Learning Programme (Programa de Alfabetização e Aceleração Escolar – PAAE - in Portuguese). The main purpose of this programme is to provide a second-chance learning opportunity for literacy, numeracy and life skills for adolescents through a condensed primary school curriculum, which can be completed in two-and-a-half years
rather than the full six years of primary schooling. It thus encourages out-of-school adolescents to complete primary education, come back into the school system and continue to the second level.

**Teacher quality:** Just after independence and during the war, people with only Grade 3 or 4 became teachers. In 2000, the eight Millennium Development Goals (MDGs) were approved, arguably the most ambitious developmental undertaking ever embraced by the international community (UN General Assembly, 2000). The MDGs are the world’s targets for addressing extreme poverty while promoting gender equality, education, and environmental sustainability. In 2002, another important agreement was launched - the EFA - Fast Track Initiative (FTI). EAP-FTI is a partnership between donor and developing countries to accelerate progress towards the Millennium Development Goal (MDG) of universal primary education. FTI is built on mutual commitments: (a) partner countries have agreed to give priority to primary education and to develop sound national education plans, and (b) donors have agreed to increase support in a transparent, coordinated manner (World Bank, 2005).

With the approval of these documents on the basic human rights of each person to health, education, shelter and security coupled with the Peace Agreement in 2002, the government felt pressured to meet MDG2 – *Achieve Universal Primary Education* - and to reduce Angola’s teenage illiteracy rate. Therefore, the country began to recruit thousands of untrained school-leavers into teaching. Currently, and even with the increase of intake in teacher training institutions (listed in Figure 1.7), anyone with a Grade 10 education can sit the exam to become a teacher. Furthermore, many Angolan schools are not properly equipped with relevant, quality teaching and learning materials. This obviously affects teachers’ ability to effectively teach and therefore for students to learn.

According to the official Angolan Press Agency (ANGOP, December, 2012), the Ministry of Education plans to increase by 5% the country scholar network in 2013, with the enlistment of 18,000 teachers at national level. In 2002 Huíla Province had about 200 schools, compared to 1,714 schools in 2012. Notwithstanding these increases, 40% of children are still being taught under trees. In order to respond to Huíla’s biggest challenge of getting about 700,000 children into school, the educational system needed more than 19,000. Therefore, in Huíla province alone, 1,900 people were hired to teach in 2012 although, as elsewhere in the country, most of them are not properly qualified because many of them have less than eight years of education and were employed despite only a few weeks of teacher training.
**Equity:** On the basis of gender parity, more attention needs to be given to equity and to the extremely low primary survival rate of just 25.5%. In fact, it is estimated that the gender parity index is 0.81, meaning that for every 100 boys completing primary, 81 girls complete the cycle, which is significantly lower than the African average of 0.91, and indicates that there is considerable scope for improvement in terms of making education available to all, and especially to girls (UNICEF, 2012).

**Funding:** Considering that the Angolan public resources represent 46.4% of the GDP, one would expect that there is not a shortage of resources to invest in education. Nonetheless, the share of the education budget devoted to primary level is only 28.6%, which falls well short of both the regional average of 45.9% and the FTI benchmark of 50%, impairing the country’s prospects of achieving universal primary education. For example, for the 2013 budget, the government allocated 33.5% of it to social spending which includes education, health, housing, environment, and social protection (ANGOP, December 2012). Of this, 8.09% was allocated for education and 5.29% for health. If Angola would like to become a regional power, then over 10% or even much more should be spent on education, as expected by the FTI benchmarks and seen in SADC countries like Lesotho, South Africa and Swaziland. In fact, spending on education and health can produce a very profound impact on national literacy levels. In short, Angola needs to consider revising its intra-sectoral budgetary trade-offs in favor of education.

**Quality:** With reference to literacy levels, the UNESCO Institute of Statistics (UIS, 2010) estimates that 70.1% of Angolan adults and 73.1% of youth are literate. Unfortunately, at least to my knowledge, Angola has not yet joined any organization that applies scientific methods to monitor and evaluate the conditions of schooling and the quality of education. Angola would benefit from participating in one or some of the regional or international organizations or evaluation procedures such as Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ), the International Mathematics and Science Study (TIMSS), the Progress in International Reading Literacy Study (PIRLS), Programme d’Analyse des Systèmes Éducatifs de la CONFEMEN (PASEC) or the Program for International Student Assessment (PISA). In fact, it is generally agreed that these standardized evaluation procedures can provide education policy decision makers with valuable historical, regional and world comparative data to inform quality-oriented policy improvement.

Therefore, we can conclude that the reform of the Angolan educational system is not without its challenges. In fact, according to the UNICEF (2012),
It is estimated that an additional 9,000 six-classroom schools need to be built to meet the expanding demand for education, while 93 per cent of existing schools need to be equipped with water and 40 per cent with sanitation facilities. This must be coupled with tackling issues of school quality - teachers’ training, management, community participation, school health and hygiene, teaching and learning materials – so that schools become more child-friendly and create environments to attract and keep more children in schools.

From the above quotation, one can see that the severe Angolan challenges for access and quality of education may be attributed to weak systems, the need for institutional development, human capacity, infrastructure, and service delivery. In order to address these basic needs and the constant influx of children and adults, a strategic and systematic effort is needed to support the education system in improving access, equity and quality, coupled with appropriate financing, national adoption of best practices and country-level monitoring and evaluation.

1.3.3. Higher education in Angola

In their detailed discussion of the factors affecting literacy, Pretorius and Machet (2004: 47) perceptively argue that “the context within which literacy is taught and acquired will have an effect on the consequent levels of literacy accomplishment.” I believe that the same is true for academic reading, and my students need “English which is somehow peculiar to the range of principles and procedures which define … [the] particular profession [of teaching]” (Widdowson, 1998: 3). Taking that into consideration, this section looks at the research context by briefly describing the historical background to the creation of the present day ISCED-Huíla.

University education was institutionalized in Angola in 1962 with the creation of the University for General Studies of Angola (Estudos Gerais Universitários de Angola) integrated into the Portuguese University (Ministério do Ultramar, 1962). In December 1968, the University for General Studies of Angola was renamed the University of Luanda (Ministério do Ultramar e da Educação Nacional, 1968). Until independence, the majority of the students in higher education were Portuguese or their descendants. In 1974, only an estimated 5% were of other origins.

In 1976, after Angola became independent, the University of Luanda was changed to the University of Angola (Ministério da Educação e Cultura, 1976). Originally founded to produce secondary school teachers, it has expanded significantly to include the faculties of Law, Agricultural sciences, Economics, Engineering, Medicine, Nursing and Modern Languages. The Instituto Superior de Ciências da Educação (ISCED) was created within the Universidade de Angola (Conselho de Ministros, 1980) following the closure of the Faculdade de Letras. At this time, ISCED-Lubango was the only higher teacher education institution in the country, with centres in Luanda, Huambo, Namibe and Uíje.
On 24 January 1985, the University of Angola changed to *Universidade Agostinho Neto* (UAN) in memory of the first President of Angola, who was also the first Rector of the University of Angola (Conselho de Defesa e Segurança, 1985). ISCED-Lubango continued being part of this renamed institution. In the early 1990s, the ISCED centre in Luanda became independent, and opened another ISCED in Cabinda.

In 1992, the Angolan government permitted and even fostered the establishment of private institutions of higher education. Thus, the Catholic Church launched Angola’s first private university, the *Universidade Católica de Angola* (UCAN), in 1997. In this same year, UAN started exercising democratic practice with the first elections for the Rector and Deans of Faculties. The period beginning in 1997 also witnessed the opening of another 22 Institutions of Higher Education, tutored by private entities. This expansion of higher education enabled a tripling of the number of students enrolled in higher education.

In 2009, the Angolan government approved the reorganisation of the higher education system (Assembleia Nacional, 2009a), aimed at meeting the strategic goals of economic, social, technological and community development. With this move, seven academic regions were created to define the operations and expansion of institutions.

Unfortunately, the reorganization also brought with it the loss of the democratic spirit that had been achieved in 1997 (Assembleia Nacional, 2009b), whereby Rectors, Vice-Rectors and Pro-Rectors for the seven regions were now appointed rather than democratically elected, on the Government’s claims that the higher education system needed to be reorganised in a period of four years, i.e., until 2013.

On the positive side, until 2012, the seven regions had a total of 51 institutions, among which 46 are working and the other 5 waiting for the completion of construction of their respective premises. The number of students grew from 13 861 in 2002 to 95 000 in 2008 and 150 000 in 2011. The number of internal bursaries or scholarships increased from 3 000 in 2008 to 9 000 in 2011 and 15 000 in 2012. It was expected that the creation of an additional 6 000 bursaries in 2012 would add to the 2 405 students who are already studying abroad (1 965 studying towards bachelor’s degrees, 146 for master’s and 294 for doctoral degrees in different countries). Another positive aspect is the existence of a document that regulates the whole higher educational system in Angola (Assembleia Nacional, 2009c).
1.3.3.1. The role of ISCED in the Angolan educational system

Under the aforementioned reorganisation ISCED-Lubango was transformed into ISCED-Huíla and it is now considered as a provincial institution, with statutory, administrative, academic and scientific autonomy, and directly bound to the Ministry of Higher Education. The mission of ISCED-Huíla is the development of teaching activities, scientific research and service provision to the community, through the promotion, diffusion, creation, transmission of science and culture as well as the promotion and implementation of scientific research in educational sciences (Assembleia Nacional, 2012).

Figure 1.4 depicts the main building of ISCED-Huíla.

Figure 1.4: The ISCED-Huíla main building

Figure 1.5, on the following page, shows the number of student enrolments for Bachelor and Licenciatura degrees at ISCED for 1977, 1997, 2007 and 2011, according to the Department of Academic Affairs - DAAC).

Between 1997 and 2007, ISCED witnessed a very rapid increase in its enrolments, with the 2007 figure being seven times as high as that of 1997. This increase can mainly be attributed to two factors: the aforementioned increase of enrolments in the previous educational levels and the opening of evening classes in 2004. In conclusion, the above figure shows that in its 31 years of
existence, ISCED has increased its enrolments by more than 14 times, having moved from about 500 enrolments in 1980 to 6999 in 2011.

![ISCED-Huíla Number of Enrolments](image)

**Figure 1.5: ISCED-Huíla number of enrolments in 34 years (DAAC, 2012)**

Graphically, the main role of ISCED in the Angolan educational system can be represented by Figure 1.6 on the following page. This figure shows that Angola currently has five types of pre-service teacher training institutions.

- After primary school, i.e., Grade 6, pupils can enter **Basic Professional Teacher Training** (i.e. Centro Básico de Formação de Professores), a two- or three-year training course that qualifies graduates to teach Grades 1-4.
- Pupils who finish Grade 9 can enter either **Magistério Primário**. These graduates qualify to teach at Primary School (Grades 1-6).
- Alternatively, those who finish Grade 9 can also enter **Escola de Formação de Professores (EFP)**. These graduates are qualified to teach not only at primary school but also any of the three types of institutions in the 1st Cycle of Secondary Schol (Grades 7-9), including the preparation of teachers at basic level. After completing Grade 13, students can enter the university level to attend either **Escola Superior Pedagógica** or ISCED.
- **Escola Superior Pedagógica** mainly prepares teachers at Bacharelato level (Years 1-3). A graduate from **Escola Superior Pedagógica** is expected to enroll in an ISCED course if they want to pursue their **Licenciatura** course.
- Alternatively, Grade 13 graduates can enter **ISCED (Higher Institute of Educational Sciences)**, to pursue different levels, such as Bacharelato, Licenciatura (Years 4-5), MA and PhD.

We can thus see that the Angolan educational system offers different and some moderately quick routes for teacher education. Unfortunately, a structural problem has often threatened the Angolan educational system seriously because most of the secondary and university schools were teacher training institutions. As a consequence, most of the entrees in these two levels are not attracted by the intention of becoming teachers but by that of gaining access to that level for academic or degree purposes.
LEGEND

- Higher Education
- Teacher Education Institutions
- Other Technical/Professional Institutions
- 2nd Cycle of Secondary School
- 1st Cycle of Secondary School
- General Education

Primary School
Can be admitted to...
Can also be admitted to other courses
Qualified to teach at...

Figure 1.6: The role of ISCED in the educational system (Adapted from INIDE, 2012)
In fact, if we look at the ELT course, history shows that Luanda launched its first graduates in 1989 at IMNE. Regarding the requirements to enter the ISCED courses or any other faculty, a student simply needs to have a nuclear subject in their Certificate to apply for whatever course they would like to pursue (e.g. English for ELT, History for History, Biology and Chemistry for Medicine, Mathematics and History for Economics, and so on). This means that after they have completed their Medium Technical Training course or their Teacher Training (Grades 12 in the old model or Grade 13 in the new system) all learners can apply to any university course.

As a consequence, while the ISCED ELT courses, like the others, could be considered as Pre-Service Training Programmes, from 1989 when IMNE launched its first ELT graduates up to now, the intake has changed completely. Anyone who has studied English in Grades 9 to 12 (old system) or 10 to 13 (new system) can enter the ELT course. From Figure 1.6, it can be seen that a student who did Economics or Agriculture at Ensino Médio or Ensino Secundário can apply to the ELT course if they intend to specialize in order to become English teachers. On that, and reporting on a study conducted at this institution, Vueba (1998) calls those who pursued the ITTP, the Trained Student Teachers (TSTs) and those who completed other courses he calls the Untrained Student Teachers (USTs).

With establishment of ITTPs (at IMNE), ISCED ceased to be the only Institution offering course in ELT TTP and similarly the original characterization of the course became blurred: the ELT TTP for one group is a PRESET programme whereas for the other an INSET. In a word, a hybrid (PRESET-cum-INSET) programme (Vueba, 1998: 2).

The availability of teacher training institutions throughout the country is another problem. They are very few and are located mostly in urban and coastal areas. Needless to say, this is a serious threat to the access and quality of the learning and teaching process.

1.3.4. The TEFL course at ISCED-Huíla

In this section we briefly look at some of the facts related to the TEFL course at ISCED-Huíla, from the importance of English in Angola, the history of TEFL in Angola to the purpose of the academic reading course.

1.3.4.1. The importance of English in Angola

The worldwide increase in the use of English has led to many changes in teacher education programmes, even in non-English speaking countries where English is taught as a foreign language. Today, most of the scientific literature is presented in English. English is increasingly regarded as the library language of the 21st Century and a leading language for the dissemination of academic knowledge. Most of the research in various fields is conducted and published in
English. Correspondingly, English speaking countries are generally placed at a very central position in the area of EFL methodology and materials design (Phillipson, 1992).

In Angola, English is perceived as being indispensable to modern living. Its use has increased considerably over the past 30 years, as have the number of EFL teacher training institutions and general levels of English proficiency in the population. Angola is one of the key states of Southern Africa. Angola needs English due to its geographical proximity to Botswana, Namibia, South Africa, Zambia and Zimbabwe. The commercial and diplomatic bilateral agreements with the USA, the UK and other English speaking countries, which are often of great importance, vitality and potentiality, and often based on mutual respect and mutual benefit, make reading English a very important asset for Angolan citizens. High proficiency in English is currently seen as crucial, especially when pursuing higher education in reputable colleges or universities in countries like the UK, the USA, Canada, Australia, South Africa and other developed or developing countries. Therefore, English has always been taught as a compulsory subject at secondary and undergraduate university levels since Angola became independent, in 1975.

1.3.4.2. History of English teacher training in Angola

When Angola became independent Portuguese was adopted as the official language used in education, administration, the judiciary system, in parliament and to run other official business. Consequently, due to its long colonial history and association with Portugal for about five centuries, Angola is heavily dominated and influenced by the Portuguese culture and language. Furthermore, although the Angolan authorities gave education priority in 1975, the Portuguese colonialists had left the country in dire straits, with a shortage of qualified teaching personnel in most of the subjects, including English, and very poor school infrastructures. Because of this legacy and the lack of good English-teaching programs, a very limited number of Angolans had a working knowledge of the English language at the time.

In response to this situation, residents were employed from neighbouring African countries, South America, Europe and Asia. The Angolan Government employed English teachers from the People’s Republic of the Congo and the Republic of Zaire (the current Democratic Republic of the Congo). At the time Angola did not have official relations with South Africa due to the then-Apartheid Regime. While most of these expatriates would be employed to teach mainly applied sciences, natural sciences and several areas of philosophy, some of them, especially those from Vietnam, were also employed to teach English at tertiary level.
Meanwhile, in the early 1980s, the Angolan Government and businesses increasingly realised the importance of English for Angola’s development. During this period it was seen that there was a need for the continued participation of Angola in the international arena. Many US and foreign companies (e.g. CHEVRON), attracted by Angola’s huge natural resources and economic potential, were showing an insatiable demand for qualified employees that are conversant in English. Unfortunately, the country had very few English-teaching institutions and the few that existed lacked qualified teachers and resources to respond adequately to this growing demand.

Therefore, the educational authorities started orchestrating measures to respond to these demands. For example, the Ministry of Education began requesting assistance from the British Government to strengthen and expand English programs in the country. In addition, in 1983, ISCED-Lubango established the first English Sector in Angola, in its Department of Modern Languages. The main objectives of its establishment was that of training teachers of English for Secondary Schools (Grades 7-12) for general University courses (i.e. Law, Economics, Medicine, etc.) and also prepare teacher trainers for the Training Colleges (Grades 9-12) and for University levels, i.e. ISCED itself.

1.3.4.3. The protocols in ELT

In the mid-1980s, two agreements were reached between the Angolan educational authorities. One with the SADCC (Southern African Development Coordination Conference, now SADC - Southern African Development Community) and another with the British Government, under the aegis of the BC.

With reference to the first protocol, the two partners decided to implement a SADC-funded English language programme within the Ministry of Education. It was agreed that the Council’s activities in Angola would focus on the management of change in English education, support for teacher education initiatives as well as supporting Overseas Development Administration (ODA) education projects throughout the country.

Between 1984 and 1994, the ODA (the now Department for International Development – DfID) launched and funded four major projects in Angola, all run by the BC staff members: the Chevening Scholarship Programme of the UK, English Language Teaching Project (ELTP), the English Teacher Education and Training Project (ETETP), and the Institute of Languages (IoL).

The first project, the Chevening Scholarship Programme of the UK, was established in 1984. There have been 58 Angolan Chevening scholars since 1984. The Chevening programme
encourages its beneﬁciaries to adopt a global view and to seek the strengthening of relationships between countries in general, and between Angola and the UK in particular (Gomes and Weimer, 2011).

The second, also established in 1984, was the English Language Teaching Project (ELTP) based at Instituto Médio “Garcia Neto” in Luanda. Three years later, in 1987, this project created an ‘outreach’ in Lubango, at Instituto Médio Normal “Comandante Liberdade”. The main objective of this project was to improve the teaching of English and the preparation of English teachers at these two training colleges (Grades 9-12).

The third project was launched in 1987, called the English Teacher Education and Training Project (ETETP), based at ISCED-Lubango. Its main objective was to improve the teaching of English and the preparation of English teachers at university level (English Sector of ISCED-Huíla, 1998).

Among their many responsibilities the ELTP and ETETP aimed at:

- organising the English Department at INIDE and the ELT Co-ordinations at national and provincial levels;
- contributing with regular inputs of books, teaching and training equipment;
- supplying trainers, consultants, and evaluators to both projects;
- producing English teaching materials, training materials and ELT curriculum and syllabuses;
- contributing to teacher education through the provision of training workshops and seminars, of guidance and inspection;
- offering the globally-recognised International English Language Testing System (IELTS), which assesses reading, writing, listening and speaking skills for people intending to study in English-speaking countries;
- awarding scholarships to key ELT educators to the UK Colleges and Universities, mainly for courses in language improvement, for opportunities to learn, share and connect with others worldwide, and for post-graduate training in ELT and Administration for Diploma and Master courses at no cost to the Angolan authorities.

Table 1.1. reflects statistical information on Angolan teachers trained in the UK, according to the ETETP.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of scholarships awards</td>
<td>40</td>
</tr>
<tr>
<td>Teachers completed and returned</td>
<td>35</td>
</tr>
<tr>
<td>Teachers who failed</td>
<td>5</td>
</tr>
<tr>
<td>MAs awards completed</td>
<td>8</td>
</tr>
<tr>
<td>MAs awards Failed</td>
<td>3</td>
</tr>
<tr>
<td>Diploma awards completed</td>
<td>27</td>
</tr>
<tr>
<td>Diplomas awards failed</td>
<td>2</td>
</tr>
<tr>
<td>Achievement of Project target</td>
<td>86%</td>
</tr>
</tbody>
</table>

Table 1.1: Statistical information on Angolan teachers trained in the UK through ETETP
The universities in the UK that provided the training were Warwick University (17), West Sussex University (6), Manchester University (5) and Reading (3) and others (9). Apart from these, several other scholarships were offered for Certificates at Bell College of Cambridge University and at London International House.

The fourth project was launched by the British Council (BC) in 1994, the **Institute of Languages (IoL)**. IoL was originally established as a merger of the SADC-funded English language teaching programme and the ELTP. It is located in Luanda and it provides English language teaching for adult learners from Mondays (morning, afternoon and evening) to Saturdays (morning). Between 1997 and 2003 IoL had the only ‘outreach’ in Lubango. IoL has been teaching about 34 General English groups every year since its establishment. A significant development in 1996 was the introduction of Intensive Preparation Courses for the Pitman Examinations in English for Speakers of Other Languages (ESOL). These are British-based, internationally-recognised examinations which test grammar, listening, reading and writing, and were available at IoL twice a year, in January and June.

Currently, only two of the above projects continue running. The ETETP closed in 1998 and the BC withdrew its direct support from the IoL. While the Chevening Scholarships still continue, the IoL project is now a self-funded project with a management team consisting of Angolans, but confined to Luanda.

Fortunately for me, I have benefitted immensely from the ETETP, as a student and as a professional: I did my TEFL undergraduate course at ISCED-Huíla (from 1992), studied my post-graduate Diploma in ELT and Administration at Warwick University (1996/1997), taught several subjects at IMNE Huíla, taught at IoL Lubango from Beginners to Advanced levels (1997/2000), and have been teaching several other subjects at ISCED-Huíla (from 1998). I also witnessed the closing of the ETETP, a decision taken after an impact study that was conducted in 1998, in which I also participated as a local researcher. This means that my past experience has served as a basis for this research study.

### 1.3.4.4. The end of ETETP

With the Labour Party victory in the 1997 UK elections, the ODA was transformed into DfID as a separate government department and declared a shift to an ‘ethical’ foreign policy. This shift also marked a turning point for the UK’s aid programme, which until then had mainly involved economic development. However, and unfortunately for Angola, it reduced the amount of aid tied to purchasing British goods and services which often led to aid being spent ineffectually.
In 1997 and 1998 DFID funded an English Language Teaching (ELT) Impact Study in Angola. The research endeavoured to assess the impact of ELT projects funded by ODA/DFID in Angola and involved teams of local researchers (including myself) trained and supported by three external consultants. The purpose of this study was for DfID to learn from past experiences, in order to improve the effectiveness of future aid activities (for more details, see Smith and Bennell, 1998).

The results suggested that DfID should end its support to ELT in Angola. In fact, it was discovered that the ETETP was not sustainable, mainly due to the consequences of the civil conflict. Therefore, the BC withdrew from the ELT in 1998, after the training of two more MA graduates at Wits University, in South Africa. The only support that the BC currently gives to ELT is confined to Luanda. It mainly assists a few English teacher associations to improve teachers’ classroom language.

1.3.4.5. ISCED-Huíla teacher trainees

Most of the current teacher trainees at ISCED-Huíla never worked as teachers before joining the course. Their age range is generally between 17 and 35 years old, with most in their early twenties, and most are men. They are all Angolans and about 95% of trainees are all Portuguese-speaking, the exception being those who have done all their studies in Namibia, South Africa or Zambia and who speak English. Depending largely on their age and where they studied, the teacher trainees have studied English from six to fifteen years at school.

They are generally very motivated and enthusiastic to learn because English is seen as a means of personal and social betterment. English proficient users (in spoken and written discourse) are often regarded by Angolan citizens as having better opportunities for education, being able to access scientific sources in their major field of study, find a high-quality job, communicate with the international world, and thereby paving the way to future success. From said, one can see how important it is for Angolan legislators, policy makers and researchers to recognize that the need for more and effective English language teachers is greater than ever before.

Regarding the objectives of the TEFL course in Angola, our teacher trainees are being prepared to work at (lower) secondary schools – i.e. Grades 7 and 13. Judging from the official education documents, much importance is ascribed to the English language (INIDE, 2000).

This role of the English language in Angola as well as the need to immerse students in the language of work, have given rise to a need to transform the Angolan teacher training courses of
English into an English-medium academic setting. This is in accordance with what Flowerdew and Peacock (2001: 8) and Jordan (1997: 1) propound, i.e. teaching EAP with the aim of facilitating student (and teachers’) study or research in that language. In fact, about sixteen years after this decision, we can now affirm that this has helped us to adapt the teacher trainees to today’s competitive society, with an emphasis on “reading to learn” (Grabe and Stoller, 2002; and Pretorius, 2000a), and so become better communicators, scholars and professionals.

1.3.4.6. ISCED-Huíla teacher trainers and resources
Currently the English Sector has a teaching staff of eight: five male and three females (all Angolan nationals, two with MA degrees and the others with a Licenciatura degree). Considering that the English Department has the responsibility of teaching 22 subjects, this means that the tutor-subject ratio is about 1:3, which roughly corresponds to 14 hours per week for each teacher trainer.

Unlike in many other institutions which are often inadequately resourced and overcrowded, the teaching conditions here are conducive to good teaching. With the aforementioned support of the BC/ODA and later the American Embassy in Angola in the last ten years, the English Department is equipped with a small library, with different English materials closely related to the students’ TEFL course, ranging from graded readers, audio material, to teaching materials. Apart from that, the institution has one main library, sponsored by the Angolan Government and other Non-Governmental Organisations, with more than 90,000 books in different areas of knowledge and several of them in English. In other words, one can say that the English course at ISCED-Huíla is like an ‘oasis in a desert’.

1.3.4.7. The purposes of TEFL at ISCED-Huíla
Similar to other courses at ISCED, the main aim of the TEFL course is to prepare, in four years, highly qualified English teachers for different levels of the Angolan education system, who will handle classes from secondary to university level throughout the country (teaching and training). The EFL course at ISCED has the following three key objectives (Pró-Reitoria para a Reforma Curricular, 2004):

- to develop the personal and social preparation of future teachers and educators of English, in order to provide the internalization of indispensable deontological attitudes (i.e. cognitive, affective and behavioural) and values (i.e. respect for others and for their opinions and values; responsibility for themselves, for the student, and for the quality of work); commitment to the profession, to students, to the research and to the community; and the education freedom of looking by herself/himself for needed knowledge);
- to enable students to formulate concepts of didactics and educational psychology;
to equip them with fundamental aspects of scientific research and those linked to language acquisition, language learning and teaching, language use and teacher education methodology.

One aspect to be highlighted here is that unlike the situation in many other institutions abroad, by the end of their course Angolan students at ISCED are expected to produce and publicly present and defend a researched dissertation before a three-member jury. The TEFL curriculum does not only cover the components proposed by Edge (1988), Kennedy (1983), Mariani (1979) and Wallace (1991), e.g. Language improvement, Applied Linguistics, TEFL [and Training] Methodology, School Administration and Academic Counseling, but also several other subjects, such as Study Skills, Applied Statistics, Teacher Education Methodology, and Research Skills.

During the academic years 2010 and 2011, ISCED was fortunate to have a resident English Language (EL) Fellow, supported by the American Government, through its Embassy in Luanda. Among many responsibilities, the EL Fellow assisted ISCED Lubango English Sector lecturers and trainers to improve their practice, through seminars, workshops, and in-service training. She refreshed the lecturers’ knowledge in research and teaching methodology, identified innovative and excellent learning and teaching practice in the Sector, supported events and projects of the Sector, and acted as the main contact person for the Sector concerns with US universities for possible links and support. With her presence, four students and two lecturers benefitted from short courses in American universities and colleges.

As to graduates, at EFP 64 students have graduated in English teacher training in the last three years (Sub-Direcção Pedagógica da EFP-Lubango, 2012). As to ISCED, Figure 1.7 below shows that the ELT course is fully alive. Compared to 2003, when ISCED had ten students finishing the curricular part, in 2012 ISCED had the highest number of finalists ever, i.e. 54 (32 from the day class and 22 from the evening class, as can be seen in Figure 1.7).

![Figure 1.7: Enrolments at ISCED-Huíla between 2003-2012 (DAAC, 2012)](image-url)
1.3.4.8. The purposes of the academic reading course

ISCED teaches ESAP rather than the EGAP. According to the distinction by Dudley-Evans and St. John (1998), while EGAP is designed for pre-study groups, or groups that are heterogeneous with regard to discipline, ESAP is designed to meet the specific needs of a group from the same discipline. In fact, it is expected that ISCED teacher trainees develop sufficiently advanced academic, cognitive and linguistic skills to conduct work, studies and interpersonal communication in English mediated environments.

In contrast to the two EAP descriptions by Dudley-Evans and St John (1998) (i.e. EAP situations in which certain subjects are taught in English, and EAP situations where subject courses are taught in the national language), ISCED is an EAP situation where most of the subject courses (22 out of 35) are taught in English. This ensures that trainees are immersed in the language.

Finally, with regard to academic reading instruction, despite some differences, students of English at ISCED-Huíla are expected to read English at the same level of comprehension as a proficient L1 reader. To achieve this objective, the teaching tends to confront student teachers with a more independent, active, and analytical approach to learning than before.

Therefore, to help students develop their literacy skills, ISCED teacher trainees of English have a subject in the second year on developing academic reading skills. There is also a course on developing academic writing skills in the third year, each with 4 x 45-minute lessons a week. The main purpose of the academic reading is to help student teachers develop reading and thinking strategies needed to read academic texts in their content classes in order to learn new subject matter (See Appendix B, English Sector of ISCED-Huíla, 2005).

In such a context, the pedagogical framework is conducive to good teaching, with considerable opportunities at the teacher trainees’ disposal to develop their reading skills. Unfortunately, even with the number of graduates at both secondary and university levels coupled with the existence of a subject on developing their literacy skills, there are still concerns about the academic reading levels of teacher trainees.

1.4. STATEMENT OF THE RESEARCH PROBLEM

From my experience as a lecturer, teacher trainer and administrator at ISCED-Huíla I have noticed that decisions relating to the curriculum, syllabus design, material selection and reading instruction have rarely been founded on systematic and organized methods concerning the
teacher trainees’ needs or matched these to their personal, academic and prospective professional wants. This confirms what is often argued by several researchers (for example, Kaplan, 2001; Kusumoto, 2008; Tomlinson, 2003; Saxena and Satsangee, 2008; Shawer, Gilmore and Banks-Joseph, 2009; Jiajing, 2007; Spector-Cohen, Kirschner and Wexler, 2001) that, firstly, needs analysis is usually not considered in the design of programmes. Tomlinson (2003: 107) rightly puts it that many material developers describe processes which are ad hoc and spontaneous and which rely on an intuitive feel for activities which are likely to “work”. Secondly, many of the teaching frameworks provide no theoretical justification for their staging or sequencing of the process. Lastly, teacher trainers tend not to fully understand nor use effective principles and methods of needs analysis.

As a consequence, the academic reading instruction and learning course at ISCED-Huíla has seldom been efficient and adequate, the motivation of the teacher trainees’ has tended to be low, and, in turn, performance has often been poor when they read and use English in their academic lives, despite the fact that English is the main medium of instruction. It is therefore the aim of this study to present a framework for determining the academic reading needs of teacher trainees who study in an EAP context at ISCED-Huíla. The aims, objectives and research questions guiding this study are set out below.

1.5. THE METHODOLOGY OF THE RESEARCH PROCESS
This section briefly outlines aspects relating to the research design of the study. Further details are given in Chapter 3.

1.5.1. Research purpose
The purpose of this dissertation is to implement a needs analysis and on the basis of the findings come up with a framework for determining the academic reading needs of undergraduate teacher trainees who study in an EAP context at ISCED-Huíla, a higher teacher training institution in Lubango, southern Angola.

1.5.2. Research design, approach and objectives
The design of this study is mainly descriptive exploratory because although it is informed by previous studies and approaches, it is not based on a particular single model, and it describes its exceptional character which existing theories and researches are unable to portray. Following McMillan and Schumacher (2001: 399), a definition that can be corroborated by Brown and Rodgers (2002), Dörnyei (2007), Mackey and Gass (2005) and Mouton (2001), exploratory
studies “examine a topic in which there has been little prior research…”. In fact, this is particularly true in the Angolan context. The research approach is predominantly analytical (Nunan, 1992; Seliger and Shohamy, 1989), considering that it focuses on specific aspects of needs analysis. Regarding the research objectives (see §3.1.3), this study aims to:

1. Determine the ISCED-Huíla teacher trainees’ level of academic reading ability;
2. Examine the teacher trainees’ use of reading strategies during the reading of expository texts;
3. Examine the relationship between teacher trainees’ academic reading proficiency and their strategy use;
4. Explore the perceived academic reading needs, skills, lacks and wants regarding course content and methodology of the teacher trainees and their teachers;
5. Compare the teacher trainees’ responses on needs with their teacher trainers’ expectations and assumptions;
6. Identify potential problem areas/challenges in the current needs analysis procedures or practices in use at ISCED-Huíla.

Based on the literature review and the findings of this study, guidelines for a contextualized framework or methodology for conducting needs analysis at university level in Angola will be outlined and recommendations made.

1.5.3. Research questions, research variables and research instruments

The present study should be considered exploratory in nature. It is not intended to test any hypotheses, but to answer the following five research questions (hereafter RQ) that it sought to address (see also §3.1.3 and §4.1.1):

1. What are the levels of English academic reading proficiency of teacher trainees before they start their reading course?
2. What reading strategies do teacher trainees claim to use when reading an academic text?
3. What is the relationship between teacher trainees’ academic reading proficiency and their strategy use?
4. What, according to the teacher trainees and teacher trainers, are the perceived reading problems, needs, practices, genres, and skills required in the teacher trainees’ academic, professional, and social lives?
5. What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important for designing and shaping their courses (i.e. who or what should be included)?

The main research variables are: the levels of academic reading proficiency; reading strategies; reading needs, practices, genres, and skills; and needs analysis procedures.

The participants of the study were 1st Year teacher trainees (N=45) who followed a teacher training course in English at ISCED-Huíla and their teacher trainers (N=5). For further details
concerning the participants see §3.5.1. Primary data were collected through the use of three research instruments (described in greater detail in §3.5.2), namely:

a. A standardised test of academic literacy called the Accuplacer test, aimed at measuring the reading levels of English proficiency, to answer RQ1;
b. A semi-structured teacher trainee questionnaire to answer the RQ2, 3, 4 and 5; and
c. A semi-structured teacher trainer questionnaire to answer RQ4 and 5.

1.6. ORGANISATION OF THE REMAINDER OF DISSERTATION

So far, I have described the focus of this research study and the reasons for it and embedded it within the broader Angolan education context. The remainder of this dissertation is structured as follows:

Chapter 2 reviews different scientific studies conducted in the areas of NA in EAP, the reading process in second language and in EAP, and those on designing academic literacy programs. Chapter 3 discusses methodological issues and describes the implementation of both the pilot and main study. Chapter 4 describes and discusses the findings of the main study, while Chapter 5 concludes this study.

1.7. CONCLUSION

The main objectives of this chapter have been to briefly outline the theoretical framework to the research problem, to provide information on the reasons that prompted this study, to describe the broader research context, to argue for the significance of the study, to briefly sketch the methodology of the research, and to outline the structure of the rest of the dissertation. The following chapter appertains to the Literature Review on topics relevant to the focus of this study.
CHAPTER 2:
LITERATURE REVIEW

2.1. INTRODUCTION

… [L]anguage teaching using generic programs and materials, not designed with particular groups in mind, will be inefficient, at the very least, and in all probability, grossly inadequate. Just as no medical intervention would be prescribed before a thorough diagnosis of what ails the patient, so no language teaching program should be designed without a thorough needs analysis. Every language course should be considered a course for specific purposes, varying only (and considerably, to be sure) in the precision with which the learner needs can be specified… (Long, 2005: 1).

English is currently considered as the primary requirement and the language of literacy in several study contexts worldwide. Furthermore, due to the continuing increase of international communication in various technical and scientific fields, the demand for English for Specific Purposes (hereafter ESP) is expanding, especially in countries where English is taught as a foreign language. Besides, we live in a time where the fastest growing occupations demand far greater than average literacy skills (Barton, 2000). Obviously, Angola is not an exception.

The main focus of this study is to propose a framework for determining the academic reading needs of teacher trainees who study in a context of English for Academic Purposes (henceforth EAP). To achieve that purpose, this chapter reviews the literature that relates to the current research study. The chapter is divided into six sections. The first section looks at definitional issues related to ESP. The second describes the process of needs analysis within one of the branches of ESP, namely EAP. The third section discusses the reading process. The fourth looks at the broader context of second language reading. The fifth pertains to the discussion of what reading in EAP entails, while the final section looks more closely at issues related to the teaching of reading in an EAP context.

2.3. WHAT IS ‘ENGLISH FOR SPECIFIC PURPOSES’?

In this section I first look at the relationship between ESP and EAP, and then identify four factors behind the origin of ESP.

2.3.1. The relationship between ESP and EAP

Despite the general agreement that ESP refers to specifically designed English programmes, there are still controversies about what ESP really is.

Hutchinson and Waters (1987: 19) argue that ESP is an approach to language learning that is based on learners’ need. In other words, ESP does not involve a particular kind of language,
teaching material or methodology. They suggest instead that the foundation of ESP involves the learners, the language required and the learning context, which are based on the primacy of need in ESP.

When discussing ESP and EAP over 40 years ago, Strevens (1977, in Hamp-Lyons, 2001: 127) identified four still relevant ways, in which courses can be specific, as follows:

a. restricting the language taught to only those skills which are required for the learners’ immediate purposes;

b. selecting from the whole language only those items of vocabulary, grammar patterns, linguistic functions, etc., which are required for the learners’ immediate purposes;

c. including only topics, themes and discourse contexts that are directly relevant to the learner’s immediate language needs;

d. addressing only those communicative needs that relate to the learners’ immediate purpose.

For Dudley-Evans and St. John (1998), ESP is not necessarily related to a specific discipline. Furthermore, ESP is more likely to be used with adult learners although it could be used with young adults in a secondary school setting.

Due to these difficulties in defining ESP, three possible solutions can be advanced. The first solution is to view ESP as a cover term for teaching and learning English for multiple specific purposes, by classifying it initially into two main sub-branches: EAP and English for Occupational Purposes (EOP), following Dudley-Evans and St John (1998), Hutchinson and Waters (1987) and Johns (1991).

According to these specialists, EAP deals with the use of English in study settings where the main goal of language learning is the ability to cope in the student’s chosen academic specialisation. According to Dudley-Evans and St. John (1998: 2), for much of its infancy, ESP was dominated by the teaching of English for Academic Purposes. As a branch of ESP, EAP is offered for many reasons: to expose students to the expectations and requirements of the faculties in terms of target situation needs and academic culture (Jordan, 1997: 80), and to help international students reach their full academic potential (Dudley-Evans and St. John, 1998: 36).

EOP, on the other hand, involves work-related needs and training. EOP includes professional purposes in administration, medicine, law and business, and vocational purposes for non-professionals in work or pre-work situations (Dudley-Evans & St. John, 1998: 7).

Dudley-Evans and St John (1998: 6) devise a tree diagram for ESP, which divides EAP and EOP according to discipline or professional area, as can be seen in Figure 2.1. In this view, a teacher trainee would do EAP, while a full-time teacher would do EOP. Similarly, a student preparing to
be a medical doctor would be involved in an EAP course, while a professional doctor would do EOP.

![Figure 2.1: Tree diagram for classification of ESP by professional areas (Dudley-Evans and St John, 1998)](image)

The second solution to the difficulties of defining English for Specific Purposes has been proposed by Robinson (1991: 2-4) who views ESP as consisting of, on the one hand, criterial features common to virtually all ESP programmes (i.e. goal oriented and based on analysis of learner’s needs), as well as, on the other hand, characteristics that in quantitative terms are likely to occur, such as: (a) learners are frequently adults, (b) the time period available for learning is often limited, and (c) homogeneity (of subject background or profession) may exist.

The third solution to the difficulty of defining ESP makes a distinction between absolute characteristics and variable characteristics (Dudley-Evans and St John, 1998; Strevens, 1988). Strevens (1988: 1-2) defines the absolute characteristics of ESP as being:

1. designed to meet specified needs of the learner;
2. related in content (i.e. in its themes and topics) to particular disciplines, occupations and activities;
3. centered on the language appropriate to those activities in syntax, lexis, discourse, semantics, etc., and analysis of this discourse;
4. in contrast with General English.

The variable characteristics are that ESP:

1. may be restricted to specific learning skills to be learned (for example reading only);
2. may not be taught according to any pre-ordained methodology.

Later, Dudley-Evans and St. John (1998: 4-5) offered a modified definition of the variable characteristics of ESP:

1. ESP may be related to or designed for specific disciplines;
2. ESP may use, in specific teaching situations, a different methodology from that of General English;
3. ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be used for learners at secondary school level;
4. ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, but it can be used with beginners.

As can be seen from the above absolute and variable characteristics of ESP, there is a change in how the range of ESP has been extended and become more flexible in its modified definition. In fact, Dudley-Evans and St. John (1998: 4-5) removed the absolute characteristic that ‘ESP is in contrast with General English’ and added more variable characteristics. According to these authors, ESP is not necessarily related to a specific discipline.

In their attempt to differentiate ESP and EGP, Hutchinson and Waters (1987) argue that what distinguishes ESP from General English is not the existence of a need as such but rather an awareness of the need. If learners, sponsors and teachers know why the learners need English, that awareness will influence what will be regarded as reasonable content in the language course and, on the positive side, what potential can be exploited. The research to date has considered the concept of needs from various perspectives and proposed various interpretations accordingly (see §2.2.1).

Therefore, what characterizes ESP is not only its content (e.g. Education, Science, Medicine, Commerce, Academic Reading, etc.) but also being able to readily specify why the learners need English. In short, it is not so much the nature of the end product which distinguishes the ESP from the EGP course but rather the awareness of a need. Richards (2001: 33) points out that “whereas in a general English course the goal is usually an overall mastery of the language that can be tested on a global language test, the goal of an ESP course is to prepare the learners to carry out a specific set of tasks.” ESP is an approach to language teaching in which all decisions as to content and methodology are based on the learner’s rationale for learning (Hutchinson and Waters 1987).

Regarding EAP, Clapham (2001) and Dudley-Evans and St. John (1998) see it as subordinate to ESP. They divide EAP courses into those for English for General Academic Purposes (EGAP) designed for pre-study groups, or groups that are heterogeneous with regard to discipline, and English for Specific Academic Purposes (ESAP) designed to meet specific needs of a small group in a narrowly defined discipline. We can see that the ISCED context fits in with the latter case.

With regard to teaching academic reading skills, Clapham (2001: 98) addresses the question of whether EAP courses should be based on ESAP (English for Specific Academic Purposes) or EGAP texts, that is, English for General Academic Purposes. After considering several empirical
studies of ESP testing of reading comprehension, Clapham concludes that it seems sensible for EAP teachers to teach a “common core” EAP, with perhaps some ESAP texts. She also recommends this because she observes that it is rare for all students in a language class to be in the same sub-discipline, and because even when they are they will have different backgrounds, personal interests and aims, leading to familiarity with a variety of lexical sets (Clapham, 2001: 98).

In the ESP course for employees at the American University of Beirut, as described by Shaaban (2005), the curriculum development and course contents focus on a common core for the learners from various workplaces. This content includes basic social English communication, following directions and giving instructions, plus work-related terms and expressions. Gatehouse (2001) also integrates General English language content and acquisition skills when developing the curriculum for language preparation for employment in the health sciences.

2.3.2. The origins of ESP

During my reading, I identified four main reasons common to the emergence of all ESP courses: mass emigration of people to the developed countries, the demands of a ‘Brave New World’, a revolution in linguistics, and a focus on the learner.

Following Howatt (1984), the first key reason has to do with the mass emigration of non-English-speaking families to Britain due to post-colonial changes in the Third World. Practitioners of the English teaching profession had to find new solutions to respond positively to the new challenges. Thus, in 1966 the University of Leeds’s Institute of Education took a first step in designing and piloting a programme of English for immigrant primary school children.

Regarding the second reason, Hutchinson and Waters (1987) noted that two key historical periods breathed life into ESP. First, the end of the Second World War brought with it an “... age of enormous and unprecedented expansion in scientific, technical and economic activity on an international scale for various reasons, most notably the economic power of the United States in the post-war world, the role [of international language] fell to English” (Hutchinson and Waters, 1987: 6). Second, the oil crisis of the early 1970s resulted in Western money and knowledge flowing into oil-rich countries. The language of this knowledge became English. This development exerted pressure on the language teaching profession to deliver the required goods. Whereas English had previously decided its own destiny, it now became subject to the wishes, needs and demands of people other than language teachers (Hutchinson and Waters, 1987: 7).
The third key reason cited as having a tremendous impact on the emergence of ESP was a revolution in linguistics. Whereas traditional linguists set out to describe the features of language, revolutionary pioneers in linguistics began to focus on the ways in which language is used in real communication. Hutchinson and Waters (1987) point out that one significant discovery was in the ways that spoken and written English vary. In other words, given the particular context in which English is used and the purpose for which it is used, the variant of English will change. This idea was taken one step further: if language in different situations varies, then tailoring language instruction to meet the needs of learners in specific contexts is also possible.

Following Hutchinson and Waters (1987), the fourth reason that has influenced the emergence of ESP has less to do with linguistics and more to do with changing perspectives on the psychological aspects of learning. Rather than simply focusing on the method of language delivery, attention was increasingly given to the ways in which learners acquire language and the differences in the ways language is acquired. Learners were seen to be heterogeneous, employing different learning strategies, using different skills, entering with different learning schemata, and being motivated by different needs and interests. Because of this, specialized courses of English were required which would relate closely to students’ particular needs and aspirations.

Having looked briefly at the domain and origins of ESP, I now move on to needs analysis.

2.2. NEEDS ANALYSIS IN AN EAP SETTING

One of the assumptions underlying teacher education is that students will eventually teach in the way that they were taught (Johnson, 1995, in Altan and Trombly 2001). In other words, one would expect that if teacher trainees are prepared in a context or approach where their needs, lacks and wants are catered for, they may replicate that in their prospective professional lives. Therefore, given the diversity and complexity of EAP objectives, it is crucial to conduct an in-depth needs analysis before planning and implementing an EAP curriculum and material (Braine, 2001; Cotterall, 2000; Johns, 1991; Johns and Dudley-Evans, 1991; Jones, 1991; Robinson, 1991).

This section is divided into nine parts. It first defines needs, then it describes types of needs, followed by a definition of needs analysis; the importance of conducting needs analysis; the limitations of this process; and the people that should be involved in needs analysis are then
considered; finally, the discussion focuses on when needs analysis should be conducted, and the frameworks or approaches to and the techniques used in needs analysis.

2.2.1. Definition of needs

It is nowadays almost axiomatic that learners’ needs should be considered in the process of planning the content of a language program: “all language teaching must be designed for the specific learning and language use purposes of identified groups of students” (Johns, 1991: 67).

According to Saxena and Satsangee (2008: 5), the concept of needs as a survey can be attributed to “the work of the team of experts that the council of Europe assembled in 1971 to study certain linguistic problems confronting the European nations at the time of the creation of the common market”. At the time, it was considered vital to establish a ‘unit/credit’ through the study of the communicative needs of the workplace. Decisions on the contents of the course were based on the findings related to the language needs of workers and the activities of their particular occupation.

Johns and Dudley-Evans (1991: 299) define needs as the “identifiable elements” of “students’ target English situations”. Berwick (1989: 52) offers a simplified conventional definition of needs as the “measurable discrepancy between a current state of affairs and a desired future state”.

2.2.2. Types of needs

Research reveals three main pairs of needs which appear to be complementary: perceived (prescribed) and felt needs (Berwick, 1989; Robinson, 1991), objective and subjective needs (Brindley, 1984, Quinn, 1985, both quoted in Brindley, 1989: 70; Robinson, 1991), and target and learning needs (Hutchinson and Waters, 1987).

Berwick (1989: 55) views perceived needs as those that the educators make judgments about in other people’s experience, while felt needs are viewed as the ones that the learners have or those that learners themselves say they need.

Brindley (1989) and Robinson (1991) consider objective needs assessment as finding out information about students’ backgrounds – country and culture, education, family, profession, age, language spoken, and so on; students’ abilities or proficiency in speaking, understanding, reading and writing English; and students’ needs with respect to how they will use or deal with English outside of the classroom. Subjective needs deal with students’ attitudes toward the target
language and culture, toward learning, and toward themselves as learners; students’ expectations, of themselves and of the course; students’ underlying purposes — or lack thereof — in studying English; and students’ preferences with respect to how they will learn.

Hutchinson and Waters (1987) make a distinction between target needs and learning needs. Target needs describe what the learner needs to do in the target situation and are mainly concerned with language use. On the other hand, learning needs describe what the learner needs to do in order to learn. These are concerned with language learning.

Hutchinson and Waters (1987) identify further divisions under the general heading of need: necessities, lacks and wants. Necessities are the type of needs determined by the demands of the target situation, that is, what the learner has to know in order to function effectively in the target situation. If we take ISCED as an example, a teacher trainee needs to be able to read English Language Teaching (ELT) materials and also be able to use classroom language effectively. This information can be gathered by observing the situations in which the learner will need to function.

Lacks is deciding not only what the learner knows already, but also which of the necessities the learner lacks, by finding out how well they can do it. For example, a learner may need to produce academic pieces of work, and the need analyst will assess what learners already know and what they lack. It is because of this concept of lacks that needs analysis is also called needs assessment. These lacks can be information-locating skills, skills for coping with extended use of English, academic writing skills, research skills, and others (for further lists see Frydenberg, 1982; Fanning, 1988; Jordan, 1997). So far, when referring to necessities and lacks the learner does not play an active role.

Wants is basically what learners themselves think as being their needs on the basis of data relating to themselves and their environment (Richteric 1984, in Hutchinson and Waters 1987: 56). Peck (1991) categorizes the concept in terms of academic, social, and emotional needs.

2.2.3. Definition of needs analysis
This section focuses more on the process, i.e. the analysis part. The term ‘needs analysis’ (hereafter NA), which is used interchangeably in this study with the term ‘needs assessment’, first appeared in India in the 1920s, when the concept of needs was introduced as two separate concepts: firstly, what learners will be required to do with the foreign language in the target situation, and secondly, how learners might best master the target language during the period of
training (White, 1988). In the 1960s, with the appearance of ESP courses, NA became instrumental in course design (West, 1994). Robinson (1991: 3) emphasizes the primacy of NA in designing a language course. Dudley-Evans and St John (1998: 122) argue that “needs analysis is the corner stone of ESP and leads to a very focused language course”.

In fact, NA has nowadays become the dynamic impulse underlying ESP course design, the justification for the S and for the P in the acronym. Consequently, the focus of the word ‘special’ in ESP ought to be on the purpose for which learners learn and not on the specific jargon or registers they learn. Hutchnison and Waters (1987) classify the development of ESP into a number of phases. These stages include register analysis in the 1960s and early 1970s, rhetorical or discourse analysis in the 1970s and 1980s, and needs analysis from the 1980s onwards. They rightly identify the NA phase as the coming of age in ESP. This is due to the fact that learner needs would appear to be the obvious basis for designing ESP (and obviously EAP) courses.

Several ESP/EAP practitioners have attempted to describe what NA involves (Benesch, 1996; Brindley, 1984, in Saxena and Satsangee, 2008; Brown, 1995; Duddley-Evans and St. John, 1998; Graves, 1996; Jordan, 1997; Richards and Schmidt, 2002; Richteric, 1983). Richards and Schmidt (2002: 353) define NA as “the process of determining the needs for which a learner or group of learners requires a language and arranging the needs according to priorities”. Brown (1995: 35) states that NA “refers to the activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of a particular group of students”.

Brindley (1984, in Saxena and Satsangee, 2008: 6) writes that needs analysis is “an attempt to identify and take into account a multiplicity of cognitive [and affective] variables which affect learning, such as learner’s attitudes, motivation, awareness, personality, want, expectations and learning styles.” Thus NA involves seeking and interpreting information about students’ needs so that the course will address them effectively.

Graves (1996: 12) states that NA basically involves finding out what the learners know and can do and what they need to learn or do so that the course can bridge the gap (or some part of it). Thus NA involves seeking and interpreting information about students’ needs so that the course will address them effectively. Richteric (1983: 2) states that the identification of language needs “consists primarily in compiling information both on the individuals or groups of individuals who are to learn a language and on the use which they are expected to make of it when they have learnt it.”

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To sum up, NA is often seen as gathering information about the students of a specific course, on the reasons why they learn a language, their learning difficulties or gaps, the target context in which the language will be used and with what level of proficiency, among many. In other words, these definitions stress the fact that this gathering of information is an essential step in designing a programme that fits the students’ needs, standard situations and levels.

2.2.4. Importance of conducting needs analysis

Richards (1990) deals with this issue from the point of view of curriculum development, and he holds that the data to be collected from learners, teachers, administrators and employers in the planning process will help to identify general and specific language needs and content of a language program. Besides, it will also provide data to review and evaluate the existing program.

Referring to the growing demands for accountability and relevance in public life, Long (2005: 1-4) cites four reasons for performing needs analyses: first, to determine the relevance of the material to the learners’ situations; second, to justify the material in terms of relevance for all parties concerned (teacher, learner, administration, parents); third, to account for differences in learner needs and styles; fourth, to create a syllabus which will meet the needs of the learners as fully as possible within the context of the situation. Accordingly, every language course should be viewed as a course for specific purposes which just varies in the precision with which learner needs can be specified.

Dudley-Evans and St John (1998: 121) state that NA “is the process of establishing the what and how of a course”. They argue that “needs analysis is neither unique to language teaching … nor, within language training, is it unique to LSP [language for specific purposes] and thus to ESP”. However, a review of several specialists, leads one to conclude that a NA more readily answers the questions who, what, when, where, but not necessarily how. In other words, through NA we can identify the target audience (Who needs to be trained), the task or content (what needs to be taught) and the context or training environment (where and when the training needs to be conducted). However, in addition to the above, Dudley-Evans and St John (1998: 126) claim that NA study “also aims to know how language learning and skills learning can be maximized for a given learner group”.

2.2.4.1. Importance of needs analysis for different stakeholders

NA can benefit various stakeholders. Schleppegrell (1994: 236) perceptively points out that the purpose of a needs assessment for teachers is fourfold. First, the teacher must become acquainted with the sponsoring institution and its requirements. Second, the needs assessment identifies how
learners will use English in their technical fields. Third, the needs assessment gives the teacher initial insights about the prospective students’ current level of performance in English. Fourth, the needs assessment provides an opportunity to collect samples of authentic texts, spoken and written that are used by the students in their jobs or professions. In this way, teachers will be able to provide students with the specific language they need to succeed in their courses and future careers (Benesch, 1996; Chan, 2001; Johns, 1991), and in the process teachers may also get to know their learners as people, as language learners, and language users; they become better acquainted with how language learning and skills learning can be maximised for a given learner group; and finally they become familiar with the target situations and learning environment such that they can interpret the data appropriately (Dudley-Evans and John, 1998).

For students, Aebersold and Field (1997: 37) state that needs assessment makes learners feel confident; it puts some of the decision making in their hands; it puts the responsibility for learning in their hands; and over the long term it builds independence and self-reliance so that they can read on their own without being dependent on teacher direction and supervision. It activates the students’ own learning spirals. It can also be a teaching tool because it can help them become more aware and more purposeful in their learning.

For researchers, a NA enables them to assess their assumptions about whether potential educational needs are sound, and to design a program in terms of topics and materials so as to be responsive to the needs of participants. This can maximize the likelihood of students’ participation, where the focus on satisfying learner needs will help the learners to attempt to learn and apply what they learn.

For other stakeholders, needs analysis can help administrators, employers and others to introduce necessary changes, if deemed necessary, so as to promote learners in their progress throughout the program (White, 1988). Hutchinson and Waters (1987) hold that the relationship between necessities as perceived by a sponsor or an ESP teacher, and what the learners want or feel can be at extreme poles. However, they suggest that learners’ perceived wants and wishes should be considered carefully, and due to the objective and subjective reality of needs, each learning situation should be considered uniquely and systematically.

### 2.2.4.2. Research confirming the importance of needs analysis

Several studies stressing the role of NA in ELT programme development have been published (Baştürkmen, 1998; Grier, 2005; Kırkgöz, 2009; Lepetit and Cichocki, 2002; Tunç, 2010). For example, in their needs assessment of health students at university, Lepetit and Cichocki (2002)
stress that NA is of central importance for developing curriculum. According to Grier (2005), curriculum developers must have tenable information which will serve as a basis to support their curricular decisions. Using interviews, observations, and questionnaires of people working in the photonics industry, Grier (2005: 60) concludes that “by incorporating needs assessments in their curricular decisions, curriculum developers can select options that benefit both the learners and society”. Belcher states that needs assessment should be the bedrock on which all decisions are based and lists the roles of ESP professionals as “needs assessors first and foremost, then designers and implementers of specialized curricula in response to identified needs” (Belcher, 2006: 135).

In her exploration of undergraduate students’ needs and attitudes at the College of Petroleum and Engineering, Kuwait University, Baştürkmen (1998) used both qualitative and quantitative techniques to generate responses from students and faculty members about various aspects of learner needs such as language proficiency and expectations of language course, among many. Baştürkmen (1998) argued that NA is a useful tool to collect data about students’ expectations, and so she used the results of this study to design a language course tailored according to the needs of the learners and the demands of faculty members.

Chaudron, Doughty, Kim, Kong, Lee, Lee, Long, Rivers, and Urano (2005) conducted a task-based NA for Korean as a foreign language program at the University of Hawai‘i at Mānoa (UHM). Chaudron et al. (2005) focused on target needs to develop prototype task-based instruction rather than developing an entire curriculum. The study involved three stages. In stage one, the study used unstructured interviews with instructional staff and with a random sample of students. In stage two, a student questionnaire was then created, based on those interviews. The results showed that more than 90% of students studying Korean at UHM had already been and/or planned to travel to Korea for various reasons such as academic, occupational, religious, and social purposes. Better communication when going to Korea on vacation was found as being one of the most prominent reasons for learning Korean. Therefore, two target tasks were identified: “following street directions” and “shopping for clothing” based on the needs analysis. They also investigated the target tasks by collecting and analyzing target discourse samples gathered in Waikiki, Hawaii, and Seoul, Korea. In stage three, an outcome of the previous two stages, Korean Task-Based Language Teaching modules were designed and developed: one for near beginners and the other for second-year students of Korean. In their article, Chaudron et al. (2005) also describe how NA data can be used in task-based materials development at stage one of their project which covers all six components in the design, implementation, and evaluation of
a program, viz: needs analysis, syllabus design, materials development, methodology and pedagogy, testing, and evaluation.

Kırkgöz (2009) conducted a study at a University in Turkey, using a multi-dimensional NA (mainly questionnaires and interviews), with 1000 participants from five groups (i.e., administration, EAP teachers, current students, former students, and subject-instructors). Kırkgöz (2009) obtained positive results, which were attributed to the new program after the needs assessment.

Soruc (2012) carried out an investigation at a preparatory school of an English medium University in Turkey. Using a questionnaire and interviews with 105 students, this study revealed that needs analysis plays an important role in making curricular decisions or renewing language programs.

Using the CIPP model (context, input, process and product), Tunç (2010) evaluated an English language teaching program at a public University in Turkey. The English program was based on A, B and C levels. Using a questionnaire, interviews and written documents, Tunç evaluated students’ perceived skill competencies across many background variables and examined students’ opinions concerning materials, methods, assessment and teachers. The findings showed that while students thought that the four skills were emphasized by the program, teachers thought that more time should be allocated to speaking and listening skills.

The discrepancy between teachers’ opinions and those by students found by Tunç (2010) is also confirmed by Ferris (1998) and by Stoffelsma and Spooren (2013). For instance, Stoffelsma and Spooren’s (2013) study from Ghana investigated to what extent the negative perceptions of lecturers from the University of Cape Coast (UCC) and the University of Education Winneba (UEW) about 316 students’ reading attitudes and behaviour corresponded to the students’ self-perceptions, by looking at these students’ reading attitudes, behaviour, and self-concept. Stoffelsma and Spooren (2013) found that while spending time on reading for enjoyment was not popular amongst students, reading for school, for enjoyment and self-concept of reading was surprisingly popular amongst these students. This finding was contradictory to the negative perceptions of lecturers at UCC and UEW, which can have a great impact in the NA process. In other words, the finding by Tunç (2010) and that by Stoffelsma and Spooren (2013) can caution the decision maker about the need for triangulating the sources and tools of the NA.
In my literature searches I could not find any study that has been carried out on NA, either nationally or internationally, on Angolan EFL teacher trainees. This gap emphasizes the urgency and relevance of the current research study.

In conclusion, needs analysis benefits administrators, teachers, and tutors with learner placement and in developing materials, curricula, skills assessments, teaching approaches, and teacher training. It assures a flexible, responsive curriculum rather than a fixed, linear curriculum determined beforehand by instructors. It provides information to the instructor and learner about what the learner brings to the course (if done at the beginning), what has been accomplished (if done during the course), and what the learner wants and still needs to know (if done at the end of the course). In other words, NA is a process that can guide teachers to delineate what specific skills and strategies language students need to succeed in their studies (Johns, 1991), and it can help teachers to evaluate and ameliorate students’ existing problems and weakness and to empower their strengths and competencies (Dudley-Evans & St John, 1998).

2.2.5. Limitations of needs analysis

Although NA plays a crucial role in course design, it is also agreed that this process has some shortcomings (Cunningsworth, 1983; West, 1994). In fact, while acknowledging the usefulness of the outcomes of NA by increasing sensitivity to students’ needs, Cunningsworth (1983) acknowledges that this process has the following five limitations:

1. In many circumstances it is difficult to predict with any degree of accuracy just what learners’ needs will be in the future;
2. Most learners are taught in groups, and groups are not always homogeneous. So the needs of the learners in a group may not be identical and in many cases may differ … one from another;
3. There is no foolproof method of analysing needs. Much depends on individual subjective judgment;
4. Some of the information necessary for carrying out the analysis may be inaccurate or missing;
5. A NA may come up with a range of functions and concepts which, when turned into language forms, cannot be organised into a coherent teaching sequence (Cunningsworth, 1983: 153-154).

According to West (1994), the lack of awareness of the existence of NA as a tool in course design tends to occur due to problems of familiarity and expertise. When converting learners’ needs into course objectives, specifying precise needs sometimes can result in either restricted competence or multiple course objectives.

Although I agree with Cunningsworth (1983) and West (1994), I also think that the advantages of NA override by far its disadvantages. As has been seen above, we should be aware that when teacher trainees know that their educators understand and want to address their needs, wishes and interests, they are motivated to continue in a program and to learn. Obviously, to implement a NA successfully, one would need to understand that each learning or training situation should be
considered uniquely and systematically, and one should be aware of how the whole process of needs analysis is conducted and why it should be done on a fairly regular basis. Therefore, one should strive to minimise the above limitations through appropriate training and by ensuring the validity and reliability of the instruments used and the accuracy of the results obtained.

2.2.6. Who is involved in needs analysis

Brown (1995) argues that the production of a new curriculum is very much a “people oriented” undertaking, and the inclusion of all types of people that can influence the curriculum is necessary, both to receive valuable input, and to make sure that, politically, all the necessary people are included. This implies taking into account the needs and expectations of all the parties involved in the learning process (i.e. the learners, the ESP educators, course designers, employers, administrators, students’ parents, sponsors, the teaching institution, and other stakeholders in society at large) when designing courses and selecting methodology. This is the concept that Nunan (1988) defends in his renowned book ‘The learner-centered curriculum.’

For this specific study, I take into account the opinions and perceptions of teacher trainees (the target group) and of their trainers teaching in the English Department at ISCED-Huíla (the teaching staff), because these two groups constitute the key players in the teaching and learning process.

Obviously, teacher trainees can be considered as one of most important groups to consult because the curriculum will ultimately affect them as persons, students and professionals. However, my experience shows that one needs to be very careful when assessing students because (1) they may not always be the best judges of what they need or do not need, and (2) they may not know how they may use what they are studying upon completion of their curriculum. Thus, in order to address this problem and create a balance of achievable ideas, this study included two main sources of information: teacher trainees and teacher trainers.

At this point, it is also important to stress that Hutchinson and Waters (1987: 54-55), in their “learning-centred approach”, identified two sets of needs to guide the needs analysis: target needs (i.e. what the learner needs to do in the target situation) and learning needs (i.e. what the learner needs to do in order to learn). In order to analyse target needs I have chosen three pertinent questions used by Hutchinson and Waters (1987: 59-60) to guide this study for teacher trainees at ISCED-Huíla:

1. How will the language be used?
2. Why is the language needed?
3. What will the content areas be?

As to the learning needs proposed by Hutchinson and Waters (1987: 62-63), I have chosen four main questions to guide this study:

1. Why are the learners taking the course?
2. How do the learners learn?
3. What resources are available?
4. How do the learners learn? (In this case the focus is on reading strategies)

To sum up, both target needs analysis and learning needs analysis are crucial in having a systematic plan that will take multiple viewpoints into consideration, with reference to AL academic reading, learning and instruction.

2.2.7. When to conduct needs analysis

The research to date emphasizes the importance of NA for devising a course, writing textbooks or course books, and for the kind of teaching and learning that takes place (Jordan, 1997; Robinson, 1991). Referring to when to conduct NA, Graves (1996: 14) states that it can be in Stage 1, the planning stage; in Stage 2, the teaching stage; and also in Stage 3, the replanning stage. For Jiajing (2007), NA should be a combination of pre-course, mid-course and post-course analysis.

In other words, bearing in mind that NA is the cornerstone of ESP/EAP, and given its increasing complexity, practitioners have come to realise that NA cannot just be a once-off exercise. It needs to be on-going and continually refined. It is recommended that needs analysis should be carried out during the life of each course, both in its development and in its use (Graves, 1996). This is because “as students become more involved with the course, their attitudes and approach may change” (Robinson, 1991; Tudor, 1996). For Dudley-Evans and St John (1998: 139), the results from this process either feed into course design (initial NA), course realignment (ongoing needs analysis/ formative evaluation) or future activities (summative evaluation).

In short, at the beginning of the course, NA might be used to determine appropriate program types and course content; during the course, it assures that learner and program goals are being met and allows for necessary program changes; at the end of the course, it can be used for assessing progress and planning future directions for the learners and the program. In terms of the present study, it is this conceptualization that I would like to see eventually implemented at ISCED-Huíla.
2.2.8. Frameworks or approaches to needs analysis

Dudley-Evans (2001: 131) makes the perceptive point that “the first questions when starting preparation for teaching an ESP course is almost always: What do students need to do with English? Which of the skills do they need to master and how well? Which genres do they need to master, either for comprehension or production purposes?” Those answered, one could move to more specific questions, as posed by Jordan (1997: 22-3): Why? Whose needs? Who performs the analysis? Who decides what the language needs are? What is to be analysed? How is the analysis to be conducted? When is the EAP (English for Academic Purposes) to be undertaken? and Where is the EAP course to be held?

With reference to frameworks for NA, specialists have advanced different approaches (Berwick, 1989; Bloor, 1984; Brindley, 1989, in Nunan and Lamb, 1996; Brown, 1995; Jordan, 1997; Kaewpet, 2009; Robinson, 1991). Most of them would agree that, generally speaking, a careful NA should involve “Present Situation Analysis” (PSA) and “Target Situation Analysis” (TSA). The PSA aims at finding out the students’ English proficiency level and their existing language requirements at the beginning of a language program, whereas learners’ language requirements regarding the target situation are identified through TSA (Robinson, 1991: 8-9).

Berwick (1989) suggests an analytic view of NA which examines expert opinion and a diagnostic approach which examines the learner’s needs to be used in social services. Stufflebeam, McCornick, Brinkheroff and Nelson (1985, in Berwick, 1989) propose a discrepancy analysis which attempts to examine what people know and what they ought to know; and a democratic approach which is based on learner points of view. The approach used in the current study is similar to both the analytic view and the diagnostic approach, in that it is intended to view both trainers’ opinions and to determine the needs, wants and lacks of teacher trainees.

Dudley-Evans and St John (1998: 125) argue that NA in ESP encompasses the following:

A. professional information about the learners: the tasks and activities learners are/will be using English for – target situation analysis and objective analysis.
B. personal information about the learners: factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English – wants, means, subjective needs.
C. English language information about the learners. what their current skills and language use are – present situation analysis – which allows us to assess (D).
D. the learners’ lacks: the gap between (C) and (A) – lacks.
E. language learning information: effective ways of learning the skills and language in (D) – learning needs
F. professional communication information about: knowledge of how language and skills are used in the target situation – linguistic analysis, discourse analysis, genre analysis.
G. what is wanted from the course.
H. information about the environment in which the course will be run – *means analysis*.

In terms of the scope and nature of the current research, the study will look mainly at the target situation analysis (A), the present situation analysis (C), learner’s lacks (D), and learning needs (E), focusing on the academic reading skills of the Angolan teacher trainees at ISCED-Huíla. This does not mean the other aspects are not useful, but for the purposes of the current study, the above four chosen aspects of the needs analysis will provide adequate information about the target institution.

Needless to say, in order for the curriculum design to be realistic and not idealistic, students should be involved in the process so that “a more positive outcome is assured” (Wajnryb, 1992: 124). Unfortunately, traditional ESP syllabuses do not always meet this demand. As Tarone and Yule (1989) observe, language teachers have usually based their teaching on some sort of intuitive or informal analysis of students’ needs. Thus, they have ignored a prominent point made by Christison and Krahnke (1986) that “sound curriculum design in ESL programs for academic preparation should be based on empirical data that reflect what is really useful to students and not only on the intuitions and experience of the teaching personnel”. I think the same is true for an EAP context at ISCED-Huíla, with a particular syllabus for a particular group of teacher trainees. Thus, the syllabus should match teacher trainees’ needs as closely as possible.

Jordan (1997: 27) states that during NA language courses should be adapted to local situations

… to accommodate what are frequently seen to be ‘constraints’, e.g. cultural attitudes, resources, materials, equipment, methods – an approach called *means analysis*, … [involving] a study of the local situation, i.e. the teachers, teaching methods, students, facilities, etc. to see how a language course may be implemented.

Jordan (1997) also proposes a trichotomy of NA as follows: deficiency analysis, strategy analysis, and means analysis. Jordan considers *deficiency analysis* as being concerned with the necessities that the learner lacks; *strategy analysis* seeks to establish the learners preferences in terms of learning styles and strategies, or teaching methods; *means analysis* examines the ‘constraints’ - local situation - to find out the ways of implementation of a language course. Brindley (1989, in Nunan and Lamb, 1996: 38-39) suggests three basic approaches to needs analysis: the language proficiency orientation, the psychological/humanistic orientation, and the specific purpose orientation. The main differences between the three approaches lie in their educational rationale, the type of information collected, the method of data collection, and the
purposes for which the data are collected. Table 2.1 below presents the most important characteristics of each approach.

<table>
<thead>
<tr>
<th></th>
<th>Language proficiency orientation</th>
<th>Psychological/Humanistic orientation</th>
<th>Specific orientation</th>
<th>purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational rationale</strong></td>
<td>Learners learn more effectively if grouped according to proficiency.</td>
<td>Learners learn more effectively if involved in the learning process.</td>
<td>Learners learn more effectively if content is relevant to their specific area of need/ interest.</td>
<td></td>
</tr>
<tr>
<td><strong>Type of information</strong></td>
<td>Language proficiency/language difficulties</td>
<td>Attitudes, motivation, learning, strategy preferences</td>
<td>Information on native speaker use of language in learners’ target communication situation</td>
<td></td>
</tr>
<tr>
<td><strong>Method of data collection</strong></td>
<td>Standardized forms/ tests Observation</td>
<td>Standardized forms/ tests Observation, interviews and surveys</td>
<td>Language analysis Surveys of learner’s patterns of language use</td>
<td></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>So learners can be placed in groups of homogeneous language proficiency</td>
<td>So learners’ individual characteristics as learners can be given due consideration</td>
<td>So that learners will be presented with language data relevant to their communication goals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>So teachers can plan language, content relevant to learners’ proficiency level</td>
<td>So learners can be helped to become self-directing by being involved in decision making about their learning.</td>
<td>So motivation will be enhanced by relativeness of language content</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.1: Approaches to needs analysis (Brindley, 1989, in Nunan and Lamb, 1996: 39)

In Brown’s (1995) words, needs analysis is an “integral part of systematic curriculum building”, because once identified, needs can be stated in terms of goals and objectives, which can help to develop materials, tests, teaching activities and evaluation strategies (see Figure 2.2).

Figure 2.2: Stages of language curriculum development (Brown, 1995)
Underlying all these five aspects is (6) evaluation, which needs to be ongoing, so that the curriculum can be improved for the future. In brief, the effectiveness of any educational programme is a function of the systematic and ongoing processes of needs analysis, planning, implementation, adaptation, evaluation, and change.

According to Kaewpet’s framework (2009: 216), the NA process starts from the investigation of communication and learning needs, and proceeds through the spiral and interactive stages of curriculum development, in two different cycles (cf. Figure 2.3).

![Figure 2.3: A framework for investigating students’ needs (Adapted from Kaewpet, 2009)](image-url)

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According to Kaewpet’s framework (2009: 216), the NA process starts from the investigation of communication and learning needs, and proceeds through the spiral and interactive stages of curriculum development, in two different cycles (cf. Figure 2.3).
Although the Brown (1995) and the Kaewpet (2009) models were developed for designing the curriculum for an ESL context, I do believe that they are also relevant for the Angolan context or other EFL contexts.

With regard to Figure 2.2 and Figure 2.3, two key points can be made. To begin with, NA is the first element of a curriculum approach and that through an evaluation programme, NA is part of a system that returns to NA again. A good curriculum, then, is designed after a NA has been done to set out the learning objectives which will guide the teacher. In addition, at all stages along the way, people are the most important element of the curriculum design. As mentioned in §2.2.6, without people operating together to make the curriculum work from the beginning, this program of study would not be effectively implemented.

2.2.9. Techniques used in needs analysis

In conducting a NA, several instruments can be used to collect different data (Hutchinson and Waters, 1987; Dudley-Evans and St John, 1998; Johns and Price-Machado, 2001; Richards, 2001). These include surveys, questionnaires, interviews, attitude scales, intelligence tests, language tests, job analyses, content analyses, statistical analyses, observation, data collection, or informal consultation with sponsors, learners and others, class discussions, and work samples.

In fact, the importance of triangulation in needs analysis is well documented by several specialists, such as Merriam (1988), Richards (2001) and West (1994). Most of them recommend a triangular approach (i.e., collecting information from two or more sources with multiple instrumentation) because each data gathering technique has its strengths and weaknesses, and any single source of information is likely to be incomplete or partial. For example, questionnaires have a low rate of return and once distributed, the items in a questionnaire cannot be modified, even if they are confusing to respondents. In addition, they cannot probe deeply into the respondents’ opinions and feelings. On the other hand, interviews can compensate for this weakness by providing completeness and depth of coverage as well as the opportunity to clarify and extend because of the physical presence of the analyst. An observer will focus on phenomena that are routines to participants to be able to understand their context, specific incidents, and behaviors (Brown and Rodgers, 2002; Freeman, 1998; Mouton, 2001; Nunan, 1992; Seliger and Shohamy, 1989; and West, 1994).
In this study, I respected the need for triangulation. According to this process, it is suggested that more than one method is desirable depending on the time and resources available. On this, Smoak (2003) makes a very perceptive point that NA is good, but it should never be unilateral. I would go further by adding that a NA should be robust, able to support its own weight and so stand by itself.

For that to happen, I thought it useful to use two of the basic types of triangulation proposed by several researchers, among them Brown and Rodgers (2002), Freeman (1998), Mouton (2001) and Nunan (1992): data triangulation (making use of several sources of data); methodological triangulation (using multiple ways of collecting data).

Structured and unstructured interviews and survey questionnaires were used to solicit the opinions of the students themselves on their levels of reading proficiency at the time they start the course, and their perceptions on how they can best acquire reading. For the reading assessment, I also used a standardized AL academic literacy test (as discussed in greater detail in §3.5.2.1) which I thought was appropriate for this context. Finally, I consulted documents related to the course, namely, programmes and syllabuses. I thought by doing so a more complete and accurate picture of the reading needs of these teacher trainees could be obtained. For more details concerning the research instruments used in this study see §3.5.2.

With regard to when to conduct NA, Jiajing (2007: 103) proposes a combination of pre-course, mid-course and post-course analysis in order to see what students need to learn and improve upon through this course. She even proposes a specific structure for NA, as can be seen in Table 2.2:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-course Needs Analysis</td>
<td>• Questionnaires</td>
</tr>
<tr>
<td></td>
<td>• Interviews</td>
</tr>
<tr>
<td></td>
<td>• Informal Discussions</td>
</tr>
<tr>
<td>Mid-course Needs Analysis</td>
<td>• Feedback from Learners’ Performance and Assignments</td>
</tr>
<tr>
<td></td>
<td>• Mid-term Test Results</td>
</tr>
<tr>
<td>Post-course Needs</td>
<td>• Final Test Results</td>
</tr>
</tbody>
</table>

Table 2.2: Structure of the needs analysis (Adapted from Jiajing, 2007)

In conclusion, first, despite the limitations of this process, research has shown that it is crucial to conduct an in-depth NA before planning and implementing an EAP curriculum and material. Second, NA should consider the opinion of every possible stakeholder that makes up the target audience (who needs to be trained), the task or content (what needs to be taught) and the context or training environment (where and when the training needs to be conducted). Third,
methodologically speaking, needs analysis should consider not only the *who*, but also the *how*, i.e. the steps, the approaches and techniques currently considered as appropriate for such an endeavor. As a matter of fact, simply asking the professors, supervisors or even students themselves what kind of EAP the learners or employees need will probably not result in a very accurate picture of students’ needs, neither would an investigation of students using one tool only. Finally, one can only conduct a NA in academic reading if one is aware of the stage of the course and of the current trends of second/foreign language reading learning and instruction.

So far, we have been looking at the meaning of ESP and at the process of needs analysis in EAP. Two main conclusions can be drawn so far. NA is very important in planning a course or a syllabus. Second, the use of triangulations is crucial for a clear understanding of the NA process. That said, and since this study focuses on determining academic reading needs, in the next section we turn our attention to what the reading process involves.

### 2.3. THE READING PROCESS

This section describes the process of reading and it is divided into five parts. It first defines what reading is, followed by a description of reading fluency, then it differentiates general reading skills and reading strategies, looks at the development and levels of reading, and finally distinguishes learning to read from reading to learn.

#### 2.3.1. Reading

The last four decades have witnessed tremendous progress in the development of reading theory. Research into the reading process has moved from quite simple views of reading to more elaborate frameworks that involve cognitive, metacognitive and motivational aspects, and interaction between reading experiences and student’s background knowledge. While some researchers have focused on the identification of sub-skills, others have developed models to explain the reading process (Grabe, 2009; Grabe and Stoller, 2011; Koda, 2005; Hoover and Gough, 1990; Pretorius, 2000a/b).

Hoover and Gough (1990: 132) proposed that “reading consists of only two parts, decoding and linguistic comprehension, both necessary for reading success, neither sufficient by itself.” Pretorius (2000b: 33) posits that reading entails decoding and comprehension, two processes that interact simultaneously in fluent readers. **Decoding** entails “the oculomotor, perceptual and parsing aspects of reading activity whereby written symbols are translated into language” (Carpenter and Just 1986, in Pretorius, 2000b: 33). It is the retrieval of the auditory code of
written words – being able to read a word aloud. In fact, whenever we read, whether we are beginners or experts, we always decode a text – we cannot know what a text is about unless we decode it. **Comprehension**, on the other hand, refers to the overall understanding process whereby meaning is constructed within sentence units, between adjacent sentences, and across larger units of text contributing to the meaning of the text as a whole. It is the construction of a mental representation of the information in the text. Reading can be perceived as an interactive process involving bottom-up, top-down and interactive processes (eg. Grabe, 1991; Ur, 2012; Wilhelm and Li, 2008).

Bottom-up processes mainly attends to meaning at word and sentence level, by emphasizing the ability to de-code or put into sound what is seen in a text (phonics). In this approach, reading is a matter of getting the meaning by recognizing letters and words. As Nunan (1991: 64) puts it, the bottom-up model sees reading basically as a matter of decoding a series of written symbols into the aural equivalents. Nevertheless, students sometimes may decode a text quite well but not comprehend it (Nuttall, 1996: 5). Thus, bottom-up processing on its own is often seen as inadequate for clarifying the reading process.

Top-down processes involve meaning making. These processes entail the reconstruction of meaning rather than the decoding of linguistic form. For Davies (1995: 61), the interaction of the reader and the text is the main aim of the process. With top down processes readers give meaning to text based on their experiential background and their prior knowledge. The readers read the text for information and contrast it with their world knowledge, helping to make sense of what is written.

Bottom-up processes are also called lower-level processes and top-down processes are also called higher-level processes. According to Grabe and Stoller (2011), reading involves both an array of lower-level skills and higher-level skills. For Grabe (2009), lower-level skills encompass the processes involved in understanding the meaning of words and sentences to form meaning units and they are predominantly linguistic processes (e.g. word processing that has to do with words and retrieval of their meanings; syntactic parsing, which is analysing the syntactic structure of the sentences, and semantic proposition encoding, which has to do with forming elementary meaning units). Higher level-skills are comprehension building processes involved in integrating meanings from meaning units to build a text model (Similar to a literal understanding of the text), and the processes involved in making personal interpretations to build a situation model (e.g. predicting, making inferences and monitoring understanding, resolving
comprehension problems, etc.). Whereas lower-level processes have the potential to become automated, and automatic processing is a prerequisite for fluent reading (Alderson, 2000; Segalowitz, 2000), higher-level processes tend to be controlled processes, which are “slow, error prone, and serial in nature” (Walczyk, 2000: 554). There is enough evidence that at the level of word recognition, poor readers make more use of contextual clues than good readers, in order to compensate for their slow word encoding (Perfetti, 1985; Stanovich, 1991). In addition, it has been shown that it is not only higher processes that control the reading process because good readers do not appear to guess much during reading; instead, they are fast and accurate readers.

The interactive approach to reading recognises the importance of both bottom-up and top-down processes, and its main characteristic is recognizing the importance of both what is on the written page and what a reader brings to it using both top-down and bottom-up skills. According to Grabe (1988, 2002, 2009), reading as an interactive process refers to three meanings. Firstly, reading as an interactive process means a kind of dialogue between the reader and text. This means that there is a dynamic relationship between a reader and a text as the reader ‘struggles’ to make sense of it, and there is a kind of dialogue between the reader and the text, or even between the reader and the author. The reader may be interested in constructing a personal interpretation of a text or, on the other hand, may be more interested in trying to get at the author’s original intention. Readers construct the meaning using their knowledge of the language, their subject and the world, continually predicting and assessing. This concept of reading as an interactive process evolved from schema theory, to be discussed below. Secondly, in addition to his notion of reading as an interactive process, Grabe (2009) posits an interactive model of reading. This term usually refers to the interplay among various kinds of knowledge that a reader employs in moving through a text: bottom-up (lower-level) and top-down (higher-level) reading strategies. As seen above, bottom-up processes include decoding graphic features and grammatical characteristics, while top-down strategies include predicting, applying background knowledge and recognizing global text structure. Thirdly, Grabe (1988, 2009) introduces the notion of textual interaction, which refers to the interaction between various linguistic dimensions within the text that together serve to define a text as such rather than as a series of unconnected sentences.

According to this process, clues are taken from the page by the eye and transmitted to the brain. Then, the brain tries to match existing knowledge to the data to facilitate the further processing of new information. As Lipson and Wixson (1997: 24) put it, “[R]ather than focus on the mastery of prerequisite skills, the interactive approach focuses assessment and instruction on the
behaviours or activities that characterize good comprehension. Skills and strategies are the means to achieving the goal of good comprehension, not the end in itself.” For this to happen, they argue, a variety of learner (or reader) factors play a role. Lipson and Wixson (1997: 40-1) highlight prior knowledge, knowledge about reading and writing, attitudes and motivation, and the physical, cognitive, linguistic and social-emotional correlates of reading and writing ability. On the basis of this previous experience, predictions are made about the content of the text (Celce-Murcia, 1991: 197).

We can then conclude that current theories to reading stress that reading does not only involve knowledge of vocabulary and grammar, but also high levels of comprehension (Alderson, 2000; Grabe, 2009; Grabe and Stoller, 2002; Hudson, 2007; Koda, 2005; Nation, 2001; and Samuels and Kamil, 1988). Therefore, and for the purpose of this study, reading will be defined following Snow, Burns and Griffin (1998) and Reutzel and Cooter (2013). Snow, Burns and Griffin (1998: 15) provide a more expanded definition:

> Reading is a complex developmental challenge that we know to be intertwined with many other developmental accomplishments: attention, memory, language, and motivation, for example. Reading is not only a cognitive psycholinguistic activity but also a social activity.

Nowadays, the “nature of reading … is changing because of digital technology” (Coiro 2009: 62). According to Reutzel and Cooter (2013: 10) our current understanding of the reading act “has been broadened to include the visual, analytical, and technological skills necessary to acquire information from digital video, handheld data assistants, computers, wireless reading devices, cell phones, or other technological learning devices.” It is clear from this concept to be adopted in the current study that reading is made up of a multifaceted and expanding number of skills and strategies, gradually acquired over years of instruction and practice.

This concept of reading is often confused with that of literacy. In fact, it is generally agreed that there is considerable overlap between literacy and reading – the word ‘literate’ has the root of “letter,” and also suggests “to be educated.” Educated here means some skill in understanding a topic through the mastery of terms, concepts, words, associated with that topic (domain). The OECD defines literacy as “using printed and written information to function in society in order to achieve one’s goals, and to develop one’s knowledge and potential” (OECD and Statistics Canada, 2000: x). A meeting by UNESCO experts defined literacy as

> the ability to identify, understand, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning to enable an individual to achieve his or her
goals, to develop his or her knowledge and potential, and to participate fully in the wider society (UNESCO, 2004).

It can be seen that this definition of literacy is very much based on a view of print literacy with the reading of written information being privileged as the central literacy skill. In other words, reading implies specific cognitive linguistic skills, like decoding and comprehension, while literacy is broader, involving the ability to solve our everyday problems via printed materials. The modern day literate is one who can identify their own problems and seek solutions, identify their own knowledge, its shortfalls and gaps, identify learning needs, recognize the difference between legitimate claims and spurious scams, be able to discern the strengths and weaknesses of opposing perspectives, be empowered with the skills of learning as well as having a willingness to learn, unlearn and relearn (see §2.6.1 on Academic literacy).

### 2.3.2. Factors affecting reading literacy achievement

There has been a large amount of research regarding the factors that may affect academic literacy development as it relates to the individual, family and educational system (Chapman, 2010; Geske and Ozola, 2008; Guthrie, Wigfield, Barbosa, Perencevich, Taboada, Davis, Scafiddi and Tonks, 2004; Howie, 2003; Ofak, Starc and Šelo Šabić, 2006; Parsons and Bynner, 1998; Passos, 2009).

Evidence from Canada, the United Kingdom, the United States and around the world shows without doubt that low levels of literacy are affected by broader social, economic and sociolinguistic factors such as: language, educational level, poverty, unemployment and low-level employment, crime, social problems such as teen pregnancy, poor coping skills, problems in early childhood care, physical health risks and medical problems, accidents and injuries, and, mental wellness problems. Here are some of the factors that affect reading literacy development:

- **Family and home background**: poverty, disadvantaged parents; the existence or not of written sources at home, such as books, newspapers, and magazines.
- **Educational background of parents**: whether parents have or have not experienced formal education; social class; financial difficulties; housing and overcrowding in the homes; lifestyle.
- **Early education and schooling**: the early development and starting of schooling; early parental support, which may depend on the whole education experience of adults with good literacy and numeracy skills and so significantly contribute to linguistic and cognitive development of a child; recognition and support of early cognitive difficulties; school attendance and behavior; parental interest in their child’s education.
- **The institution and teaching staff**: school characteristics; existence of a school library with enough and appropriate resources; preparation and qualification of the teaching staff.
- **Transition from school to work**: qualifications and early job expectations; first employment experiences of early school leavers. In fact, due to the low-literacy levels, most people tend to
choose occupations that are less demanding cognitively, like unskilled or semi-skilled low grade work, such as ‘personal services’, being ‘at home’, and manual occupations.

- **Voluntary associations, community activities, and workplace:** the attitudes that communities have towards reading may have a great impact on the development of literacy skills. People can set up reading associations, reading clubs, and library clubs.

- **Effort, attitude and motivation:** the more a person values reading the more they can develop literacy skills.

Studies conducted in South Africa by Howie (2003) and in Mozambique by Passos (2009) report the following school-related factors as being related to students’ poor performance in PIRLS, TIMSS and SACMEQ (i.e. mathematics, literacy and science – see §1.3.2): inadequate subject knowledge of teachers, inadequate communication ability between students and teachers in the LoLT, lack of instructional materials, difficulties for teachers to manage classroom activities effectively, pressure to complete examination driven syllabi, heavy teaching loads, overcrowded classrooms, poor communication between policy makers and practitioners and lack of support due to shortage of professional staff in the ministry of education.

From said, it can be seen that the actions taken by parents, family members, educational institutions, and the society as a whole are of great importance in student’s reading literacy development. We will return to this topic when we discuss the relationship between reading and different types of context in §2.4.2. Meanwhile, we look more closely at reading fluency.

### 2.3.3. Reading fluency

Reading fluency has been found to be important for academic achievement (Iwahori, 2008; National Reading Panel, 2000; Pretorius, 2000a; Rasinski, 2003; Samuels, 2002). Current views suggest that reading fluency consists of three distinct components: accuracy of decoding, automaticity of word recognition, and prosody of oral text. **Accuracy of decoding** refers to the ability to correctly generate a phonological representation of each word, either because it is part of the reader’s sight-word vocabulary or by use of a more effortful decoding strategy such as sounding out the word. **Sight vocabulary** is seen as words that readers are able to recognize automatically (Day and Bamford, 1998: 13). Rasinski (2003) defines reading fluency as the ability to read accurately, quickly, effortlessly, and with appropriate expression and meaning. Therefore, when encountered in a text, these words are recognized and decoded quickly and without any cognitive effort. For example, if readers encounter the lexical item “research problem” in a text and the expression is in their sight vocabulary, they do not need to rely on the surrounding context to comprehend its meaning. It is agreed that students who recognize words quickly and automatically are able to focus instead on meaning. Among several skills required
for accuracy of decoding we can highlight the alphabetic principle, the ability to blend sounds, the ability to use cues to identify words in text, and a large sight-word vocabulary of high-frequency words (Day and Bamford, 1998; Grabe and Stoller, 2001; Grabe, 2009). Accurate decoding is a requirement for building the next component of reading fluency, namely automaticity.

**Automaticity of word recognition** refers to the ability to quickly recognize words automatically, with little cognitive effort or attention. The theory of automaticity in reading suggests that proficient word decoding occurs when readers move beyond conscious, accurate decoding to automatic, accurate decoding (Samuels, 2002 and Stanovich, 1991). In other words, automaticity is the ability to perform a complex task quickly, with few attentional resources and it is gained through practice. According to Logan (1997), processes are considered to be automatic when they possess four properties: **speed or reading rate** (i.e. the number of words read correctly in one minute), effortlessness, autonomy, and lack of conscious awareness. Regarding reading speed or reading rate, there is often a parallel between reading speed and comprehension. In other words, fast readers also tend to be good comprehenders. Among several factors that reduce reading rate we can highlight lack of practice in reading, word-by-word reading, slow reading, subvocalization, faulty eye movements (jumping to the wrong line, etc) and attempting to remember everything rather than only important things. Reading rate is very important in an academic context where rapid processing and retention of new information is the primary goal.

Nuttall (1982: 56) states that a silent reading speed of 300 words per minute is the norm for adult L1 (first-language) readers of English with average education and intelligence reading a narrative text, while Dubin and Bycina (1991, in Pretorius 2000:3) suggest that 200 words per minute is the minimum required for proper comprehension. Segalowitz, Poulsen and Komoda (1991, in Anderson 1999:2) argue that the reading rates of bilingual L2 (second-language) readers are usually about 30 percent slower than L1 reading rates. Nuttall (1996: 127) argues that “speed, enjoyment, and comprehension are closely linked with one another.” A study conducted by Iwahori (2008) that examined the effectiveness of extensive reading on reading rates of high school students in Japan, confirmed the estimation by Nuttall (1982: 35) that secondary school students’ average reading rate in ESL may be from 120 to 150 words per minute (wpm) and university students’ rate in ESL may be at about 200 wpm. However, we should remember that these are rates for English specifically – rates will differ from language to language, depending on factors such as morphosyntactic complexity and orthography (e.g. agglutinating languages
tend to have longer ‘word units’). Automaticity is a requirement for building the next component of reading fluency, namely prosody.

*Prosody of oral text* refers to naturalness of reading, or the ability to read with appropriate phrasing and expression, imbuing text with suitable volume, stress, pitch and intonation. Prosody is an indicator that the reader is actively constructing the meaning of a passage as they read (Day and Bamford, 1998; Grabe, 2009). Indeed, prosody may serve both as an indicator that a student is comprehending while reading and may also aid comprehension (Rasinski, 2004).

From the above three subprocesses or components, we can conclude that reading fluency forms a bridge from decoding skills to comprehension (Rasinski, 2004). At one end of this bridge, fluency connects to accuracy and automaticity in decoding, with implications for working memory, i.e. how attention is allocated during processing. At the other end, fluency connects to comprehension through prosody, or expressive interpretation. This means a fluent reader must have the ability to “recognize the word forms, the graphic form and phonological information, activate appropriate semantic and syntactic resources, recognize morphological affixation in more complex word forms, and access her or his mental lexicon” (Grabe, 2009: 23). The American National Reading Panel identified fluent reading as a key ingredient in successful reading instruction (National Institute of Child Health and Human Development, 2000). The final report of this Panel defends that, in contrast to earlier theories, it is nowadays believed that “(t)he fluent reader is one who can perform multiple tasks – such as word recognition and comprehension – at the same time.” The characteristics that distinguish fluent from non-fluent readers are detailed in Table 2.3 on the following page.

Given that a lot of reading is required for study at tertiary level, we would expect that teacher trainees ideally should be fluent readers with the following characteristics: (a) accuracy and ease in decoding, (b) expression in oral reading, (c) simultaneous decoding and comprehension, and (d) speed of reading. In other words, a fluent [academic] reader decodes and comprehends rapidly and simultaneously. A non-fluent [academic] reader, on the other hand, can perform only one task at a time. S/he laboriously decodes a section of the text, and only then s/he tries to make sense of or to comprehend the text (cf. Grabe, 1991). To cope with all the reading that is required at tertiary level, students need to be fast and efficient, otherwise they cannot read it all and/or do not properly understand what they read. They often adopt alternate strategies, e.g. taking shortcuts or relying on oral discussions of the work or summaries.
Reading fluency is important because it affects students’ reading efficiency and comprehension, and disfluent students may have difficulty understanding what they read. I now look at some research studies conducted on the relationship between decoding and comprehension or lower-level processes and higher-level processes. In this research study I will adopt the distinction that states while “lower-level processes of reading concern the identification of letters and words in a text, higher-order skills concern the understanding of concepts and ideas conveyed by the text” (Rapp, van den Broek, McMaster, Kendeou and Espin, 2007: 292.

<table>
<thead>
<tr>
<th>Fluent Readers</th>
<th>Why</th>
<th>Nonfluent Readers (many dyslexics) and struggling readers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decode effortlessly, with automaticity and with average reading rates or better for age and/or grade level.</td>
<td>Fluent readers read more, more extensively, and with a variety of printed materials.</td>
<td>Decode laboriously, without automaticity and with lower than expected reading rates for age/or grade level.</td>
</tr>
<tr>
<td>2. Place a reading emphasis on comprehending words within the context of phrases, sentences, and paragraphs.</td>
<td>Fluent readers have acquired a variety of word recognition strategies that make word reading for the most part effortless.</td>
<td>Place a reading emphasis on identifying or decoding words in isolation before discerning meaning because of word recognition difficulties.</td>
</tr>
<tr>
<td>3. Have extensive sight vocabularies.</td>
<td>Fluent readers have more exposure to print and reading practice.</td>
<td>Have limited sight vocabularies as compared to fluent readers of similar age or developmental level.</td>
</tr>
<tr>
<td>4. Are able to effectively handle miscues or errors in word reading.</td>
<td>Fluent readers have acquired a variety of strategies for fixing miscues or errors in word reading.</td>
<td>Often rely on one or two “fix-it” strategies when problem-solving during word-reading.</td>
</tr>
<tr>
<td>5. Can effectively decode and comprehend text simultaneously.</td>
<td>Fluent readers effectively key in on main ideas and important information when reading; they can accurately summarize or paraphrase readings; they are able to self-monitor comprehension and organize information learned from reading as needed.</td>
<td>Experience a diminished ability to comprehend text because more cognitive energies are spent on decoding and identifying words.</td>
</tr>
<tr>
<td>6. Adjust reading rates according to reading demands.</td>
<td>With frequent and extensive reading practice and feedback, fluent readers become flexible readers, adjusting reading rates as needed.</td>
<td>Have difficulty adjusting reading rates according to reading purpose and text difficulty.</td>
</tr>
</tbody>
</table>

Table 2.3: The characteristics of fluent versus nonfluent readers (Spafford and Grosser, 2005:208-209)

A study conducted by Braze, Tabor, Shankweiler and Mencl (2007) with a population of less-skilled adult readers, found that word reading and pseudohomophone identification tasks failed to account for additional variance in reading comprehension after listening comprehension was taken into account, whereas pseudoword reading still accounted for significant (18%) variance. Pseudoword reading is understood as the ability to read pronounceable combinations of letters
that resembles the orthography and phonology of a real word, but they, by definition, do not actually exist in English language (e.g. *flink* and *dake* may be read by analogy to words like *blink* and *take*, respectively). Therefore, what we can understand from the study is that Braze, Tabor, Shankweiler and Mencl (2007) looked at different aspects of decoding skills and found that even after listening comprehension was taken into account, pseudoword reading ability still accounted for significant variance. In other words, even in adult readers, the ability to decode unknown words was an important aspect of reading ability.

Regarding studies with skilled readers, Perfetti and Hart (2001) report data from a factor analysis. The study sought to examine the relationship among multiple reading skills in adult skilled, average, and poor comprehenders. The findings showed that there were partial dissociations between low-level skills such as spelling and elision and higher-level skills such as comprehension and vocabulary for all three groups of readers. However, they found that the pattern of factor loadings was different for the less skilled readers such that an additional factor was required to explain a comparable amount of variance. Whereas for poor readers, phonological skills loaded on a separate factor from lexical skills (e.g., word identification), for skilled and average readers, these were combined on one factor. Perfetti and Hart (2001) suggest that for more skilled readers, lexical-level factors and phonological factors are linked, whereas for poor readers they are still separate. Jackson (2005) examined the relationship between academic skills and a variety of reading measures among a small sample of highly skilled adult university students. Her main finding was that reading measures clustered into three independent components, namely decoding accuracy, reading speed, and text comprehension. This finding is consistent with those of Perfetti and Hart (2002), pointing towards a dissociation between comprehension and decoding abilities in more skilled readers.

A study conducted by Hock *et al.* (2009) on eighth and ninth grade students, found that 61% of the struggling adolescent readers had low scores on every component of reading measured, including word recognition, fluency, vocabulary, and comprehension. In this study struggling readers were understood as those failing to achieve a standard score on a standardized reading comprehension measure. Many of these students at the upper grade levels had failed to achieve fluent and accurate decoding at the word level and continued to struggle with automatic word recognition.

There is thus evidence that weak decoding skills impair reading comprehension performance for two reasons, in my opinion. Firstly, readers with poor reading accuracy may be unable to derive
sufficient text information for comprehension. In other words, the quality of information derived from text during slow, disjointed and interrupted reading may not, therefore, match the quality of information derived during smooth, focused reading. Secondly, readers are expected to distribute effort between reading accuracy and reading comprehension. However, the act of decoding may be so effortful for readers with weak decoding skills that they adopt a strategy of not actively engaging comprehension processes, i.e. limitations on working memory – too much attention on decoding, but not enough ‘disc space’ for comprehension.

In short, “many readers may readily decode text but still have difficulty understanding what has just been decoded (Daneman, 1991; Yuill and Oakhill, 1991, both in Pretorius, 2002: 170). Decoding is necessary for comprehension, but not sufficient. The two happen simultaneously – while we decode we are busy constructing meaning, and we can change or modify the meaning as we go along, in terms of the incoming information that we decode. Without decoding, then can be no comprehension. But decoding alone does not guarantee comprehension, because several other types of knowledge interact in the whole reading process. In the following section we look at the difference between reading skills and reading strategies.

2.3.4. Reading skills vs. reading strategies

It is generally believed that readers should acquire specific types of knowledge and skills in order to maintain and accelerate their development of proficiency in their private, academic and professional lives. These types of knowledge and skill can be grouped according to several criteria. For example, Nuttall (1996: 44-124) suggests that there are three major categories of reading skills, namely efficient reading skills, word attack skills, and text attack skills.

1. Efficient reading skills: identifying the reason for reading, choosing the right material, using the text effectively, making use of all the resources in the text, and improving reading speed (Nuttall, 1996: 44-61).
2. Word attack skills: the interpretation of structural clues (both syntactical and morphological); inference from context; and the use of the dictionary (Nuttall, 1996: 62-76).
3. Text attack skills: understanding syntax, recognizing and interpreting cohesive devices, interpreting discourse markers, recognizing functional value, recognizing text organization, recognizing the presuppositions underlying the text, recognizing implications and making inferences, and prediction (Nuttall, 1996: 78-124).

As to reading strategies, they are here defined as “deliberate, conscious procedures used by readers to enhance text comprehension” (Sheorey and Mokhtari, 2001b: 433), and their application is believed to contribute to efficient reading (Auerbach and Paxton, 1997: 240-241). Several lists of reading strategies have been identified from previous research. Briefly, this study
has adopted the list of strategies developed by Sheorey and Mokhtari (2001b: 436), who identify three groups of reading strategies: metacognitive, cognitive, and supportive strategies.

*Metacognitive strategies* are those intentional, carefully planned techniques by which learners monitor or manage their reading. According to Auerbach and Paxton (1997: 240-241), metacognitive awareness “entails knowledge of strategies for processing texts, the ability to monitor comprehension and the ability to adjust strategies as needed”. In other words, while cognition relates to knowledge and skills a reader has and their use, metacognition refers to awareness and conscious control over those. For example, having a purpose in mind, previewing the text as to its length and organization, or using typographical aids and tables and figures, i.e. basically monitoring the reading process and using appropriate repair strategies when comprehension breaks down.

Brown (1987, in Lee and Baylor, 2006: 345-346) delineated four components of metacognition: planning, monitoring, evaluating, and revising. Planning describes an overview of how the learning will be carried out. Monitoring is related to controlling the undergoing learning process. Evaluating refers to the assessment activities of current learning. Revising involves activities to correct previous mistakes and adjust previous learning plans and other strategies. Metacognitive awareness is considered to be a key factor for proficient strategic reading. More proficient or successful readers tend to have better awareness of their metacognitive knowledge than less successful readers (Phakiti, 2003). In other words, better readers employ reading strategies in planning, monitoring, evaluating and revising their own reading processes effectively and efficiently (Carrell, 1989; Sheorey and Mokhtari, 2001a/b). As a result, they enhance their reading ability, are more aware of the characteristics of the text and the strategies they use, and can engage in higher thinking skills about texts and their relations to those texts (Carrell, 1989; Hudson, 1998; National Reading Panel, 2000; Sheorey and Mokhtari, 2001a/b; Zhang, 2001).

Following Alexander, Schallert and Hare (1991: 329), I understand metacognition as knowledge about one’s cognition (“knowing that”) and about the regulation of that cognition (“knowing how”). Slightly different from Brown (1987, in Lee and Baylor, 2006) above, Alexander *et al.* (1991) subdivide metacognitive knowledge into four dimensions:

a. **Self knowledge**: perceptions or understandings of oneself as learner or thinker.

b. **Task knowledge**: analyses of the cognitive demands of a task.

c. **Strategic knowledge**: knowledge of processes that are effortful, planned, and consciously invoked to facilitate the acquisition and utilization of knowledge. This component includes both cognitive and metacognitive strategies; the former contribute directly to the solution of a problem and the latter evaluate and monitor how well the selected cognitive strategy works.
d. **Plans and goals**: knowledge of the goals that may be established and the general plans that may be invoked. The first three dimensions “are directly aligned to the goals learners establish or the general plans that they have internalized for themselves” (Alexander *et al.*., 1991: 328-330).

In the context of reading, metacognitive knowledge should be understood as readers’ assessment of themselves as readers and their knowledge and control of strategies for processing and learning from text, in relation to both the complexity of the task at hand and the goals and plans that guide the reading process.

*Cognitive strategies* are the actions and procedures readers use while working directly with the text. These are localized, focused techniques used when problems develop in understanding textual information. Examples of cognitive strategies include adjusting one’s speed of reading when the material becomes difficult or easy, guessing the meaning of unknown words, and re-reading the text for improved comprehension.

*Support strategies* are mechanisms intended to aid the reader in comprehending the text such as using a dictionary, taking notes, or underlining or highlighting the text to better comprehend it.

Conceptual knowledge of the reading topic helps students understand and remember its information. Text-structure knowledge is related to knowledge about genres and their conventions, since different genres have different text structures. It is useful for the reader to see relations between ideas, including hierarchical relationships between main ideas and details. Knowledge about text-processing strategies has to do with the repertoires of cognitive strategies for processing text as well as metacognitive strategies (the self-regulation of cognition) to monitor this processing. Tannenbaum, Torgesen and Wagner (2006) argue that although development in one set of skills may enable development in the other, lower-level and higher-order skills develop simultaneously and independently rather than sequentially. This discussion takes us to the next point which is about the different stages and levels of the development of reading ability.

### 2.3.5. Reading development and reading levels

This section deals with the phases and levels through which readers proceed, each of which emphasizes a particular aspect of reading development. According to Van Elsäcker (2002: 10), the first thing beginning readers have to learn is to see the relation between meaning and print, because the written material is a representation of knowledge they already have, following these three stages: (a) to develop the awareness that words are made up of sounds; (b) to develop the awareness that print represents these sounds; (c) to develop the understanding that the letters on
the page represent these units of sound. Only after they have reached this level of phonological awareness, are they ready to learn to read.

Several models of reading development have been proposed to describe the predictable stages of learning to read. According to Chall (1996), reading acquisition falls into six distinct phases (Chall, 1996; Ehri, 1991, 2005; Frith, 1985). In Stage 0, the **prereading stage or pseudo-reading** (from birth to age 6), i.e., prior to formal instruction, children begin to control language and develop skills related to the reading process that include concepts about print, phoneme awareness and book-handling knowledge, and they can play with pencils and paper. It is expected that by the time they reach kindergarten young readers can understand thousands of words they hear but can read very few if any of them. In other words, individuals in this phase are essentially non-readers.

During Stage 1, the **initial reading and decoding stage** (ages 6-7), i.e. the beginning of formal reading instruction, children learn basic correspondences between sounds and letters and between printed and spoken words. They are also able to read simple texts containing high frequency words (see §2.5.3.1) and phonically regular words.

In Stage 2, the **confirmation and fluency stage** (ages 7-8), students read simple familiar stories and selections with increasing fluency. This is done by consolidating their basic accuracy in decoding, sight vocabulary and meaning context acquired from the previous stage and they now develop automaticity with print.

During Stage 3, the **reading for learning stage** (ages 9-14), the focus of reading instruction is on the understanding of content area material, and students are expected to gain proficiency with increasingly complex texts. Reading is now used to learn new ideas, to gain new knowledge, to experience new feelings, and to learn new attitudes.

In Stage 4, the **multiple viewpoints stage** (ages 15-17), readers begin to read a broad range of complex materials, both expository and narrative, and are expected to critically evaluate different viewpoints.

During Stage 5, the **construction and reconstruction stage** (ages 18 and above), through high school and university, reading is rapid and efficient. Individuals now use reading for their own needs and purposes (personal, academic and professional). Reading helps to integrate students’ own knowledge with that of others, if it is used for analyzing and synthesizing the myriad
viewpoints presented in texts, and creating new knowledge and determining their own perspective on a given subject. This skill is fundamental if a learner is to develop into a critical reader and thinker. According to Chall (1996), many people never reach the highest stage, and those who do typically take 20 years or even more to get there. Chall (1996) emphasizes that the process of comprehension is practiced in all of the stages, including the decoding stage.

Related to the topic of phases of reading development are the maturational levels of reading. In standardised criterion-referenced reading tests, a distinction is commonly made between four levels of reading ability, appropriate to a specific maturational level (e.g. McCormick, 1995: 100). These levels are not absolute, but serve as guidelines:

- At the independent level, the reader reads with 98% decoding accuracy and has at least a 95% level of comprehension. These are highly skilled readers who can effectively learn from texts appropriate for that specific maturational level.
- At the instructional level the reader reads with 95% decoding accuracy and about 75% comprehension. These are readers who do not have major reading problems but who can benefit from reading instruction at their maturational level.
- At the borderline level the reader reads with 90-94% accuracy in decoding and about 55-74% accuracy in comprehension. These readers need to be given additional reading exposure and practice.
- At the frustration level, the reader reads with less than 90% decoding accuracy and about 50% or less comprehension. These are readers who have major reading problems and who are reading well below their maturational level. They need intensive reading programmes to increase their reading level.

So far, we have seen that accuracy and automaticity are essential components of fluent reading that help individuals transit to comprehension. In this study I would like to argue that if individuals are unable to make the transition from Stage 2 to 3, their academic success is usually severely hampered or challenged (Buehl, 2011; Chall, 1996; Grabe and Stoller, 2011). Furthermore, Chall’s Stages 1 and 2 can be characterized as the “learning to read”, i.e. the time young readers acquire the alphabetic principle and are able to read simple and familiar words, while Stages 3 to 5 correspond to “reading to learn” stages.

Two broad stages are often used to categorize reading growth: “learning to read” and “reading to learn” (Grabe, 2009; Grabe and Stoller, 2011; Pretorius, 2000a/b). Basically, learning to read focuses primarily on developing decoding. At this stage young readers are required to read simple and familiar words and texts and acquire the alphabetic principle. Meanwhile, reading to learn tends to focus on comprehension or explicit reading strategy instruction. During this stage texts become more varied, complex, and linguistically and cognitively challenging (Grabe and Stoller, 2011; Herrera, Perez and Escamilla, 2010; Reutzel and Cooter, 2013). This distinction implies that learning new reading skills may end after an initial period of instruction, with
reading then becoming a tool in the service of the student’s broad education. It is to this topic that we now turn.

### 2.3.6. Reading to learn

As aforementioned in the preceding section, readers often transit from *learning to read* to *reading to learn* in Grade 3 mainly in developed countries. However, studies have indicated that in Africa and elsewhere (Hellekjær, 2009; Nation and Angell, 2006; Pretorius, 2000a/b; Pretorius and Machet, 2004) by the time some students reach tertiary level (or even when they leave university) they may only be reading at primary grade levels. Therefore, the teaching of different skills to university students is fundamental. Hermida (2009) makes a very perceptive point that

> Success at the university level mainly depends on existing pre-entry college attributes, including the mastery of some fundamental academic skills …. These include – reading, writing, critical thinking, oral presentation, and media literacy. Despite the importance of these skills for academic success, professors seldom teach them …. They generally take them for granted, as they tend to presuppose that all students already acquired these skills either as part of their secondary education or elsewhere in college …. The reality is that most first-year students lack academic reading skills, especially because University-level reading greatly differs from High School reading. Thus, most students employ non-university strategies to read academic texts, which results in students taking a surface approach to reading (Hermida, 2009: 20).

This also has to do with the levels of reading development referred to in §2.3.5. The move from Level 2 to Level 3 is fundamental for a reader’s future success. It is generally agreed that readers who have moved from learning to read to reading to learn will learn exponentially, while those who have not will slump (Paul, 2012).

In operation this is what reading specialists and researchers have called the *Matthew effect*. The *Matthew effect* was coined by sociologist Robert Merton after the Bible verse found in the New Testament Gospel of Matthew (Matthew 25:29): “To those who use well what they are given, even more will be given, and they will have an abundance. But from those who do nothing, even what little they have will be taken away.” According to Stanovich (1986), this passage roughly translates to: “Young readers who have early success in acquiring reading skills usually have further success in reading as they grow, while those who do not learn to read before the third or fourth year of schooling are most likely to be deprived of it.” In other words, the academically rich get richer and the poor get poorer. However, according to Paul (2012), the *Matthew effect* has a significant positive effect. In other words, provided there are well-timed interventions, the direction can be reversed, turning a vicious cycle into a virtuous one.
Our teacher trainees at ISCED-Huíla need to understand that they must be skilled at reading to learn. In other words, they need to be fast, accurate, comprehending, strategic readers. They need to be alerted that, as readers at university, they need to be able to read to learn, read for information, read to build knowledge and understanding. This means that rather than simply knowing how to decode, they must be able to activate background knowledge; draw inferences; read skeptically; understand and question the author’s assumptions; understand and use different types of discipline-specific styles, vocabulary, conventions, reasoning, and arguing; and monitor comprehension. In fact, if teacher trainees continue learning and expanding their literacy knowledge, skills, competences and values in several content-areas, they may leave university as highly fluent readers. This will obviously have a positive impact on their everyday life as people, academics and professionals.

2.4. BROTHER CONCEPT OF SECOND LANGUAGE READING
This section describes the process of reading in an EAP context, and is divided into five parts. It first looks at different reading purposes, followed by reading versus types of context; it then differentiates spoken and written discourses, and reading in a first language versus reading in a second or foreign language; and finally it sketches the reading situation in Angola.

2.4.1. Purposes for reading
Reading is a purposeful activity, as we saw above. Competent and accomplished readers make use of different approaches depending on what they read and why. They do it instinctively and in more or less detail according to their particular purpose.

Research shows that reading skills should be addressed in EAP courses for a number of reasons, the two most important being that: (1) education is about learning – and “reading is learning”; and (2) all tertiary students are required, at certain points, to read exhaustively in their subject areas (Grabe, 1986: 38; Grabe and Stroller, 2011; Hedge, 2000). These reasons are applicable to students at undergraduate and postgraduate levels who need to obtain a great deal of information from books or reading material covering research in their fields.

For Jordan (1997: 143), students’ purpose in academic reading can include: (a) to obtain information (facts, data, etc), (b) to understand ideas, or theories, etc, (c) to discover author’s viewpoints, and (d) to seek evidence for their own viewpoint … all of which may be needed for writing essays, … etc’.
Grabe (2009: 8-10) presents six reasons why students read: (a) reading to search for information (scanning and skimming), (b) reading for quick understanding (skimming), (c) reading to learn, (d) reading to integrate information, (e) reading to evaluate, critique, and use information, and (f) reading for general comprehension (in many cases, reading for interest or reading to entertain).

To sum up, and as seen above, readers need to have more skills than just recognising vocabulary. Before starting any task readers need to consider why they are reading certain material, what their purpose may be, and what information they may require or what they are trying to learn.

2.4.2. Reading and types of context

In §2.3.2 it was argued that several factors may affect the development of reading literacy skills. In this section we look at how context shapes readers’ interaction with the writer and texts and their comprehension of texts, and how context shapes readers’ attempts to construct meaning as they read. Among some types of context, we can highlight the physical, social and academic contexts (Gizir and Simsek, 2005; McGaan, 2003; Pretorius, 2010).

The physical context refers to the context in which a reader interacts with a text, i.e. place, quality of printer and paper used to create a text, etc. (McGaan, 2003). Readers might react differently to a text depending on where they read it. For example, reading a text on a crowded bus may create different reactions to the text and different feelings about it compared to reading the same text in a quiet library. Put bluntly, the physical context can enhance or diminish their ability to read the document.

The social context refers to the community to which readers belong. According to Pretorius (2010: 351), social context “includes the home environment where the student first encounters literacy practices and the larger community environment within which schools operate.”

According to Parcel and Dufur (2001, in Pretorius, 2010: 352), the home environment relates to the effect of three kinds of ‘family capital’ on reading achievement: family social capital (the cognitive stimulation provided in a home, and parent’s affective and disciplinary style), family human capital (parental education, marital status and mental ability) and financial capital (income and material resources). Studies have shown that there is a considerable literacy gap between students from low-income families and those from higher-income families, not due to poverty per se, “but due to the barriers or constraints on learning that poverty can create. … [W]hen children from poor homes have parents who have high expectations for them, are
involved in their schooling and have caring relations with them, then such children have higher reading achievement” (Pretorius, 2010: 351-2).

The larger community context within which schools operate also has a great impact on reading attitudes, reading practices and reading achievement. For instance, readers familiar with specific political, cultural and social issues, for example, are less likely to expect a writer to define those issues in detail. For instance, readers familiar with the civil fratricide war in Angola will not need to be educated about the issue - they will already know the key issues. Needless to say, this reduces the amount of time and effort writers need to devote to providing background information about the issues. In other words, the social context can affect the extent to which writers and readers share common experiences and expectations about a text. Another example is that students in some Angolan schools might find it easier to understand the allusions and metaphors used in a document written by someone from Lubango than those in a document written by someone from Morocco or England. In short, the larger context may affect the fundamental assumptions, beliefs, and aspirations that the readers bring to the reading of a text.

The academic or school context refers to the school environment where literacy is formally taught and used (Gizir and Simsek, 2005; Pretorius, 2010). Several factors can contribute to reading achievement such as practices and attitudes in an academic context. Among these we can highlight the existence of well-prepared and equipped staff, a school library, a print-rich school, students issued with textbooks, the autonomous, efficient and meaningful access to additional books and materials of an educational or recreational nature, in and outside the classroom, among many. As Hugo (1991, in Pretorius, 2000a: 39) rightly puts it, “about 75 per cent of the information which senior secondary learners need is accessed via textbooks rather than transmitted by teachers in the classroom”. Studies also show that schools from poor backgrounds may have a negative impact on reading achievement, because they often “attract less qualified staff, are more poorly resourced, may not be as efficiently managed and may have parents who are less inclined to participate in school activities” (Pretorius, 2010: 351-2).

2.4.3. Spoken vs. written discourse

Extensive evidence exists that show a robust relationship between reading and academic performance (e.g. Collier, 1989; Carrell, 1988; Cummins, 1984; Day and Bamford, 1998; Hermida, 2009; Mason and Krashen, 1997; Pretorius, 2002; Pretorius and Machet, 2004). These studies indicate that good readers perform better than non-readers academically.
For the purpose of the current study, one cannot discuss the relationship between reading ability and academic performance without mentioning the differences between spoken discourse and written discourse. The first is what Cummins (1984: 26) has called Basic Interpersonal Communication Skills (BICS), whereas the second is what Cummins (1984: 26) has called Cognitive Academic Language Proficiency (CALP).

Collier (1989: 516) argues that spoken discourse (or BICS in Cummins’ terms) is largely cognitively undemanding because it primarily deals with everyday issues, and it is “context-embedded”, because it relies heavily on contextual factors like tone, gestures and other non-verbal communication skills. It is that type of communication that is often placed within a context, with explanations, back-tracking and gestures (Collier, 1989: 513).

Meanwhile, as Collier (1989:5 13) further elaborates, “school language” or academic discourse (or CALP in Cummins’s terms) tends to be cognitively demanding and more context-reduced, requiring the student to rely on the internal text meaning. This does not mean “written language is context-free, since no language is context-free; rather meaning is ‘built into’ the text to a larger extent than is the case with oral discourse” (Pretorius, 2002: 188). In order for the reader to understand these texts, they must have the key skills, like the ones listed by Grabe (1991), i.e. knowledge of text types, text structure, technical/specialised vocabulary, textual cues and the relationships between the elements of the text necessary in the comprehension of such academic texts (Just and Carpenter, 1987). It is only with regular exposure to written or printed texts, integral to and embedded in daily classroom activities and school life that a student acquires CALP (Pretorius, 2002: 188), and it is with CALP that a student achieves academic success (Collier, 1989; Cummins, 1984; and Pretorius, 2002).

It is, however, important to highlight that according to Cummins, the BICS/CALP distinction is not dichotomous but is viewed as a continuum of activities within both extremes (Cummins, 1984: 26-27). Hence, oral discourse can be cognitively demanding in a setting where one would be required to engage in an academic discussion/debate.

2.4.4. Reading in a first language vs. reading in a second or foreign language

One of the questions that research has often attempted to find answers to is how reading in a first language differs from or is similar to reading in a second or foreign language (Eskey, 2005; Grabe, 1991; Koda, 2005). On this Koda (2005: 7) points out that there are mainly three differences between L1 and L2 readers. The first difference is that “unlike beginning L1 readers, L2 readers can draw on their prior literacy experience, which potentially provides substantial
facilitation, assuming that they have prior L1 literacy.” The second difference is that “L1 readers, through oral communication, have already established a basic linguistic foundation by the time formal literacy training commences.” Thus, there is a need to differentiate the focus of the reading instruction. In other words, while the focus of early L1 reading instruction is on decoding, the L2 emphasis is on linguistic foundation building. The last difference has to do with the information processing. While the L1 occurs in a single language, the L2 processing “necessitates dual-language involvement.” Grabe’s (1991: 11) contribution to this debate is that L2 reading is a process largely similar to that of reading in an L1 but one that is subject to “a number of additional constraints on reading and its development”. In other words, there are reader variables, socio-cultural variables, and contextual variables that limit any universal statements about L2 students’ reading comprehension. For example, one would argue that the age of the learners and the schooling context may have an impact on this because in many schools in developing countries, learners start learning the language of learning and teaching (LoLT), for example Portuguese/English, and learn to read at the same time.

The third difference is that “unlike first language reading, second language reading involves two languages” (Koda, 2005: 1). This point can be corroborated by Pretorius (2010: 340) who, when referring to the level of difficult, rightly points out that

If reading in the L1 (or monolingual reading) is complex, then reading in another language (or bilingual reading) is doubly so, since it involves linkages between two distinct linguistic systems and a common writing system (e.g. English and isiXhosa and a shared alphabetic writing system) or two distinct linguistic systems and two diverse writing systems (e.g. English with its alphabetic writing system and Mandarin with its logographic system).

In his discussion on the interdependence hypothesis, Cummins (2000: 173) argued that “academic proficiency transfers across languages such that students who have developed literacy in their first language will tend to make stronger progress in acquiring literacy in their second language”. However, first, as reported by Hellekjær (2009: 202), “the ability to do so depends on their L2 proficiency, also known as the linguistic threshold level. This means that if a reader’s L2 proficiency falls below a certain level, the transfer of these skills and strategies to the L2 is prevented even though the student is a fluent reader in the L1”. Second, according to Pretorius and Mampuru (2007: 41), although transfer of communicative competence across languages has also been reported for children in Spanish-English, Japanese-English and Turkish-Dutch, the linguistic transfer that is being defended relates more commonly to cognitive/academic aspects of L1 and L2 proficiency.
In fact, Pretorius and Mampuru (2007) clearly point out that despite the suggestion by L2 or EFL reading research of the existence of “a complex interplay between L2 proficiency, first language (L1) reading and L2 reading, … not much is known about the effect of L1 proficiency on L1 reading, and of L1 reading on L2 reading, or vice versa, in bilingual settings when readers have few opportunities for extensive reading in their L1”. Their study investigated the relationships between L1 (Northern Sotho) and L2 (English) proficiency and L1 and L2 reading in 104 Grade 7 learners attending a high-poverty primary school in South Africa. The study was conducted during the course of a year when a reading intervention programme was implemented. The researchers examined the effect that attention to reading and accessibility of books had on the learners’ reading proficiency in both languages, and the factors that predicted academic performance were analysed. The results of this study show that when the learners were engaged in more reading, L2 reading contributed more variance to L1 reading than L1 proficiency. The authors suggest that this was because the learners did not have strong L1 reading skills in the first place.

Put another way, the ability to read in the L2 contributed to academic performance. In fact, some learners scored high in L1 proficiency but it bore little relationship to their academic performance and they could not read well in their L1. How well they read in L2 predicted how well they read in L1 and how well they performed academically. From these findings, Pretorius and Mampuru (2007) recommend the need for more cross-linguistic reading research in different educational settings.

Empirically, studies by Van Gelderen, Schoonen, Glopper, Hulstijn, Simis, Snellings and Stevenson (2004) and by Van Gelderen, Schoonen, Stoel, de Glopper and Hulstijn (2007) support the Linguistic Interdependence Hypothesis and L1-L2 transfer of reading skills. Van Gelderen et al. (2004) investigated the reading comprehension development of 389 adolescent students of Dutch-as-L1 and English-as-L2 reading comprehension. The study took place over a three-year span from Grades 8 through 10. Analyses of students’ performances on reading comprehension, linguistic knowledge, processing efficiency in both languages, and their metacognitive knowledge about reading indicated that the component skills of L1 and L2 reading held different weights in L1 and L2 reading models. Moreover, L1 reading comprehension strongly correlated with L2 reading comprehension and contributed more to L2 reading comprehension than other L2 component skills.
However, transfer between languages does not seem to occur for all literacy skills. Verhoeven (2000) investigated the early reading and spelling processes of children learning to read in an L1 and L2 during the first two grades at primary school. Vocabulary knowledge was found to have a greater impact on reading comprehension of the L2 learners than on the L1 learners. Another study by Droop and Verhoeven (2003) compared the reading comprehension, word decoding, and oral language skills of Dutch Grade 3 and 4 children with those in similar grades from a Turkish or Moroccan background living in the Netherland. The findings showed that for L2 learners, L2 language skills were highly related to L2 reading ability. These findings seem to show that lexical and syntactic skills are not likely to be readily transferred between L1 and L2, and these skills are strong predictors of L2 reading abilities.

Apart from what we have just seen, another main difference between reading in a first language and in second or foreign language has to do with fluency and speed. In fact, Grabe (1988: 63) argued that the lack of “a massive receptive vocabulary that is rapidly, accurately and automatically processed ... may be the greatest single impediment to the fluent reading by ESL students”. In fact, while I agree with Grabe, I also think that this is not an insurmountable problem nor is it a ‘cognitive’ impediment – it is more a matter of exposure, a problem that is fundamental in L2 and FL contexts, like Angola (for more details see §4.2.4, Graph 4.2, relating to the books owned in the home of the participants in this study).

### 2.4.5. The reading situation in Angola

Research studies conducted in Angola show that students entering ISCED and other universities show several literacy problems (Pedro, 2000; Sambeny, 2000). Moreover, the Matthew effect (§2.3.6) can also be witnessed on a larger scale at the municipal and provincial levels, where there are disparities between some wealthier suburban areas and their impoverished area counterparts. While the schools in wealthy areas enjoy better facilities, attract better qualified teachers and better prepared students, the schools in poorer areas have more reinforced problems, namely, underfunding of the educational system, high unemployment, family instability, and industrial and middle class flight, such factors contribute to the vicious cycle of literacy under performance.

It is generally believed that resources such as textbooks, books, journals, and stationery play a crucial role in the teaching-learning process. A well resourced learning environment is generally (a) more motivating, interesting, and enriching; (b) teachers and students can save a lot of time and money, because resources are easily available and accessible; and (c) the contents and
procedures are scientifically and methodologically concrete (Allwright, 1981; Harwood, 2005; Gilmore and Banks-Joseph, 2009; O’Neill, 1982). Yet this situation does not obtain equally in all learning contexts, especially in multilingual communities in developing countries, like Angola, as seen in §1.3.1, where the linguistic situation was outlined.

Harwood (2005) reports on several research studies and lists various benefits of using textbooks in EAP contexts. For Harwood (2005: 152), textbooks can be used as (a) ‘bridges’ to stimulate students’ thinking and as the basis for providing the most appropriate classes in their context; (b) textbooks can become “spurs to creativity”; (c) they can be resources as well as/rather than courses; (d) they can be data banks which allow local input to be added to them; and (e) they can develop both new and old teachers’ repertoires alike, thereby acting as agents of change. According to Westbury (1990, in Shaver et al., 2009: 130) “it is a truism that textbooks are the central tools and the central objects of attention in all modern forms of schooling”. Their significance is pervasive to the extent that “educational development and curriculum development … go hand in hand with textbook development and distribution.” Needless to say, now we have new technology – e-books and e-learning, and the digital divide between the rich and poor. There are some private schools in Angola that now use white boards. There are even schools where children are issued with ipads. However, it is unfortunate to see that in several rural and urban schools in poor communities there are not even any textbooks.

In fact, teaching materials in Angola are not provided adequately in all schools. The Angolan Government’s policy on this is that at primary school, i.e. Grades 1 to 6, textbooks, notebooks, and school uniform should be distributed free of charge. However, the reality is almost similar to the one reported by Phillips (2004), when she refers to the South African reality regarding this issue. In other words, despite the best of intentions and efforts by the Angolan Ministry of Education to address the challenges, we still have the following problems.

Firstly, there is little provision of adequate textbooks, readers or additional resources by way of reading material (dictionaries, fiction, non-fiction, reference books, etc.) for all schools as a result of insufficient funds allocated for the Ministry of Education (see §1.3.1). Secondly, the distribution is often not efficient, meaning that textbooks rarely reach the students, especially in rural areas. Thirdly, publishers face supply and demand issues and so they do not publish enough because there is not a reliable buying market for their stock. Consequently most books are sold on the black-market with very speculative prices rather than by official distributors. Fourthly, most of the books are designed by people who are not adequately trained to develop and evaluate
teaching materials. For example, Menezes (2010) conducted a case study on the implementation of the New Educational Reform in Angola. The investigation was conducted in three of the most populated provinces of Angola: Luanda, Huambo and Huíla. Several school principals and municipal Heads of Education took part in the study. The results clearly show that in most parts of these provinces, teaching materials rarely exist, or if they do, they are either received by the school administration months after the commencement of the school year, or they are being sold on the black market. Those findings are confirmed by another study conducted by Figueira and André (2009) in provinces of Angola (Cabinda, Uíge, Lunda-Norte, Luanda, Moxico, Huíla, Huambo and Kuando-Kubango). Fifthly, unlike in many parts of the African continent (like Namibia, South Africa, Egypt), Angola does not have large scale formal assessment procedures or standardized reading tests for determining reading levels. As a consequence, the educational authorities, school administrators and teachers do not have any way of evaluating the extent to which the Angolan educational system meets international standards. Furthermore, as seen in §1.3.1, in Angola reading is rarely encouraged and nurtured at the family, school and broader society levels. Thus, in developing countries it should become the responsibility of the Education Ministry (and relevant stakeholders) to develop and nurture a culture of reading throughout the education system.

Similar to what is reported in the study by Pretorius (2002) when referring to South Africa, poor reading levels are evident throughout the whole Angolan educational system. One example to support this is through the results obtained by teacher trainees in the English Entrance Examination for ISCED-Huíla, which is an English proficiency test. In the last three years 90% of the applicants’ reading levels were below the accepted entrance reading mark (i.e. 7 marks out of 20), 8% were between 8 and 9 marks, and only 2% passed (between 10 and 15 marks) (DAAC, 2011). We have observed that most of these students rarely finish their 2-hour exams, usually a 4-page exam question paper (with sections on Vocabulary, Reading, Language Use, and Writing). This, obviously, may also suggest that these candidates read slowly and are unfamiliar with the assessment content and format. As research suggests, reading at too slow a rate not only reduces enjoyment of reading but also jeopardizes efficient comprehension (Anderson, 1999). In other words, and as Pretorius (2002: 173) points out when referring to South Africa, we can also see that when ELT ISCED-Huíla applicants arrive at university, they are not sufficiently equipped to cope with the demands of tertiary level. This and other reasons can serve as a justification and urgency for the implementation of this study.
Looking at this dismal reading situation in Angola (at the family, school and community levels), it is not presumptuous to call for a very strong commitment to literacy development by policymakers, institutions, administrators, teacher educators, and teacher trainees themselves. Moreover, this engagement should be coupled with appropriate training and professional development and with targeted interventions for those students most behind, so that our teacher trainees who graduate from Angolan university are well prepared for future social, academic and professional lives.

Even with these problems, and as stated in §1.3.4.6, the reality of the English course at ISCED-Huíla is like an ‘oasis in a desert’. In other words, the English Department is quite well resourced, and the environment is good enough to help teacher trainees to develop their reading attitudes and skills. In fact, Sambeny (2000) conducted a study aimed at discovering what reading strategies fourth-year students at ISCED-Luanda were able to use, and which ones they still needed to learn. Using pre and post-interviews with students, three different orientations to reading (i.e. text-based, interactive and critical approaches) and own observation, she found that students did not appear to lack knowledge of reading skills, but rather appeared not to have a ‘metacognitive’ awareness. Thus, she concluded, students did not need to learn new skills, rather needed to consolidate the ones they already possess. Surprisingly, she even found that “students became critical as they were dealing with specific texts and they provided their own opinions and reactions to texts” (2000: 115).

Overall, one can say that reading is a multifaceted skill, and it cannot be properly understood if one does not know what fluent reading entails. Second, research recommends that there is a need for more cross-linguistic reading research in different educational settings in order to find out how far the development of reading ability, skills and strategies in L1 and using the first language as the medium of instruction can contribute to learners’ academic achievement. Third, academic vocabulary correlates significantly with reading comprehension and academic success. Finally, poor reading levels are evident throughout the whole Angolan educational system. We now look more closely at what reading in an EAP context involves.

2.5. READING IN AN EAP CONTEXT

In the preceding section we looked at the broader context of L2 reading. This section looks at the process of reading in an EAP context. It is divided into four main parts, namely: the importance of reading for academic and professional performance, approaches for improving reading in an EAP, academic vocabulary, and the question of where knowledge of vocabulary comes from.
2.5.1. Importance of reading for academic and professional performance

Reading has often been considered by many as a prominent gateway to knowledge, and in the learning context it is the key ingredient to achieving one’s goals, and to developing one’s knowledge and potential. As far as EAP is concerned, Carrell (1988: 1) stresses that in … teaching/learning situations for academic purposes, especially in higher education in English-medium universities or other programs that make extensive use of academic materials written in English, reading is paramount. Quite simply, without solid reading proficiency, second language readers cannot perform at levels they must in order to succeed, and they cannot compete with their native English-speaking counterparts.

Through my experience as an individual, academic and ELT professional I came to understand that reading is a fundamental part of language teaching in the ‘classical humanistic’ paradigm, where an understanding of the ‘high’ culture and thought expressed through written material took precedence over mere competence in using the language. Reading is now considered a *sine qua non* for the truly educated person. I now understand that reading is really (a) a window to culture, helping students appreciate and understand other cultures, including academic culture, the world of science – which can extend across cultures; (b) an example of certain types of patterns and structure; (c) a source of education, enjoyment and emotional gains; (d) an ideal basis for developing and integrating the other three language skills (speaking, listening, and writing); and (e) valuable in raising students’ and teachers’ communicative competence, in its four components, i.e. *linguistic or grammatical competence, sociolinguistic competence, discourse competence, and strategic competence*. In effect, in studying texts offering a wide range of styles and registers, in studying texts which are open to multiple interpretations and which provide opportunities for group discussion, students will benefit both as speakers and teachers of the English language. In a wider sense, reading is personally enriching, stimulating students to draw on and express their experiences, feelings and opinions.

This is also confirmed by research findings. A study by Bohlmann and Pretorius (2002) comprised University of South Africa (UNISA) students. The group consisted of students who had enrolled for the Mathematics Access module, a bridging course that covers the high school mathematics syllabus and helps prepare students for first-year mathematics. The findings showed clear and consistent differences in reading ability between the different academic groups, with reading skills improving the higher the academic group. The findings indicated that many additional language (AL) students had serious reading comprehension problems, which means that they had ineffective and limited access to the rich sources of declarative knowledge provided by print-based materials in the learning context. Pretorius (2002) states that even in a subject typically associated with logic-deductive skills, like Mathematics, reading skills play an
important role. However, reading ability does no guarantee good academic performance since many other variables come into play, such as motivation, perseverance and dedication to task. For Pretorius (2002: 169), reading is a powerful learning tool, a means of constructing meaning and acquiring new knowledge. If developing countries aim to produce independent learners, then serious attention will need to be given to improving the reading skills of students and to creating a culture of reading. Reading is not simply an additional tool that students need at tertiary level - it constitutes the very process whereby learning occurs.

Perkins (1991) investigated the reading and vocabulary of students registered at the University of Trankei (UNITRA). Using the Stanford Diagnostic Reading Test which tests reading skills, the researcher found that the students were largely inadequately prepared for an academic environment. The study established that 53% of the 258 participants tested were considered ‘at risk’ at the start of their academic careers. Later a second test was used – the Stanford Diagnostic Reading Test, and the results showed that only 13.8% of the students had the required reading skills to comprehend first-year textbooks.

Pretorius (2005) conducted a large-scale assessment (1998-2001) of the reading ability and academic performance of 1,200 University of South Africa (UNISA) first-year psychology students (2005:790). The study showed that 638 of the 1,200 (53%) subjects seemed to be reading at frustration level, below 60% comprehension levels (Pretorius, 2005). Although this figure of 60% comprehension level may sound reasonable, in reality it represents struggling reading levels. The research indicates the extent of the reading and academic inadequacy experienced by university students, not just in South Africa but in the SADC region as a whole, as UNISA’s intake is international, with many students coming from the neighbouring countries.

In fact, it is nowadays believed that the twentieth-century assumptions about the world are rapidly becoming obsolete. Our age demands workers who are able to synthesize different types of information creatively. In other words, among some of the goals of the 21st Century education, we can stress the need for (a) preparing our students to participate fully in today’s and tomorrow’s world demands, (b) preparing them to become (not only local, but mainly) global citizens by nurturing their global competence so that they can live, compete, and collaborate in a new global scenario and demonstrate broader personal and social responsibility through collaboration and teamwork; and (c) preparing our youth to participate successfully in a world of increasing social, cultural, ethnic, linguistic, and religious diversity (Bassey, 1997; Jerald, 2009; Mansilla and Jackson, 2011; National Center for ESL Literacy Education, 2003; Schleicher, 2012).
In their attempt to answer the question “What competences will students need to fare well in a flattened global economy?”, Mansilla and Jackson (2011: 1) rightly point out that we must prepare our future force in multiple skill sets, which “range from learning, thinking, and innovation skills, such as thinking creatively and using systems thinking, to skills associated with life and careers, such as designing, evaluating, and managing one’s own work for ongoing improvement and adapting to change, and communicating ideas effectively across diverse audiences.” This means that we need local and global literates. Modern day literates are those who can identify their own problems and seek solutions, identify their own knowledge, its shortfalls and gaps, identify learning needs, recognize the difference between legitimate claims and spurious scams, be able to discern the strengths and weaknesses of opposing perspectives, one who is empowered with the skills of learning as well as having a willingness learn, unlearn and relearn. Needless to say, fluent reading is the cornerstone to achieving most of these goals.

Furthermore, in order to study or work in English-dominant contexts requiring high levels of English proficiency, increasing numbers of adults must learn English as an Additional Language both as an object of study and as a means for learning and doing other things, such as studies, work, and interpersonal communication. Individuals who read fluently tend to develop their critical thinking capacities. Obviously, this also entails building up knowledge because it is difficult to adopt a critical perspective when one knows very little about a domain. In other words, in learning environments where English is used as a medium of instruction, like teacher trainees of English at ISCED-Huíla, students are expected to possess efficient reading comprehension skills to achieve academic success. In the current study, it is hypothesised that teacher trainees with a positive attitude towards reading and who read large volumes of materials will perform better academically than students who do not. Obviously, it is assumed that being university students, English teacher trainees at ISCED-Huíla should possess high-level reading skills in order to read at the instructional or independent level (cf. §2.3.5).

As to professional performance, the need for a language component in a teacher training course has been stressed by several experts (Cullen, 1994; Edge, 1988; Kennedy, 1979, 1983; Mariani, 1979; Wallace, 1991). Needless to say, a language component should have reading as one of the skills to be developed. Obviously, the main reason for that is that reading is crucial for the improvement of a teacher’s professional competence.

Research shows that through reading teachers develop and refine their own teaching style. They can make informed decisions as they manage the learning process in their classrooms (Nunan
and Lamb, 1996: 1). Reading also allows respect of the three principles of lesson planning: (a) flexibility, (b) variety, and (c) flow. It enriches reflection-for-action, reflection-in-action and reflection-on-action (Schön, 1987). Bartlett (1990) points out that becoming a reflective teacher involves moving beyond a primary concern with instructional techniques and “how to” questions and asking “what” and “why” questions that regard instructions and managerial techniques, not as ends in themselves, but as part of broader educational purposes. Asking “what and why” questions gives teachers a certain power over their teaching. We could claim that the degree of autonomy and responsibility teachers have in their work is determined by the level of control they exercise over their actions. In reflecting on the above kind of questions, they begin to exercise control and open up the possibility of transforming their everyday classroom life (Bartlett, 1990: 267). Furthermore, it is vital to consider that although critical reflection can trigger a deeper understanding of teaching, it can be nourished through continuous and critical reading. As Ur (2012: 293) perceptively points out, “Reading … may be … a substitute for courses and conferences – but the opposite is not true: courses and conferences are not a substitute for reading”. Unfortunately, I often see that this is precisely what many of our students (and even some lecturers and administrators) believe. Several keep asking reading and content subject teachers to reduce the reading load of students.

2.5.2. Approaches for improving reading in EAP

There are two major approaches that are currently used for improving reading in an EAP context: Intensive Reading and Extensive Reading (hereafter IR and ER). Research has shown that both approaches are fundamental in helping learners develop different reading skills, such as fluency, vocabulary and word recognition, and reading comprehension skills. IR involves careful reading of specific passages under the teacher’s guidance, and it provides opportunities for teaching reading strategies (e.g. how to identify main ideas) and a basis for explaining difficulties of structure and for extending knowledge of vocabulary and idioms (Richards and Schmidt, 2002). IR deals with comprehension mostly at the text, lexical and syntactic level. ER, on the other hand, means reading in quantity in order to gain a general understanding of what is read, and it is intended to develop good reading habits, to build knowledge of vocabulary and structure and to encourage a liking for reading (Richards and Schmidt, 2002).

Several studies have shed light on the support of both IR and ER as means of improving not only students’ reading and academic levels but also their general language proficiency (Chuenchaichon, 2011; Day and Bamford, 1998; Grabe and Stoller, 2011; Joyce, Hood and Rose, 2008; Mason and Krashen, 1997; Paran, 2003). Carrell and Carson (1997) argue that a
principled curricular approach that combines both IR and ER through Task-Based Language Teaching (TBLT) is necessary to prepare students for the task and texts they encounter in college. A study by Rashidi and Piran (2011) looked at the effect of ER and IR on Iranians’ EFL learners’ vocabulary size and depth. Participants were 120 studying English as a foreign language at Omid English Language Centre, divided into two groups: intermediate and advanced. Rashidi and Piran (2011) found that (a) both IR and ER impacted significantly on the development of students’ vocabulary size and depth, (b) intermediate students benefitted more from IR, and (c) advanced students benefitted more from ER.

Paran (2003: 40) argues that ER alone is “not sufficient for developing reading skills, and a more focused [IR] approach, including explicit instruction, is also needed: it deals with more detailed comprehension and has an important role in teaching reading strategies”. Paran stresses that IR activities are needed for four main reasons: (a) to help learners comprehend written texts, (b) to become more aware of text organization; (c) to learn how to use more effective reading strategies; and (d) to develop general literacy skills necessary to generate productive expressions in L2 (Paran, 2003:40). Grabe (2002) argues that the integration of IR reinforces vocabulary learning and development and that ESL/EFL learners can benefit from IR in order to improve their vocabulary knowledge. Chuenchaichon (2011) investigated the impact of incorporating IR into EFL writing, regarding students’ written performance in terms of grammatical accuracy, grammatical complexity, and coherence. Participants were 54 Thai undergraduates attending a four-year Humanities programme. Their age ranged from 20 to 22. The findings revealed that IR has positive impact on paragraph-writing development, particularly as far as grammatical complexity is concerned.

Studies have demonstrated that those who are exposed to large amounts of print show gains in reading proficiency, positive motivation, and reading habits (Camiciottoli, 2001; Tse, 1996), in reading speed (Bell, 2001; Grabe and Stoller, 2011), in reading comprehension (Mason and Krashen, 1997), in listening proficiency, and grammatical competence (Elley and Mangubhai, 1983), in writing ability (Mason and Krashen, 1997), in spelling (Day and Swan, 1998), in vocabulary knowledge, size and depth (Lao and Krashen, 2000; Horst, 2009), and in automatic sight word reading (Grabe and Stoller, 2011; Horst, 2009).

Summarising different studies on the benefits associated with ER, Grabe (2009: 322) states that “greater amounts of reading and extensive reading, when carried out consistently and appropriately over an extended period of instructional time, will significantly improve students’
reading abilities.” Generally speaking, the studies that refer to the effects of reading intervention are grouped into three categories: on (1) reading itself on (2) language proficiency, and on (3) academic performance. Usually the effects of more reading impact quite quickly on better reading and can also change reading attitudes. Effects in 2 and 3 can sometimes take longer to manifest and need consistent reading input or exposure, longitudinally. Grabe (2009: 322-325) argues that ER “(a) contributes to positive attitudes and motivation for reading; (b) it has an impact on the development of vocabulary growth; (c) it leads to significant improvements in literacy skills; (d) it creates gains in conceptual-knowledge growth; and (e) it predicts better reasoning skills.” This accords with Nuttall (1996: 128) who states that “The best way to improve your knowledge of a foreign language is to go and live among its speakers. The next best way is to read extensively in it.” Day and Bamford (1998: 34) refer to twelve studies that have been conducted on the impact of ER on different skill areas. The studies represent both ESL and EFL contexts, from a range of countries and across all levels from primary to university, adolescent to adult. The studies are overwhelmingly positive about extensive reading. They report gains in all language skills but particularly reading (comprehension and speed) and writing proficiency, gains in vocabulary, although these were not statistically significant in all cases, and also gains in positive affect to reading in the target language.

Lao and Krashen (2000) report significant gains in both vocabulary and reading rate made by students on a popular literature course compared with others enrolled in a traditional academic skills class. This study also showed that students in the popular literature course acquired a much more positive view of the value of their course for learning English than the other group did.

Mason and Krashen (1997) report on a series of three studies aimed at confirming the value of extensive reading in English as a foreign language. Firstly, they investigated whether the so-called “bad students” or failures in English as a foreign language (EFL) could improve with an extensive reading treatment, and secondly they wanted to determine the reliability of the effect of extensive reading with two additional groups. They compared 30 “reluctant” Japanese college readers who read an average of 30 books over a semester and wrote a diary in Japanese with a control group that had intensive reading. The results showed that “reluctant” EFL students at the university level who had begun the semester far behind traditionally taught comparison students, nearly caught up to them by the end of the semester. In other words, the study provided significant evidence of increased motivation and general English ability. In the second study subjects were four intact classes of Japanese EFL students with a sample size of 128 students. The results showed that, first, they replicated that of the first study, in that extensive readers
outperformed traditionally taught students at both a prestigious university and a two-year college. Second, the measure of writing confirms that improvement in writing in ER is possible without conscious learning.

Reading, especially free voluntary reading or extensive reading, is a powerful means of developing AL competence for EAP. Those students who read more have larger vocabularies (sight and general knowledge), do better on tests of grammar, write better, and spell better (Krashen, 1993, in Kim and Krashen, 1997; Gee, 1999; Mason and Krashen, 1997; Renandya and Jacobs, 2002), and can develop different types of knowledge (topical, linguistic and world knowledge). Fluent readers are able to get through more volumes of reading and use their energy on comprehending the text instead of identifying the words in the text. Immature readers generally lack fluency which means they devote more attention and cognitive energy to word recognition, and have less energy for meaning.

This is very important. If we take the example of my students who study in an EAP context, where students are expected to read a massive amount of printed information, it is clear that a student who has difficulty accessing information independently and constructing meaning and knowledge from it faces several problems in his/her academic life. In fact, being a fast and accurate reader helps one get through the amount of reading to be done. Thus, I concur with Pretorius (2002) when she argues that if we continue ignoring the reading problem, “the intellectual potential of current and future generations of students goes untapped”.

Therefore, research has shown that an important part of instruction for struggling readers is the use of the right intervention at the right time. This means that universities, ISCED-Hulla included, need to design programs of intensive intervention for the least prepared students. In fact, reading intervention programs play an important role in helping diverse students become confident, strategic and skilled readers. The Southwest Educational Development Laboratory published a summary of the research on effective reading intervention program resources for secondary students (Peterson, Caverly, Nicholson, O’Neal and Cusenbary, 2000). Research indicates that effective programs will address the following four components:

1. *Motivation to read*: this refers to intrinsic motivation to want to read and read widely. It is crucial to consider that as students move up the grades, their motivation to read declines (Guthrie, 2013; Guthrie and Wigfield, 2000). Mikulecky (1990) studied a group of secondary students two or more years behind their peers in reading ability and found that they actually experienced declines in reading comprehension over the two-year period of the study.

2. *Decoding skills and fluency*: this comprises basic decoding skills and fluency. A study of struggling high school students conducted by Shankweiler, Lundquist, Dreyer, and Dickinson (1996) showed
that differences in phonological processing accounted for differences in text comprehension. Furthermore, as defended by Nathan and Stanovich (1991) and Samuels (1994), slow reading impedes comprehension and laborious reading diminishes the desire to read.

3. **Language comprehension**: this comprises linguistic knowledge, morphemic knowledge, and semantic and syntactic knowledge. In other words, readers need to understand the language system used in texts. Actually, as will be shown in §2.5.3.2, research shows clear evidence of the strong correlation between comprehension and the size and depth of one’s vocabulary (Beck and McKeown, 1991; Qian, 2002).

4. **Text comprehension**: this consists of teaching students cognitive skills such as how to be active with text and make personal connections, how to make inferences and activate background knowledge, how to monitor comprehension, how to interact with different types of texts, and how to ask questions and wonder – both key components of enquiry. Wide reading of texts at students’ right level is crucial for the development of their background knowledge and their understanding of the topic improves (Fisher and Frey, 2009; Marzano, 2004).

For Hock and Deshler (2003: 52), reading intervention strategies for failing readers requires “…intensive, focused, sustained instruction to help them catch up with their peers”. For that to happen, Hock and Deshler (2003) propose a curriculum wide focus on literacy instruction. Thus, they outline five “levels” of increasingly focused literacy support:

1. focusing on mastery of crucial content in all subject areas;
2. incorporating learning strategies in all classes;
3. specific instruction for identified at-risk students;
4. for students with severe disabilities, intensive reading and writing instructional options; and
5. for those students who do not respond to level 4 instruction, a referral to a clinical instruction program (e.g. speech pathologists) (Hock and Deshler, 2003: 52–54).

From the preceding discussion, we can draw four conclusions. Firstly, there is a close relationship between reading and academic performance. Secondly, proficient readers are able to access written sources easily, quickly, effectively and comprehendingly, which enables them to broaden their general knowledge, increase their vocabulary and develop strong language skills. Thirdly, they also increase their ability to skilfully search for, select, retrieve, and use electronic information in a sophisticated manner. Finally, educators and institutions should design programmes of intensive intervention for readers reading below expected levels.

To sum up, learners who fail to become proficient readers are unlikely to do well at school or even after school, because (a) they are often less exposed to new ideas and experiences; (b) they rely on orally transmitted information; (c) they lack learning *independence*; (d) they do not have access to written sources which could broaden their general knowledge, increase their vocabulary and develop strong language skills; (e) they have less ability to sophisticatedly search for, select, retrieve and use electronic information; and (f) they are less likely to become fast and accurate readers which would help them get through the amount of reading to be done. Consequently, they are unlikely to become long-term learners that can question, consider
alternatives and make informed decisions as they seek meaning, and they are unlikely to become successful, problem-solvers, and professionals.

However, reading large amounts of academic text and text that is moreover conceptually complex and dense can be challenging even for L1 readers (Grabe and Stoller, 2001). Thus, it is generally agreed that teachers and course designers must design more effective AL programs. This can be achieved through the integration of language and content instruction, and examination of the impact of participation in language programs on students’ demonstrable AL abilities, content knowledge, career outcomes, and ability to participate in local discourse communities as well as the global society. Obviously, if we match this idea with the purpose of this study, one would agree that the above advantages of reading for academic success would be better achieved if a thorough needs analysis were conducted. In stressing the relationship between needs analysis and a learning programme, Yalden (1983: 105) points out that “… the more accurately one can predict what the learner’s language or communicative needs will be, the more clearly the content of a syllabus can be delineated.” This is corroborated by Mei-Yun (1994), as seen in §1.1, page 1 of this dissertation, and by Eskey (1986, in Huang, 2006: 373) who defends that

For any approach to teaching to succeed, no matter how true to the latest “scientific principles,” it must take into account the real needs and desires of learners – that rather loosely defined cluster of goals, inclinations, and biases which we call “motivation” – and we must therefore give more thought to what motivates people to read, or not to read, anything.

To sum up, teachers, parents and caregivers need to ensure that students are exposed to literacy-rich environments and receive developmentally appropriate literacy instruction. Students need to have reading skills appropriate to the reading demands of their subjects or course. Such environments and experiences have a profound effect on students’ literacy development by providing opportunities and encouragement for them to become successful readers, problem-solvers who are seen as long-term learners that can question, consider alternatives, and make informed decisions as they seek meaning. This will, in turn, have different impacts depending on whether the course goals have arisen directly from students’ needs.

2.5.3. Academic vocabulary

According to Alderson (2000: 35), “Measures of a reader’s vocabulary knowledge routinely correlate highly with measures of reading comprehension, and are often, indeed, the single best predictor of text comprehension”. The notion of word family is often used in discussions of vocabulary knowledge. This refers to a grouping of words derived from the same base. For
example, *produce, productive, production, products* are all in the same word-family. The assumption is that if one member of the word family is known, then it is easier to infer the meanings of the other members of the family. According to Goulden, Nation and Read (1990), it is often expected that a five year old will have a vocabulary of around 4,000 to 5,000 word families, while a university student that around 20,000 word families.

The aim of this sub-section is to look at what academic vocabulary is. It is divided into three parts: definition of academic vocabulary, the distinction between breadth and depth of vocabulary and where it comes from.

### 2.5.3.1. Defining academic vocabulary

A distinction is often made between *core vocabulary* and *academic vocabulary*. According to Carter (1987, in Jordan 1997: 150-3), *core vocabulary* generally refers to the 2,000-3,000 most frequently used words that provide the basis of about 80% of the words likely to be encountered. *Academic vocabulary*, on the other hand, are words that are generally used in academia either in specific fields or across a number of disciplines, which generally ranges from 8,000 to 10,000. This can be divided into three groups:

a. *The research process*: the vocabulary is primarily verbs and nouns and is “presented in a context which discusses the five steps of research: formulating, investigating, analyzing, drawing conclusions and reporting results” (Jordan 1997: 229);

b. *The vocabulary of analysis*: it includes high-frequency and two-word verbs needed “in order to present information in an organized sequence” (Jordan, 1997: 153), e.g. *consist of, group, result from, derive, base on, be noted for*; and

c. *The vocabulary of evaluation*: it includes adjectives and adverbs that occur in reviews, critiques and some reports, e.g. *exhaustive, controversial, coherent, indispensable, comprehensive, distinctive, pervasive, objective-subjective, implicit-explicit, inductive-deductive, significant- insignificant*.

Several other expressions are generally used to define *academic vocabulary*. The following six can be highlighted: (a) generally useful scientific vocabulary; (b) sub-technical vocabulary, (c) semi-technical vocabulary, (d) specialized non-technical lexis; (e) frame words; and (f) reference terms.

Nation (2001) distinguishes four categories or levels of vocabulary: high frequency words; academic vocabulary; technical vocabulary; and low frequency words.

*High frequency vocabulary* are the same as *core words*, consisting of the most frequent 2,000 words seen in the majority of uses of the English language. The standard list of these words is the General Service List (GSL) of English Words (West, 1953, in Nation 2001). The GSL can be
downloaded free at http://jbauman.com/gsl.html (Bauman, 2007). Coxhead (2000) has shown that the GSL covers almost 80% of the academic texts she studied, and so it would seem essential for any EAP student to know these words such as complain, head, moral, perform, president, request, temperature, among many. The GSL has two parts, the first 1,000 words (referred to as GS1), and the second 1,000 words (referred to as GS2). While GS1 refers to very high-frequency words that cover about 77% of academic texts, GS2 refers to words that are only slightly more frequent than others not in the list and covers 5% of the running words in academic texts (Nation, 2001:16). The GSL includes virtually all of the function words of English (around 176 word families), but by far the majority of high frequency words are content words (Nation, 2001: 13-16). Despite the criticism of GSL due to its age and size, it is still considered the best list (Coxhead and Nation, 2001) for three main reasons. Firstly, it “has had a wide influence for many years, serving as the basis for graded readers as well as other material” (Bauman, 2007:1). Secondly, it is essential and appropriate for learners who are moving on to special purpose study (Hwang and Nation, 1995). Finally, the GSL is still applicable and utilized by researchers who work on corpus analysis (Hwang and Nation, 1995 and Coxhead, 2000).

Academic vocabulary, variously known as sub-technical vocabulary and semi-technical vocabulary contains words that frequently appear in academic texts regardless of subject areas, but are not common in non-academic materials (Coxhead, 2000; Nation, 2001). Academic vocabulary is associated with academic language. Gottlieb, Carnuccio, Ernst-Slavit, and Katz (2006: 18) define academic language as language that is “used to acquire a new or deeper understanding of content related to the core curriculum areas and communicate that understanding to others; it is the language that students must use to effectively participate in the classroom environment.” Coxhead (2000) conducted a study using an academic corpus from various subject areas and compiled a list of the most common academic words, referred to as the Academic Word List (AWL). Academic words “most probably occur because they allow academic writers to do the things that academic writers do. That is, they allow writers to refer to others’ work (assume, establish, indicate, conclude, maintain) and to work with data in academic ways (analyse, assess, concept, definition, establish, categories, seek)” (Nation 2001: 18). The AWL contains over 800 word families which cover 8.5 % of running words in academic texts. Therefore, English learners, in general, and EAP students, in special, are strongly recommended to learn the words in the AWL in addition to those in the GSL if they have to read and understand texts, develop subject-matter literacy, and demonstrate their abilities, skills and knowledge. This list
Three criteria are used to include words in the AWL: specialized occurrence, range, and frequency (Coxhead, 2000). Specialized occurrence refers to the occurrence of words outside the first 2,000 high frequency words from the GSL. Range is the occurrence of a word across different fields - a member of a word family must occur at least 10 times in each of the four main divisions and in 15 or more of the 28 subject areas. Frequency means that members of the word families must occur at least 100 times in the corpus. Thus, an *academic vocabulary* is defined as a word which occurs generally in academic texts, outside the GSL, across a wide range of texts from different fields, and with high frequency. The advantage of the AWL is that it has been created from a well-designed corpus. Therefore, AWL is well known among corpus linguists and English language teachers worldwide and used in research studies and references (Chung and Nation, 2003; Mudraya, 2006).

*Technical vocabulary* refers to words which occur frequently in a specialised text or subject area but do not occur or are of very low frequency in other fields (Nation, 2001: 18-19). This discipline-specific vocabulary has also been labeled in a variety of ways, such as *terminological words*, *specialist vocabulary*, *scientific/technical terms*, *specialized lexis* and *technical words*. Technical vocabulary is assumed to have up to 1,000 words and covers 5% or less of the running words in academic texts. This type of vocabulary is largely of interest and use to people working in a specialised field, such as linguistics, education, economics, medicine, among others, considering that within every discipline there is a specific set of words to represent its concepts and processes. Technical vocabulary can be a common word which provides a specialized meaning different from its vernacular meaning when used in specific field. Nation (2001) and Chung and Nation (2004) remark that technical vocabulary is a word which is common in specific area but not so common elsewhere and is specific to a particular topic, field or discipline.

*Low frequency vocabulary* is the largest category with words ranging from those that learners come across with moderate frequency to words that English speakers rarely use (Nation, 2001). There are thousands of these words and they typically cover around 5% of running words in texts.

In conclusion, the GSL plus the AWL cover nearly 90% of academic texts. As well as these general academic words, EAP students are expected to know the specific words related to their
subjects – around 5% of the words in an academic text (Nation, 2001: 12) and some of the less frequent words used in English – again about 5%.

2.5.3.2. Breadth of vocabulary vs. depth of vocabulary

Research studies have shown that reading correlates with vocabulary significantly (Day and Bamford, 1998; Gairns and Redman, 1986; Grabe, 1991; Nation, 2001; Schmitt, 1997; Shen, 2008). As Wiener and Bazerman (2009: 23) assert, “To read well, you need a strong vocabulary. To build a strong vocabulary, you need to read well.” Needless to say, apart from needing to transit from learning-to-read to reading-to-learn (see §2.3.5 and §2.3.6 for more details on that), university students need to consider that acquiring a solid reading vocabulary is a lifelong endeavour.

According to Pikulski and Templeton (2004) the recognition of the importance of vocabulary in reading achievement can be traced as far back as 1925, when the following quotation by Whipple (1925, quoted in Pikulski and Templeton, 2004) appeared in the National Society for Studies in Education (NSSE Yearbook, quoted in Pikulski and Templeton, 2004), that “growth in reading power means, therefore, continuous enriching and enlarging of the reading vocabulary and increasing clarity of discrimination in appreciation of word values.”

This multiple benefits of vocabulary knowledge have contributed to various interpretations as to what it means to know a word. Amongst them, Qian (1999) contends that vocabulary knowledge should comprise at least two dimensions: breadth or size, and depth or quality.

Vocabulary breadth refers to the number or amount of words a person knows or the meanings of words of which the learner has some superficial understanding. Depth of vocabulary knowledge refers to the quality of that vocabulary knowledge, the additional information about a particular word in terms of its various interpretations and word use.

Depth of word knowledge includes “all word characteristics such as phonemic, graphemic, morphemic, syntactic, semantic, collocational and phraseological properties” (Qian, 2002: 516). For Nation (2001: 27), knowing an item means knowing not only its meaning (concepts, referents, associations), but also its form (spelling, pronunciation, word parts) and use (functions, collocations, constraints). This distinction between breadth and depth is not held by all researchers. Vermeer (2001), for example, argued that breadth and depth are two dimensions of the same factor, input.
Qian’s (2002) framework, based on earlier models of vocabulary knowledge (Chappelle, 1998; Henriksen, 1999; Nation, 2001; Qian, 1999), proposes that vocabulary knowledge comprises four connected dimensions namely a) vocabulary size, which is the number of words known by the learner, b) depth of vocabulary knowledge, which includes semantic, collocational and phraseological properties, c) lexical organization, which includes storage and connection of words in the mental lexicon and d) automaticity of receptive-productive knowledge.

Studies conducted on the differences between ESL and L1 found that not only do ESL know fewer words than L1 students, but that they know less about the meaning of these words. Perhaps of greatest significance, the dimension of vocabulary depth has been shown to be as important as vocabulary breadth in predicting the performance of ESLs on academic reading (August, Carlo, Dressler, and Snow, 2005; Ordóñez, Carlo, Snow and McLaughlin, 2002; Qian, 2002).

2.5.3.3. Where does knowledge of vocabulary come from?
Several studies and educational policy makers have often asked questions about where knowledge comes from. According to “cognitive efficiency” theorists the crucial variable in learning is conceptual need and inference of meaning from context, but not exposure per se. Stanovich and Cunningham (1993) challenge the “cognitive efficiency” view, and those who claim that information is available to individuals in all but the most seriously deprived environments and who conclude that exposure to print does not account for differences.

For Stanovich and Cunningham (1993), print exposure is a critical independent contributor to the acquisition of domain knowledge among older students. In a study involving nearly 300 college students, Stanovich and Cunningham (1993) collected data on the subjects’ general cognitive and reading abilities, print exposure, and general knowledge regarding practical and cultural issues. After the variance associated with general cognitive ability and reading comprehension was partialed out, print exposure accounted for a notable portion of the variance in general knowledge. In fact, not only was print exposure a unique predictor of general knowledge, it was also a more robust predictor of general knowledge than was general cognitive ability. Their study confirms the argument that exposure to print is a good predictor of reading proficiency, spelling, vocabulary knowledge, verbal fluency, and general world knowledge.

The results of the studies by these two researchers suggest that once basic reading skills are established, independent reading can help children of all ability levels further develop their reading skills and, perhaps more importantly, their background knowledge and critical thinking
skills. In other words, the relationship between intelligence and reading success is not unidirectional. Reading more can enhance children’s innate intellectual abilities, regardless of their initial ability level. However, within a generally literate society, and even among individuals with similar levels of reading ability and education, there are vast differences in reading volume. One possible difference observed in independent reading behavior is that children who are immersed in a literacy-rich environment from an early age (i.e., children who are surrounded by books and engage in shared reading frequently) develop an enjoyment of and interest in reading and are, therefore, more likely to read independently. Thus, the importance of shared storybook reading in the early years, which promotes independent reading, which in turn develops one’s ability to read, to think critically, and to process and comprehend texts.

To sum up, academic vocabulary is crucial to reading comprehension and academic success, because it helps to access background knowledge, to express ideas, and to learn about new concepts. That being so, university students should consider the development and improvement of vocabulary as a life-long goal of their lives, in order to become better students and professionals. Needless to say, it is the responsibility of educational authorities and instructors to design efficient programmes to help students meet that requirement.

Having looked at the process of reading in an EAP context, we now turn our attention to what the teaching of reading in EAP entails.

2.6. THE TEACHING OF READING IN EAP

In this final section of the chapter attention moves to the process of teaching reading in EAP. In its four parts, it defines academic literacy, followed by how to design academic literacy programmes, the difference between academic reading skills and strategies, and how to select reading materials.

2.6.1. Defining academic literacy

In §2.3.1 the difference between reading and literacy was briefly touched on and the conclusion drawn was that it is not possible to have literacy without reading skills. The definition of academic literacy has not been consensual in recent years (Short and Fitzsimmons, 2007; Torgesen, Houston, Rissman, Decker, Roberts, Vaughn, Wexler, Francis, Rivera, and Lesaux, 2007; Weideman, 2003; Weideman, 2012). A brief review shows that Blanton (1994) argued that becoming academically literate occurs when a person, who is proficient in academic language speaking and writing skills, can speak and write academically with authority. Short and
Fitzsimmons (2007: 12) considers academic literacy as a crucial element for success at school. For these authors, academic literacy consists of “reading, writing and oral discourse for school purposes; varies from subject to subject; requires knowledge of multiple genres of text, purposes for text use, and text media; academic literacy is influenced by students’ literacies in contexts outside school; and academic literacy is influenced by students’ personal, social and cultural experiences”. Torgesen et al. (2007: 3-5) equate academic reading with academic literacy. According to Torgesen et al. (2007: 3):

Academic literacy [or Academic reading] is usually defined as the kind of reading proficiency required to construct the meaning of content-area texts and literature encountered in school [and university]. It also encompasses the kind of reading proficiencies typically assessed on state-level accountability measures, such as the ability to make inferences from text, to learn new vocabulary from context, to link ideas across texts, and to identify and summarize the most important ideas or content within a text. Notice that the definition of academic literacy [or academic reading] includes not only the ability to read text for initial understanding but also the ability to think about its meaning in order to answer questions that may require the student to make inferences or draw conclusions. Our definition of academic literacy also includes the ability to learn from text, in the sense that full comprehension of text meaning usually results in new understandings or new learning.

It is generally agreed that academic reading involves understanding of multiple, long and complex reading sources; reading very widely and in-depth across a range of subject areas; being very selective; having concentration skills on a deeper level; comprehending the meaning of the author’s main point, style, tone and voice; stressing the reader’s active and considerable engagement with the text and author; interrogating both the text and the writer; and thinking about the main theories and concepts so that readers can construct their own (Glendinning and Holmström, 2004; Grabe and Stroller, 2011; Slaght, 2004; Spears, 2003; Wiener and Bazerman, 2009). Academic language proficiency is imbuend with cognitive as well as analytical processing. Academic language has functions like exposition, clarification, and conclusion; the academic demands for language therefore require us to do things with language like explain, define, compare, contrast, classify, agree, disagree, illustrate, elaborate, make claims, see implications, infer, exemplify, anticipate, and conclude (Introduction to Weideman and Van Dyk, 2012, in Weideman, 2012).

According to Torgesen et al. (2007), improvements in academic reading should result in two broad outcomes. Firstly, it should enable students to acquire more knowledge and understanding from their content-area classes, and demonstrate their deeper and accurate understanding of texts of content-course bibliographies in English. Secondly, it should enable them improve their performance on different reading measures at local and national levels. As Carrell and Carson (1997: 48) put it in a section on the definition of ‘literacy’, “what is needed are academic preparation programs that focus on college and university requirements so that students will be
taught literacy skills that are transferrable to academic contexts” (cf. §2.6.3, on academic literacy skills).

For this study, I define academic literacy or academic reading as the complex, purposeful and critical reading of volumes of long academic texts for the study completion of specific subjects.

2.6.2. Designing academic reading programs

In recent years we have become aware that the material for the teaching of second or foreign reading has to be aimed at the development of the strategies used by skilled readers as they interact with a text during reading. On the one hand, readers match reading skill with reading purpose; they scan and skim; they do not operate in a vacuum; they are constantly involved in a process of reacting with the text by expecting, checking, disagreeing, interrogating, etc. On the other hand, it is also believed that in doing that they integrate both top-down and bottom-up processes. Effective readers also use their word- and text-attack skills (Buehl, 2011; Hudson, 2007; Koda, 1992, 2005; Nuttall, 1996). Paran (2003: 40) argues that a well balanced second language reading program should include three main foci: (1) vocabulary development activities; (2) intensive classroom reading; and (3) extensive out-of-class free-reading activities.

Despite having been published more than 30 years ago, I think Grellet’s (1981) suggestions for improving reading skills are still relevant today. Grellet (1981) proposes the following hints to develop reading skills:

- Teach the students to concentrate on the text and not on the sentence. If reading comprehension is to be achieved, the structure of long units such as the paragraph or the whole text must be understood;
- Start with global understanding and move towards detailed understanding rather than working the other way around. (e.g. using headings/titles to activate relevant background knowledge? But also moving backwards and forwards between the bigger picture and its component parts);
- Use authentic text whenever possible. The authentic text does not make learning more difficult. The difficulty depends on the activity which is required on the students rather than on the text itself. In other words, the teacher should grade exercises rather than texts;
- Focus on reading skills and learning strategies and plan comprehension exercises for each of them.
- Do not impose your own interpretation on the learners. Teach them to think by providing enough evidences for them to follow the right way;
- Do not impose an exercise on the text. It is better to allow the text to suggest what exercises are more appropriate to it;
- Do not use so many exercises that you might spoil the pleasure of reading;
- Help the students to time themselves and increase their reading speed, little, by little;
• Use a variety of procedures when controlling the students’ reading activities. Self-correcting exercises are extremely useful.

Regarding academic reading instruction, and based on general findings in reading research, Grabe (1991) developed some useful guidelines for reading programs. Grabe (1991: 375) offers the following seven principles, which I think are still relevant:

1. Reading should be taught in the context of a content-centered, integrated skills curriculum, because content provides learner motivation and integration reinforces learning;

2. Individualized instruction should additionally be provided in a language lab, including practise of certain skills and strategies (e. g., recognition exercises, timed reading, vocabulary learning strategies);

3. Sustained silent reading should be encouraged to develop automaticity, confidence, and appreciation of reading;

4. Reading lessons should be planned in a pre-, during-, and post-reading framework: this would help build background knowledge, practice, engagement and motivation in comprehension instruction;

5. Specific skills and strategies should be practised consistently: the nature of this would depend on the needs, lacks and necessities of each group;

6. Group work and cooperative learning should promote discussions of the readings and exploration of different solutions for complex activities;

7. Students need to read extensively: students need to learn to read by reading.

In 2000, the National Reading Panel Report attempted to answer the question on how we can teach students to read accurately, rapidly, and with comprehension. After having summarised several decades of scientific research, the National Reading Panel Report [National Institute of Child Health and Human Development (NICHD), 2000] showed that effective reading instruction addresses five areas: (a) Phonemic awareness; (b) Phonics; (b) Fluency; (d) Vocabulary; and (e) Comprehension. While the first two areas relate specifically to early reading development in alphabetic languages, the last three are areas that are on-going and are still applicable at university level.

Grabe (2009: 332) suggests the following key components of a reading curriculum:

A. Promote word-recognition skills;
B. Build a large recognition vocabulary;
C. Practice comprehension skills that combine awareness of grammar, main idea identification, and comprehension strategies;
D. Build awareness of discourse structure;
E. Develop strategic reading;
F. Practice reading fluency;
G. Promote extensive reading;
H. Develop motivation;
I. Integrate both reading and content-learning.
It is important to stress that all these should be developed within a content-subject approach.

In fact, reading is becoming more and more important in the new knowledge economy and remains the most effective human activity for transforming information into knowledge and this into competence. In fact, twentieth-century assumptions about the world are rapidly becoming obsolete. Globalization, the digital revolution, mass migration, and the prospect of climate instability are triggering new concerns and demanding a new kind of graduate. In the 21st Century we are recasting our understanding of economics, communication, security, cultural identity, citizenship, and the environment. A growing number of reports document the new demands and opportunities these changes present to our students. They call for more powerful, relevant, and self-directed learning that will prepare the student to live, compete, and collaborate in a new global scenario. We are now living in a knowledge economy, where the jobs that are growing in demand the world over tend to be those that demand expert thinking and complex communication (OECD and Statistics Canada, 2005; Mansila and Jackson, 2011). Our age demands workers able to synthesize different types of information creatively. In addition to that, it is usually through pleasure reading that fluency and automaticity are built up (Day and Bamford, 1998; Grabe and Stoller, 2011; Herrera et al., 2010).

In their attempt to answer the question “What competences will students need to fare well in a flattened global economy?”, Mansilla and Jackson (2011: 1) point out that we must prepare our future force in multiple skill sets, which “range from learning, thinking, and innovation skills, such as thinking creatively and using systems thinking, to skills associated with life and careers, such as designing, evaluating, and managing one’s own work for ongoing improvement and adapting to change, and communicating ideas effectively across diverse audiences.” Therefore, I would like to argue in this study that because L2 readers in EAP courses need to develop general language, academic language, and academic reading abilities, they do require a curriculum based on these broad needs. Their reading program should thus include aspects of both IR and ER reading.

2.6.3. Academic reading skills and strategies

It is generally believed that our students should acquire specific types of knowledge and skills and so continue to develop in order to maintain and accelerate their development of proficiency in their academic, private, and professional lives. Several other reading specialists have proposed different lists of reading skills (Davies, 1995; Grabe, 2009; Hudson, 2007; McWhorter, 2002;
Mokhtari and Sheorey, 2008; Shih, 1992). These types of knowledge and skill can be grouped according to these six general component skills and knowledge areas (Grabe, 2009: 21 ff):

1. Automatic word recognition skills: which occurs when the reader is unaware of the process, not consciously controlling the process, and using little processing capacity;

2. Vocabulary and structural knowledge about words: sound knowledge of language structure and a large recognition of a considered number of words and lexical items;

3. Formal discourse structure knowledge (formal schemata): knowledge about the formal, rhetorical, organizational structure of different kinds of texts, such as whether the text is an essay, a simple story, a scientific text, a news report, etc.

4. Background knowledge about content and world (content schemata): background knowledge about the content of a text as well as knowledge about culture, i.e. depending on whether it is a text about teaching large classes, addressing forms in Nigeria, language acquisition, etc.

5. Synthesis and evaluation skills/strategies: evaluating the text information and comparing/synthesizing it with other sources of information/knowledge. It is deciding if the information of the text is coherent and recognising what is opinion and what is fact.

6. Metacognitive knowledge and skills monitoring: knowledge about cognition and the self-regulation of cognition. Applied to reading, this means recognizing the more important information in a text; adjusting reading rate; using context to sort out a misunderstood segment; skimming portions of the text; previewing headings, pictures, and summaries; using search strategies for finding specific information; formulating questions about the information; using a dictionary using word-formation and affix information to guess word meanings; taking notes; underlining; summarizing information; and so on.

For Shih,

A central goal of academic purposes ESL programs is to help students develop reading and thinking strategies needed to read academic texts in their content classes in order to learn new subject matter. “Study” reading, reading for in-depth comprehension and learning, is a special type of reading, demanding a different type of processing (in terms of focusing of attention, information encoding and retrieval) than reading for enjoyment or reading for general information. (Shih, 1992: 289)

According to Shih (1992: 291-292), there are three types of knowledge that serve as the foundation for successful construction of meaning at high school and university: conceptual knowledge (content schemata), text-structure knowledge (formal schemata), and knowledge about text-processing strategies (i.e. metacognitive knowledge). To that McWhorter (2002) adds three other relevant reading skills: distinguishing between fact and opinion, paraphrasing and summarizing.

With reference to reading strategies defined in §2.3.4, Shih (1992: 294) proposes four main areas of students’ metacognitive knowledge that need to be attended to by EAP classes: (a) criterion tasks; (b) basic structures of academic text; (c) personal strengths and weaknesses that affect
reading comprehension and learning, and how to compensate for weaknesses when making study plans; and (d) a range of task-specific strategies for learning from text.

I think the same is true for an EFL context, such as Angola. In fact, as Auerbach and Paxton (1997: 240-241) put it, *metacognition* “entails knowledge of strategies for processing texts, the ability to monitor comprehension, and the ability to adjust strategies as needed”. For Sheorey and Mokhtari (2001b), metacognition is the combination of conscious awareness of the strategic reading processes and the actual use of reading strategies that distinguishes the skilled from the unskilled readers.

More recently Weideman (2003) presented a comprehensive list of academic literacy skills, which defends that academic literacy proficiency involves skills that students are expected to have at tertiary level. According to Weideman (2003), a student who has *academic literacy* is able to:

- understand a range of academic vocabulary in context;
- interpret and use metaphor and idiom, and perceive connotation, word play and ambiguity;
- understand relations between different parts of a text, be aware of the logical development of (an academic) text, via introductions to conclusions, and know how to use language that serves to make the different parts of a text hang together;
- interpret different kinds of text type (genre), and show sensitivity for the meaning that they convey, and the audience that they are aimed at;
- interpret, use and produce information presented in graphic or visual format;
- make distinctions between essential and non-essential information, opinion, propositions and arguments; distinguish between cause and effect, classify, categorise and handle data that make comparisons;
- see sequence and order, do simple numerical estimations and computations that are relevant to academic information, that allow comparisons to be made, and can be applied for the purposes of an argument;
- know what counts as evidence for an argument, extrapolate from information by making inferences, and apply the information or its implications to other cases than the one at hand;
- understand the communicative function of various ways of expression in academic language (such as defining, providing examples, arguing); and
- make meaning (e.g. of an academic text) beyond the level of the sentence. (Weideman, 2003: xi-xii)

The above review is supported by the studies conducted by Barnett (1988), Dhib-Henia (2003), Jimenez (1997), and Mokhtari and Richard (2004). For example, using tests and protocols
Dhieb-Henia (2003) provided evidence of the effectiveness of metacognitive strategy training in improving the subjects’ familiarity with and proficiency in reading research articles, and also of the effectiveness of retrospection as a method for evaluating the subjects’ reading behaviour. She studied the reading processes of English as a foreign language/English for specific purposes (EFL/ESP) students with respect to research articles in Biology, their speciality area. Two groups of Tunisian undergraduate Biology students (61 in all) from two science institutions took pre- and post-course reading tests, and 12 participated in retrospection. The researcher purpose was to find if, and to what extent, a 10-month metacognitive strategy training course in the study skills and strategies necessary for reading scientific research articles can help ESP students in an EFL context read more efficiently and rapidly in their subject area. It was hypothesized that the students who received this strategy training would show enhanced declarative and procedural knowledge (as indicated by their higher scores and lower task-achievement timings) at the end of the course. Dhieb-Henia’s (2003) study provided evidence in favour of the idea of teaching strategy to advanced level ESP students, mainly regarding (a) their declarative knowledge of the metatextual features of research articles was enhanced, which impacted on their reading behaviour; (b) it raised the subjects’ awareness of how metacognitive strategy training ejected their reading behaviour; and (c) they became familiar with the research article genre.

Mokhtari and Richard (2004) explored the question of whether significant differences exist between first and second language readers in their metacognitive awareness and perceived use of specific strategies when reading for academic purposes in English. The participants in this investigation were a total of 350 college students (209 Moroccan and 141 American) who completed a questionnaire called metacognitive awareness of reading strategies inventory (MARSI), which, as the name states, is designed to measure the students’ metacognitive awareness of reading strategies. The most striking result to emerge from the data is that despite the fact that the two student groups had been schooled in significantly different socio-cultural environments (Morocco and United States of America), they reported remarkably similar patterns of strategy awareness and reported use when reading academic materials in English. Both Moroccan and American students demonstrated a moderate to high awareness of reading strategies. When examining the type of strategies used by the subjects, the study showed that Moroccan students reported using certain types of strategies more often than did their American counterparts. The results of this research help to explain some of the differences and similarities between second language readers and those reading in their first language, which have only been seen in terms of deficiencies but not in other, presumably more beneficial or even neutral ways.
From the above, three conclusions about metacognitive awareness of reading strategies can be drawn. First, it is of a paramount importance for all readers, students and teachers to be aware of the significant strategy use proficient reading requires. Phrased differently, one of the main differences between skilled and unskilled readers is believed to lie in the ability of the former to “engage in deliberate activities that require planful thinking, flexible strategies and periodic self-monitoring” (Paris and Jacobs 1984, in Sheorey and Mokhtari 2001b: 433). Second, students who receive strategic reading instruction improve their reading comprehension performance. Finally, generally speaking, students display some awareness of reading strategies without much difference among native and non-native students in the types of strategies reported to have more often been used. However, in her study of Swazi teacher trainees, Lukhlele (2010) found that the students showed awareness but were themselves not strategic readers and had poor reading levels.

Given the diversity and complexity of EAP objectives, it is crucial to conduct an in-depth NA before planning and implementing an EAP curriculum and material (Johns, 1991; Robinson, 1991). As Palacios-Martinez (1993: 44) puts it, “a needs analysis is a model of learning from learners. It is assumed that a particular syllabus for a particular group of learners should not be designed in a vacuum; rather, it should match students’ needs as closely as possible”. For Koda (2005: 272) “… L2 learning is greatly augmented when teachers know what students bring, linguistically and conceptually, to the instruction…”.

2.6.4. Reading materials and tasks
Following Shih (1992), in order for the EAP reading instruction to assist students to become good at “reading to learn,” (see §2.3.5 and §2.3.6) a fundamentally different approach is needed: “Reading materials and tasks should resemble materials and tasks students face in academic content classes, thus encouraging students to build repertoires of task- and text-appropriate discourse-processing strategies.” I still think that in an EFL context like Angola where students lack some of the basic skills, the two approaches should not be seen as mutually exclusive but rather be used to complement one another. Shih (1992) recommends three measures that instructors should consider: selecting material, criterion tasks, and strategies to aid comprehension and learning from text.

Selecting reading material
Shih (1992) suggests some criteria for selecting and sequencing reading materials that lend themselves to practicing reading-to-learn strategies for students like ours at ISCED-Huíla.
Select independent whole texts (complete articles, entire chapter) rather than text excerpts whenever possible.

In content classes, students read in depth on related topics in specific subject areas. In the ESL academic reading classes, extended reading on a single topic ... closely simulates the academic situation than short and varied selections.

Reading selections should present substantial new information, on topics appropriate to students’ ages, educational levels, and interests.

A logical theme for readings at the beginning of the term is orientation to the assumptions and demand of high school/college.

Materials should lend themselves to the particular criterion tasks that students need to develop strategies to handle.

Choose texts that exhibit discourse patterns and devices that students need to recognize.

**Criterion tasks**

After a needs analysis, curriculum developers can decide on the specific types of criterion tasks to focus instruction. These academic tasks can “be oral (e.g., participation in class discussion, oral presentations, panel discussions, role plays), written (e.g., quizzes and tests of various types, problem sets, essays, research papers), and activity-based (e.g., observations, labs). Shih (1992) recommends the following criterion tasks for EAP reading classes:

- Reading assignments in EAP classes should be guided by criterion tasks like the tasks students are assigned in content classes, rather than by a focus on reading skills.
- Students need to learn and practice strategies for task analysis and analyzing steps needed to complete the task successfully.
- Students should develop a habit of using their knowledge of task demands to set reading and study goals and to monitor their reading and studying process accordingly.

**Strategies to aid comprehension and learning from text**

Shih (1992: 301-309) defends that “EAP reading classes can introduce ESL students to a variety of pre-reading, during-reading, and post-reading strategies to enhance their reading and learning process as they work toward fulfilling specific criterion tasks.” Therefore, after selecting a text, the following three stages of activities are typically used (Aebersold and Field, 1997; Grabe, 2009; Hudson, 2007; and Nuttal, 1996):

- **Pre-reading stage:** At this important stage the teacher should make sure that students have the relevant schema for understanding the text. This is achieved by having students think, write, and discuss everything they know about the topic.

- **While-reading stage:** This stage requires the teacher to guide and monitor the interaction between the reader and the text. One important skill teachers can impart at this stage is teaching students the strategies for identifying main ideas and note-taking strategies, which allows students to compile new vocabulary and important information and details, and to summarize information and record their reactions and opinions.
• **Post-reading stage:** The post-reading stage offers the chance to evaluate students’ adequacy of interpretation, while bearing in mind that accuracy is relative. Post-reading activities focus on a wide range of questions that allow for different interpretations.

According to Anderson and Krathwohl (2001), Bloom’s taxonomy provides an excellent range of simple to complex activities and questions that are perfect for the three stages. Figure 2.4 summarizes the 2001 revised version of this taxonomy, with some of these activities (Anderson and Krathwohl, 2001) and associated questions (Pohl, 2000: 12-14).

![Figure 2.4: The revised Bloom’s taxonomy (Anderson and Krathwohl, 2001)](image-url)
2.7. CONCLUSION

This chapter reviewed six main domains relevant to the study focus, namely, the definitional issues related to ESP, the description of the process of a needs analyst in EAP, the discussion of the reading process, the description of the broader context of second language reading, the discussion of what reading in EAP entails, and the discussion of issues related to the teaching of EAP reading. There are five main conclusions that can be drawn from this chapter. First, NA plays a very important role in course and syllabus design. Second, a need analyst should strive to use different types of triangulations in order to have a better picture of the whole process. Third, it is important that the researcher is fully aware of what reading at university really entails. S/he should be aware that tertiary level reading involves knowledge of different academic literacy skills and strategies, student engagement and raising awareness of students. As stressed by (Grabe, 1991:396), “sustained ... reading should be encouraged to build fluency (automaticity), confidence, and appreciation of [or fostering the love for] reading.” Fourth, rather than conceptualizing reading as an isolated subject, teacher educators should see it in the context of a genre-oriented, content-centred and skill-integrated curriculum. Lastly, but not definitely the least, students can become skilled at reading to learn provided that reading materials and tasks resemble materials and tasks students face in their academic content classes. Obviously, this paper defends that those five conclusions can better be achieved if every stakeholder is made aware and use appropriate procedures in the analysis of students’ academic reading needs, lacks and wants. In my opinion, provided that the process respects the current developments in AL reading theory and practice, this would consequently and simultaneously enhance the teacher trainees’ intensive and extensive academic reading skills and strategies. I think that the theoretical, practical and concluding ideas that we have looked at in this chapter can serve as the right bridge to the next chapter, where the research methodology used in this study is presented.
CHAPTER 3:
RESEARCH METHODOLOGY

3.0. INTRODUCTION
This chapter describes the research methodology used in carrying out this study. The chapter is divided into six main sections. The first section outlines the main features related to research methodology while the second section discusses matters related to reliability and validity in quantitative research. The third section deals with the sampling techniques that have been used, followed by the fourth which is about the ethical issues that have been considered in the process of data collection. The fifth section focuses on the first phase of the study, i.e. the piloting stage. Finally, the chapter discusses the second phase of the research, i.e. the main study.

Before proceeding, I will first clarify the distinction between three terms that will be used throughout the chapter: research, methodology and methods. Hatch and Lazaraton (1991: 1) suggest that research is “the organized, systematic search for answers to the questions we ask.” Nunan (1992: 3) provides a somewhat more elaborated description when he states that research is “a systematic process of inquiry consisting of three elements or components: (1) a question, problem or hypothesis, (2) data, and (3) analysis and interpretation”. Northrop (1966, in Brewer and Hunter, 2005: 40) posits that “Inquiry starts only when something is unsatisfactory, when traditional beliefs are inadequate or in question, when the facts necessary to resolve one’s uncertainties are not known, when the likely relevant hypotheses are not even imagined. What one has at the beginning of inquiry is merely the problem”. What can be understood from the above definitions is that, essentially, research is a systematic process of investigation (a) to find the source or cause of something, (b) to discover new knowledge, (c) to advance in our discipline or bring about change, (d) to find solutions to a problem or (e) to find answers to questions through the application of scientific procedures.

Mouton (2001: 35) describes methodology as the means or method of doing something. According to Harding (1987: 3), methodology is a theory and analysis of how research should proceed. It includes accounts of how “the general structure of theory finds its applications in particular scientific disciplines”. For other specialists, like Cook and Fonow (1990) and Lather (1992), methodology is a model which entails theoretical principles as well as a framework that provides guidelines about how research is done in the context of a particular paradigm. In simple terms, a methodology translates the principles of a paradigm into a research language, and shows how the world can be explained, handled, approached and studied (Sarantakos, 2005).
Methods, on the other hand, refer to the tools or instruments employed by researchers to gather empirical evidence or to analyze data from individuals, groups, and texts in any medium. For Harding (1987), methods refer to techniques and procedures used in data collection during the research process. Put another way, methods are a theoretical and a methodological approach to carrying out research (Sarantakos, 2005).

3.1. RESEARCH METHODOLOGY
This section outlines the main aspects related to research methodology used in this study. It outlines more specifically the research approach and design, the research purpose, the research objectives, and the research questions.

3.1.1. Research approach and design
According to Seliger and Shohamy (1989: 27), there are two broad research approaches: synthetic/holistic and analytic. A synthetic or holistic approach to research of second or foreign language phenomena allows us to view the separate parts as a coherent whole. It focuses on the interdependence of a variety of interrelated systems that impact on a research problem. An analytic approach on the other hand tries to identify and investigate a single factor or a cluster of factors of one major system. An analytic approach means that the “second [or foreign] language phenomenon is analysed in its constituent parts and one or a cluster of these constituent parts is examined in greater detail to the exclusion of other factors” (Seliger and Shohamy 1989:56). It focuses on a more specific aspect of language proficiency, for example, an aspect of reading, writing, pronunciation or vocabulary.

A research design is an action plan that guides research from the questions to the conclusions and includes steps for collecting, analyzing, and interpreting evidence according to pre-established propositions, units of analyses, a logic for linking the data to the propositions, and application of set criteria for interpreting the findings (Yin, 2003). It is a plan and structure of investigation used to obtain answers to research questions (Kerlinger, 1986). Research design enables researchers to answer research questions as validly, objectively, accurately and economically as possible.

A distinction between qualitative and quantitative research design is commonly made. Berg (2001), for example, argues that qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things, while quantitative research refers to the measures and counts of things. Denzin and Lincoln (2000) assert that
qualitative research emphasises the process of discovering how the social meaning is constructed and stresses the relationship between the investigator and the topic studied. Conversely, quantitative research is based on the measurement and the analysis of relationships between variables. It advocates the use of statistics and controlled measurement. As a result of this, the quantitative approach is regarded as objective and reliable.

Seliger and Shohamy (1989: 116-117) distinguish between qualitative, descriptive and experimental research. Qualitative research is “heuristic and not deductive since few, if any, decisions regarding research questions or data are made before the research begins”. Descriptive research “refers to investigation which utilizes already existing data or non-experimental research with a preconceived hypothesis ... It provides descriptions of naturally occurring phenomena” (Seliger and Shohamy, 1989: 117). Experimental research is mainly hypothesis-driven and it manipulates data before it is analysed, contrary to descriptive research.

Similarly, Babbie (2001) posits three common types of research in social science that overlap in many respects with the heuristic-inductive/deductive distinction, namely: exploratory, descriptive, and explanation. Exploratory research is undertaken in order to develop initial rough understanding of some phenomenon. It is a methodological approach that is primarily concerned with discovery and with generating or building theory. Clearly, this term is similar to Seliger and Shohamy’s notion above of qualitative research. Descriptive research is conducted when the researcher needs to describe the precise measurement and reporting of the characteristics of some population or phenomenon under study. Explanatory research is undertaken to discover and report some relationships among different aspects of the phenomenon under study.

The approach of this study is predominantly analytical and quantitative, considering that it focuses on specific aspects of needs analysis. As Seliger and Shohamy (1989: 27) put it, an analytic perspective seeks to “identify and investigate a single factor or a cluster of factor which ... are constituents of one of the major systems.” In fact, this study analyses and investigates several factors which are related or integral to needs analysis:

- the actual reading levels of teacher trainees at ISCED-Huíla;
- the teacher trainees’ and teacher trainers’ attitudes to reading;
- the reading strategies used by teacher trainees when reading academic texts;
- the teacher trainees’ and teacher trainers’ perceptions and opinions on the former’s reading competence in specific academic reading sub-skills in academic, professional, and social domains;
- the academic reading lacks and academic reading needs of these teacher trainees;
- the procedures and main data sources during the process of needs analysis at university level, bearing in mind the local constraints.
In order to investigate the factors central to their research, researchers need to bear in mind their overall research purpose.

3.1.2. Research purpose

Seliger and Shohamy (1989) propose that research may have a heuristic, inductive or exploratory (hypothesis-generating) or a deductive (hypothesis-testing) purpose or objective. In heuristic or exploratory studies the researcher first observes, records and describes particular phenomena and then, based on the data collected, may generate hypotheses about the phenomena investigated. The research is thus data-driven. The importance of heuristic (or data-driven) studies is mainly to discover patterns, behaviours, and explanations, and to form questions or hypotheses for further research. On the other hand, in deductive or hypothesis-testing studies the researcher initially formulates hypotheses and then collects data to test the hypotheses “in order to develop a theory about a phenomenon in question”. The importance of formulating and testing hypotheses is that “it narrows the focus of the research and allows the … phenomenon to be investigated systematically” (Seliger and Shohamy, 1989: 29).

This research study is essentially heuristic, inductive or exploratory. The purpose of the dissertation is to present a framework for determining the academic reading needs of teacher trainees who study in an EAP context, based on what was learned from the literature review that suits the context and consisting of practical stages and processes. The rationale originates from a desire to update and improve an existing small scale ESAP reading programme to improve a course which I teach. This is a small scale study involving teacher trainees at ISCED-Huíla.

Although this research is informed by previous studies and approaches, it is not based on a particular single model, and it describes its exceptional character which existing theories and researches may not adequately portray. In addition, the exploratory framework was also used to examine the actual level of academic reading ability of teacher trainees and the strategies they use when reading and to establish contextualized methodology for conducting needs analysis that is (or should be) used or by their university trainers. Following McMillan and Schumacher (2001), a definition that can be corroborated by Brown and Rodgers (2002), Dörnyei (2007), Mackey and Gass (2005) and Mouton (2001), exploratory studies “examine a topic in which there has been little prior research…” (McMillan and Schumacher 2001: 399). In fact, although research on this topic (needs-analysis in the tertiary level context) has been done elsewhere, it has not yet been undertaken in Angola. Even though in recent years there has been a considerable growth in the amount of published materials for teaching EAP, whether wide-angle
or skill-specific worldwide (see for example Cox and Hill, 2004a,b; Glendinning and Holmström, 2004; McGovern, Matthews and Mackay, 1994a,b; and Wiener and Bazerman, 2009). Most of these scholars confirm the role of reading for academic performance as well as the importance of respecting students’ needs before any delineation of an academic course.

3.1.3. Research objectives and research questions

Research objectives are generally understood as declarative statements that focus on the identification and description of variables or concepts and sometimes on the relationships between the variables. They often summarize what is to be achieved by the study (Brown and Rodgers, 2002; Dörnyei 2007; Mackey and Gass, 2005; and Mouton, 2001). Therefore, as seen in §1.5.2., with reference to the research objectives, this study aims to do the following:

1. Determine the ISCED-Huíla teacher trainees’ level of academic reading ability;
2. Examine the teacher trainees’ use of reading strategies during the reading of expository texts;
3. Examine the relationship between teacher trainees’ academic reading proficiency and their strategy use;
4. Explore the perceived academic reading needs, skills, lacks and wants regarding course content and methodology of the teacher trainees and their teachers;
5. Compare the teacher trainees’ responses on needs with their teacher trainers’ expectations and assumptions;
6. Identify potential problem areas/challenges in the current needs analysis procedures or practices in use at ISCED-Huíla.

Generally speaking, the research questions are derived from the research objectives. Campbell, Daft and Hulin (1982) define research questions as statements that identify the phenomenon to be studied and they follow from the objectives. For Johnson and Christensen (2004: 77), research questions are generally understood as interrogative statements that represent “an extension of the statement of the purpose of the study in that it specifies exactly the question that the researcher will attempt to answer”. According to Maxwell (2005: 69), “research questions state what you want to learn”. Research questions “narrow the purpose into specific questions that the researcher would like answered or addressed in the study” (Creswell, 2005: 62).

Punch (1998:38) argues that research questions can have five main roles in a research project:

- organize the project, and give it direction and coherence.
- delimit the project, showing its boundaries.
- keep the researcher focused during the project.
• provide a framework for writing up the project.
• point to the data that will be needed.

Similarly, Onwuegbuzie and Leech (2006: 478), point to the several roles that research questions can play:

they provide a framework for conducting the study, helping the researcher to organize the research and giving it relevance, direction, and coherence, thereby helping to keep the researcher focused during the course of the investigation. Research questions also delimit the study, revealing its boundaries. Additionally, research questions give rise to the type of data that are eventually collected.

From the above, it would seem that the purposes of research questions can be grouped into two main categories: (a) to keep the overall research project on track (organisation and delimitation), and (b) to help the researcher to focus on the real purpose of his or her work (focus, framework and data).

Onwuegbuzie and Leech (2006) also classify research questions as quantitative (those that enquire about the measures and counts of things) and qualitative research questions (those that enquire about meanings, concepts, definitions and descriptions of things). Quantitative questions can be subdivided into descriptive, comparative and relationship questions. Descriptive questions simply seek to quantify responses on one or more variables. These questions often can begin with the words ‘What is…’ or ‘What are…’. Comparative questions seek to compare two or more groups on some outcome (i.e. dependent) variable. These questions often use words such as ‘differ’ and ‘compare’. Relationship questions are concerned with trends between (or among) two (or more) variables. These questions often use words such as ‘relate’, ‘relationship’, ‘association’, and ‘trend’.

Qualitative questions are defined as “open-ended, evolving, and nondirectional” (Creswell, 1998: 99). These questions tend to seek, to discover, to explore a process, or describe experiences. Therefore, Onwuegbuzie and Leech (2006: 482) argue that “qualitative research questions typically describe, rather than relate variables or compare groups, avoiding the use of words such as ‘affect’, ‘influence’, ‘compare’, and ‘relate’. More specifically, qualitative research questions tend to address ‘what’ and ‘how’ questions”.

Determining the research question(s) is an extremely important step in both the quantitative and the qualitative research process because these questions narrow the research objective and research purpose to specific questions that researchers attempt to address in their studies (Bell, 2005; Creswell, 2005; Johnson and Christensen, 2004; Punch, 2006).
Studies that include characteristics of both quantitative and qualitative research are mixed methods studies. According to Onwuegbuzie and Leech (2006: 475), research questions are even more important in mixed methods research because mixed methods researchers adopt a more pragmatic method and system of philosophy. In all research studies, research questions (a) drive the methods used and (b) dictate the type of research design used, the sample size and sampling scheme employed, and the type of instruments administered as well as the data analysis techniques (i.e. statistical or qualitative) used.

As mentioned in §3.1.1, the present study is essentially quantitative. It formulated five quantitative questions (cf. §1.5.3 and §4.1.1), i.e. four descriptive questions (RQ1, RQ2, RQ4 and RQ5) and one relationship question (RQ3). RQ4 and RQ5 are also implicit comparative questions because they imply similarities and differences.

1. What are the levels of English academic reading proficiency of teacher trainees before they start their reading course?
2. What reading strategies do teacher trainees claim to use when reading an academic text?
3. What is the relationship between teacher trainees’ academic reading proficiency and their strategy use?
4. What, according to the teacher trainees and teacher trainers, are the perceived reading problems, needs, practices, genres, and skills required in the teacher trainees’ academic, professional, and social lives?
5. What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important for designing and shaping their courses (i.e. who or what should be included)?

Furthermore, the five questions reflect different themes that this work is investigating, namely teacher trainees’ literacy practices, attitudes and performance, and the needs analysis procedures used in English for Academic Purposes (EAP) reading at ISCED-Huíla.

Because the research was descriptive and exploratory, no specific hypotheses were posed, so the collection and analysis of data were conducted within an inductive framework, with predetermined research questions that guided this study (cf. §3.1.3 above). Given the nature of this study, I now look at two constructs that are central to quantitative research, namely reliability and validity.
3.2. RELIABILITY AND VALIDITY OF THE RESEARCH DATA

It is generally agreed among quantitative researchers that determining the impact of the results of a study is dependent upon two concepts: validity and reliability. For this study these two concepts were taken into account from its inception throughout its administration.

3.2.1. Reliability

Reliability “provides information on whether the data collection procedure is consistent and accurate” (Seliger and Shohamy, 1989: 185), given the same initial circumstances. Reliability involves the consistency, accuracy, reproducibility or replication of the results.

From said, one would ask what a satisfactory level of reliability is. According to Nunnally (1978), the answer to this question depends on how a measure is being used. Nunnally (1978) suggests that reliabilities of .70 or higher will be sufficient in the early stages of research on predictor tests or hypothesised measures of a construct. This is corroborated by McMillan and Schumacher (2001: 248) who state that “a good rule of thumb is to be wary of reliability below .70”. For Nunnally (1978), increasing reliabilities much beyond .80 are often wasteful of time and funds, because correlations at that level are attenuated very little by measurement error. To obtain a higher reliability of .90, for instance, requires strenuous efforts at standardisation and probably an addition of items. On the other hand, in applied settings where important decisions are made with respect to specific test scores, Nunnally (1978) recommends that a reliability of at least .90 is desirable, because a great deal depends on the exact score made by a person on a test.

Two main ways are used to assess the reliability of a procedure: internal and external.

3.2.1.1. Internal reliability

According to Nunan (1992: 14), internal reliability refers to “the consistency of data collection, analysis, and interpretation.” The question that is often asked is “Would an independent researcher, on reanalyzing the data, come to the same conclusion?” (Burns, 1999; Dörnyei, 2007; Leedy, 1993; Nunan, 1992).

For this specific study, internal reliability was guaranteed in various ways, such as:

- Most of the questions in the Accuplacer test had the same type of question formats that the student often do in English Language and other subjects of their course, so the students were familiar with the question type and formats.

- The Accuplacer test was taken seriously by the participants and in a favourable location (Hughes, 2003: 48), i.e. adequately ventilated, and free from distractions.
• The scoring of the Accuplacer test was objective and consistent because the 35 questions were hand scored using the Scoring Stencil for the Companion Test Reading Skills (Form 02VL10) which clearly stated what the correct answers were.

• Marking the Accuplacer test twice or regrounding (Seliger and Shohamy, 1989:186). Considering that I obtained similar raw scores between the first and second rounds of marking and the final check I was satisfied that I had been consistent in my scoring.

• Both the trainee and trainer questionnaires were piloted to ensure that they contained clear and unambiguous questions and instructions and that were both written in clear language (Hughes, 2003: 46-7). Modifications to the test instruments are discussed in §3.5.4.

3.2.1.2. External reliability

Nunan (1992: 14) defines external reliability as “the extent to which independent researchers can reproduce a study and obtain results similar to those obtained in the original study.” External reliability can be guaranteed in various ways, namely through quantification, the statistical application of a reliability test to test or questionnaire items, such as the Cronbach Alpha, and the guarantee of the participant’s attention.

For this specific study, external reliability was guaranteed as described below:

• The research materials were quantified to ensure that the data from such instruments was reliable and objective. The questions in the item pool of the Accuplacer test for Reading Comprehension are generally accepted as fair and useful for assessment purposes. Each of its subsections has a coefficient reliability of \( \alpha = 0.87 \) or higher (Mattern and Packman, 2009: 3; The College Board, 1993: 18; and The College Board, 2007), considered as exemplary for a low-stakes test.

• The reliability indexes for the questionnaires are \( \alpha = 0.81 \) for the teacher trainee questionnaire and \( \alpha = 0.79 \) for the teacher trainer questionnaire. These numbers of the Cronbach’s Alpha (which is above 0.70) give me enough confidence that the items in the scale are related enough, because 0.70 is regarded as satisfactorily reliable.

• The participants were attentive throughout the administration of the Accuplacer test and the questionnaires.

The data obtained from this study can be replicated in other contexts. However, because this is mainly an exploratory study that serves as a case study at ISCED-Hufla, the results cannot be generalized and applied to any research context, unless to those that specifically have this specific course (Linguística/Inglês) and this specific subject (Técnicas de Leitura – or Academic Reading Skills). In other words, the specific characteristics of the institution, participants, and conditions cannot be replicated to any institution that does not have similar variables. In both the pilot and main studies, different strategies were used to obtain reliable results. Some of these strategies were to guarantee the internal reliability and others were to guarantee external reliability. These issues will be taken up again in §3.5.2.1, §4.2.1, §4.2.2 and §4.2.4.
3.2.2. Validity

Validity “refers to the extent to which the data collection procedure measures what it intends to measure” (Seliger and Shohamy, 1989: 188). Validity involves the appropriacy, meaningfulness or usefulness of the inferences about language ability based on students’ performance on a specific test.

There are many threats to research validity (Dörnyei, 2007: 53-54; Seliger and Shohamy, 1989). Some of these threats are: participant mortality or attrition (i.e. participants lost from the study); practice effect (effect of experience with the instruments), maturation (physical or psychological changes in the participants over time), participant desire to meet expectation (exhibiting performance that participants’ believe is expected of them), and history (events that occur besides the treatment).

There are different kinds of validity, such as internal and external validity. On this, Merriam (1988: 173) defends that a researcher should first establish internal validity before external validity is discussed because “there is no point in asking whether meaningless information has any general applicability”.

3.2.2.1. Internal validity

Mackey and Gass (2005: 119) define internal validity as “the extent to which the results of a study are a function of the factor that the researcher intends.” This means that the results of a research study are not biased and that any differences which are found can actually be ascribed to the treatments under scrutiny. The question to ask can be “Is the research design such that we can confidently claim that the outcomes are a result of the experimental treatment?” (Burns, 1999; Dörnyei, 2007; Leedy, 1993; Nunan, 1992). Internal validity is all about control by “being random”. This can be through the use of different types of triangulation (e.g., data triangulation, method triangulation, etc.) or through different types of of probability sampling techniques (i.e., random, systematic, stratified random, cluster; §3.3). Triangulation is “using different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes” (Cresswell, 2003).

The internal validity of this study was guaranteed through the following strategies (Cresswell, 2003; Freeman, 1998; Leedy, 1993; Mackey and Gass, 2005; Merriam, 1988):

- Following Freeman, (1998: 97), I used data triangulation (i.e. getting data from different groups in the same context (trainees and trainers) and getting data from the same group (trainees) in different ways (Accuplacer and questionnaire).
• I ensured that my position as a lecturer of the teacher trainees and that of a colleague to teacher trainers did not affect or influence the research (Mackey and Gass, 2005: 115).

• The three research instruments were all piloted before the instrument was administered to the larger group. As Mackey and Gass (2005: 43) point out, a “pilot study is an important means of assessing the feasibility and usefulness of the data collection methods…”.

• Colleagues and specialists were contacted for a discussion of the study findings and comments on them as they emerged – peer debriefing or peer examination (Merriam, 1988). My supervisor was a constant source of guidance and advice during the preparation, application and report of this study.

3.2.2.2. External validity

According to Mackey and Gass (2005: 119), external validity is “concerned with generalizability of our findings, or in other words, the extent to which the findings of the study are relevant not only to the research population, but also to the wider population of language learners.” In other words, one would need to ask “Is the research design such that we can generalize beyond the populations, situations, times or environments under investigation to a wider population?” (Burns, 1999; Dörnyei, 2007; Leedy, 1993; Nunan, 1992). Findings can be generalizable if one examines the characteristics of the sample versus the population or versus other samples or populations.

The external validity was guaranteed through the following strategies:

• Students in the study were volunteer subjects.

• As a researcher, I did not attempt to influence participants to change their responses on the questionnaire or test. In other words, all data were collected and analysed in an objective manner and the findings reflect the actual data obtained from the subjects (Seliger and Shohamy, 1989).

• The sample population possess the same or similar characteristics as the wider population to which the research findings will be applied. In other words, the sampling of the participants was well defined and may be considered as representative of the population being investigated: Angolan teacher trainees and teacher trainers at ISCED-Huíla, students in the Angolan context specifically, and perhaps to tertiary level students in developing countries.

We can heed Cherry and Meyer’s (2009: 31) words who defend that “reliability is a necessary but not sufficient condition for validity.” This means that you cannot have a valid assessment if your testing instruments are not reliable, though you can have reliable instruments that nevertheless do not produce valid conclusions.
3.3. SAMPLING TECHNIQUES

In quantitative research, there are specific conventions regarding the way in which participants are selected to participate in a study. This section describes the sampling techniques that have been used in this study.

Sampling is usually defined as the procedure of selecting a sample (i.e., any group of individuals) that is seen to represent a population. According to Gay (1987), sampling enables researchers to select a number or a group of individuals in such a way that those selected represent the larger group from which they are selected. Sampling techniques generally fall into two groups: probability, and non-probability. For Dörnyei (2007: 97) probability sampling involves complex and expensive procedures that are usually well beyond the means of applied linguists. Examples of these methods we have random sampling (random samples from a whole population); stratified random sampling (random samples from identifiable groups (strata), subgroups, etc.); and systematic sampling (every n<sup>th</sup> element from the list is selected as the sample).

While probability sampling methods are often advantageous in that they can strengthen the validity of the research findings, they can, however, be time-consuming and costly and require a level of skill many researchers may not possess.

Non-probability sampling, on the other hand, “consists of a number of strategies that try to achieve a trade-off, that is, a reasonably representative sample using resources that are within the means of the ordinary researcher” (Dörnyei, 2007: 97). Examples of these techniques are quota sampling (individuals are selected as they come to fill a quota by characteristics proportional to populations); snowball sampling (subjects with desired traits or characteristics give names of further appropriate subjects); and convenience sampling (sample is selected from elements of a population that are easily accessible, often on the basis of opportunity or specific characteristics, such as intact classes in an education setting). According to McMillan and Schumacher (2001: 175), “while this type of sample makes it easier to conduct the research, convenience sampling presents some limitations”. Among them, we can highlight the claim that “there is no precise way of generalizing from the sample to any type of population.” But McMillan and Schumacher (2001: 175) advise that rather than thinking that the finding are not useful, it simply means that caution is needed in generalizing the findings.

Taking into consideration the available conditions at the research site coupled with the demands of other types of samplings, convenience sampling was used for this study. In fact, this is “the most common sample type in L2 research” by using “captive audiences such as students in the researcher’s own institution” (Dörnyei, 2007: 98-99), due to the fact that they are geographically
close, or they are available at the time of the research. Furthermore, they tend not to be disruptive of institutional routines, since use is made of existing classes or groups of students.

3.4. ETHICAL ISSUES
There is always a need for research to be conducted in a principled way that does not disadvantage or harm the participants. Silverman (2000: 201) reminds researchers that they should always remember that while they are doing their research, they are in actual fact entering the private spaces of their participants. According to Creswell (2003), the researcher has an obligation to respect the rights, needs, values and desires of the informants, i.e. s/he should address several ethical issues during the research and after the study had been conducted.

For McMillan and Schumacher (2001: 420), ethical guidelines include but are not limited to issues related to informed consent, deception, confidentiality, anonymity, harm to subjects, and privacy and others. In other words, many different disciplines, institutions, professions and scientific communities have norms for behavior that suit their particular aims and goals. These norms also help members of the discipline and researchers to coordinate their actions or activities and to establish the public’s trust of the discipline. The following can be considered as a broad and general summary of the methods used to control the ethical standards of a study (Creswell, 2003; De Vos, Strydom, Fouché and Delport, 2005; Dörnyei, 2007; Gall, Gall and Borg, 2007; Shamoo and Resnik, 2009).

**Informed consent**: This means that prospective research participants must be fully informed about the procedures and risks involved in research and must give their consent to participate.

**Voluntary participation**: Requires that people not be coerced into participating in research. This is especially relevant where researchers had previously relied on ‘captive audiences’ for their subjects such as prisons or universities.

**Confidentiality or anonymity**: While confidentiality is the assurance that no one, including the researcher, will know the identity of individual participants, anonymity is the assurance that the identity of participants will be preserved by the researcher. Basically, this means that the participant will remain anonymous throughout the study – even to the researchers themselves. Researchers should protect confidential communications, such as papers or grants submitted for publication, personnel and other records.
Honesty and trust: Researchers should strive for honesty in all scientific communications. They should honestly report data, results, methods and procedures, and publication status. They should not fabricate, falsify, or misrepresent data, neither deceive colleagues, or the public.

Courtes y: Researchers should not intrude unnecessarily into participants’ lives or make unnecessary demands on their time and knowledge. The participant sample should be realistic based on producing valid results and inclusive in that potential participants do not feel excluded from the study; and only necessary data should be collected.

Objectivity: Researchers should strive to avoid bias or self-deception in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity is expected or required.

Carefulness: It is the responsibility of a researcher to avoid careless errors and negligence. This requires careful and critical examination of one’s own work and the work of peers. Good records should be kept of research activities, such as data collection, research design, and correspondence with agencies or journals.

Respect for intellectual property: Researchers should honour patents, copyrights, and other forms of intellectual property. They should not use unpublished data, methods, or results without permission; they should give credit where credit is due; they should give proper acknowledgement or credit for all contributions and collaborations to research and should never plagiarize.

Although Merriam (1988: 179) refers specifically to qualitative research case studies, ethical issues are applicable to all kinds of research: during the collection and analysis of data, and during the dissemination of the findings.

3.4.1. Ethical issues relating to data collection

Data collection is the process of gathering the various quantitative or qualitative information about the research process. This can be carried out in a variety of ways such as through questionnaires or surveys, tests, observations, as well as interviews (Brown and Rodgers, 2002; Gall, et al. 2007; Leedy, 1993; Nunan, 1992). It is generally agreed that regardless of the type of data and the means used for its collection, it is necessary to gain the approval of the people, institutions or community from which the data will collected.
Permission for this study was requested and granted from the General Director of ISCED-Huíla. Whereas for the pilot study the permission was given orally, for the main study I wrote a letter of application to the ISCED-Huíla General Director (Appendix G) asking for permission to conduct the research at this site, and permission was given in writing (Appendix H). Similarly, permission to use the Accuplacer test was requested and granted in writing from the Accuplacer testing platform (Appendix F). The Institution Administrator login credentials for ISCED-Huíla’s Accuplacer account were purposefully provided for this specific study.

The participants were all orally informed in class before testing about the aims and the proposed data collection methods of the research study. Aspects related to anonymity and confidentiality were also stressed. The teacher trainees were informed that they were not obliged to participate in the study and that they could withdraw from it at any time. Regarding the teacher trainers, who were all my colleagues, I maintained a positive and professional relationship with each teacher throughout the research process. The five teacher trainers were informed of the aims, anonymity and confidentiality aspects of the research during a departmental meeting. As can be seen, and following Seliger and Shohamy (1989: 196), participating teacher trainees and teacher trainers were all informed concerning the nature of the study. Furthermore, all the participants were happy to participate.

3.4.2. Ethical issues relating to the dissemination of the findings

Dissemination is generally understood as the tailored and targeted distribution of information and intervention materials to a specific public audience of researchers, teachers, educators, learners, decision makers and other stakeholders (cf. Louis and van Velzen, 1988). This can be done either through the traditional vehicles of journal publication and academic conference presentations or through a process of extracting the main messages derived from research results in a way that encourages the audience to react and act through new ideas, new practices, and new materials (Louis and van Velzen, 1988; Owen and Stupans, 2009).

The current study reflects the real and actual findings of the study. Throughout this research study pseudonyms have been used in order to preserve the anonymity of the participating teacher trainees and teacher trainers so that they would not be able to be identified after the results had been disseminated. Efforts were made to honestly report data, results, methods and procedures, and no data were fabricated, falsified, or misrepresented.

Having looked at some of the methodological issues related to how the study was designed, we now turn our attention to the two stages of the study: the pilot and the main study.
3.5. THE PILOT STUDY

Dörnyei (2007: 75) compares a research study to a theatre performance because they both require a dress rehearsal: “a research study ... needs a dress rehearsal to ensure the high quality (in terms of reliability and validity) of the outcomes in the specific context.”

As already stated, the pilot study was conducted in July 2007 at ISCED-Huíla. The university academic year in Angola typically starts in mid-March and finishes in late December. At the time that the trainees participated in this pilot study, we were in the last week of the first term. There were two main purposes for this pilot study. The first purpose was to test and revise the research instruments. This would allow me to determine whether the procedures would work, whether the materials I collected were the ones I needed, and it was an opportunity to refine my research questions for the main study. The second purpose was to do some exploratory work to experiment with procedures for analysing the data for the main study. In other words, this ‘pre-study’ permitted me to do a thorough check of the planned statistical and analytical procedures. The pilot study was aimed at finding preliminary answers to four research questions:

- What are the levels of English academic reading proficiency of teacher trainees at the time they start their reading course?
- What strategies do teacher trainees use when reading academic texts and solving their reading problems?
- What is the relationship between teacher trainees’ academic reading proficiency and their strategy use?
- What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important sources of information for designing and shaping their courses?

3.5.1. Participants

The sample of teacher trainees in this pilot study were 20 first-year Angolan teacher trainees, all at the end of their first term at ISCED-Huíla, who have Portuguese as their first language and English as their second language. They completed the Accuplacer test and the questionnaire. Most trainees were male (75%), ranging in age from 20 to 40 years, with a mean age of 26.45 years. Their English learning experience ranged from 4 to 20 years, with a mean of 9.55 years. They were generally very motivated and enthusiastic to learn because English is seen as a means of personal and social betterment.

The 5 teacher trainers who answered the questionnaire were all from the English Department and are Angolan Portuguese-speaking practitioners. As Kennedy (1979) points out, this is
advantageous because they speak the students’ official language and they are familiar with the
cultural background of their students, their learning habits and the particular problems they face
in acquisition of the AL. Three of them were female. They were aged between 28 and 49 years.
They all graduated from ISCED in Teaching English as a Foreign Language (TEFL). One of
them has a Master of Arts in Applied Linguistics from one of the universities in the United
Kingdom and two are currently pursuing an MA in TESOL at UNISA. Their teaching experience
ranged between 7 and 23 years.

3.5.2. Research instruments
In this section we look at the three research instruments that were piloted.

a. a test of academic literacy called the Accuplacer test, aimed at measuring the reading levels
   of English proficiency, to answer RQ1 (Appendix C);
b. a semi-structured teacher trainee questionnaire to address RQ2–5 (Appendix D);
c. a semi-structured teacher trainer questionnaire to answer RQ4 and 5 (Appendix E).

3.5.2.1. The Accuplacer test
The Accuplacer test (Appendix C) is a general standardized test of academic literacy developed
in the United States of America by the College Board (www.collegeboard.com/accuplacer). It
has three main purposes: (a) to assist with the determination of course placements that are
suitable for school leavers/Grade 12; (b) to monitor student course progress; and (c) to suggest
whether remediation is needed or if a change in course assignment is recommended. It has good
predictive validity for academic performance at tertiary level, i.e. coefficient reliability of α=.87
or higher (The College Board, 1993: 18; Mattern and Packman, 2009: 3).

The Accuplacer system includes nine computer-adaptive, multiple-choice tests, five being core
tests and four subtests of English as a second language. The five core tests include Reading
Comprehension, Sentence Skills, Arithmetic, Elementary Algebra, and College-Level Math. The
four tests of English as a second language are designed to assess the English skills of students
whose first language is not English. These tests include Accuplacer ESL Reading Skills,
Accuplacer ESL Sentence Meaning, Accuplacer ESL Language Use, and Accuplacer ESL
Listening.

For the purposes of this study, I used the pencil-and-paper Accuplacer ESL Reading Skills
02VL10 (The College Board, 2002). The Accuplacer ESL Reading Skills measures the students’
comprehension of brief passages of 50 words or less and moderate length passages of 50 to 90
words in areas such as the arts, human relationships, physical science and history/social sciences.
The three main aims were, first, to trial the research instrument; second, to find preliminary
answers to the first pilot research question, which is “What are the levels of English academic reading proficiency of teacher trainees at the time they start their reading course?”; and finally, to find the relationship between teacher trainees’ performance in this literacy test and the SORS.

As to the kind of reading skills that the test taps into, half of the Accuplacer ESL Reading Skills test (2002, 02VL10) contains straightforward comprehension items (paraphrase, locating information, vocabulary on a phrase level, and pronoun reference). The other half assesses inference skills (main idea, fact versus opinion, cause/effect logic, identifying relevant information, author’s point of view, and applying the author’s logic to another situation).

The Accuplacer ESL Reading Skills test contains 35 question items. The raw score for this component of the test is equal to the number of questions answered correctly (i.e., minimum 0 and maximum 35). For instance, depending on how much a test taker scores, Table 3.1 can be used to convert some of the raw scores to an Accuplacer scale score, i.e. minimum 20 and maximum 120 (The College Board, 2007: 25-26).

<table>
<thead>
<tr>
<th>Result (i.e. Raw Score)</th>
<th>ESOL Reading Skills (i.e. Scale Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>20</td>
<td>68</td>
</tr>
<tr>
<td>25</td>
<td>87</td>
</tr>
<tr>
<td>30</td>
<td>104</td>
</tr>
<tr>
<td>35</td>
<td>120</td>
</tr>
</tbody>
</table>

Table 3.1: Conversion of some scores of the Accuplacer test (The College Board, 2007)

Furthermore, as can be seen in Table 3.2, the total right score can reflect different skills that a test-taker demonstrates, that is, total right score of about 57, about 82, and about 102 or higher.

<table>
<thead>
<tr>
<th>Total Right Score</th>
<th>Number of Test Takers</th>
<th>Students at this level can demonstrate the following reading skills</th>
</tr>
</thead>
</table>
| About 57          | 10                    | • locating information in a passage by answering literal comprehension questions on even the longest passages, if the question posed and the answer to that question are in the same sentence or in close proximity to each other  
|                   |                       | • answering questions in which the wording in the answer is very similar to the wording in the passage or uses minimal paraphrasing  
|                   |                       | • answering some questions requiring small inferences (including questions asking for the main idea of the passage) if the options do not require fine distinctions  
|                   |                       | • answering questions based on maps and charts  |
| About 82          | 13                    | • drawing conclusions on the basis of the information presented in the passage  
|                   |                       | • making inferences from the information presented  |
| About 102 or Higher | 5                    | • answering questions that require dealing with a passage as a whole or manipulating the information presented in the passage  
|                   |                       | • making generalizations on the basis of the information in the passage, recognize what was implied, and answer questions about the author’s tone and purpose  |

Table 3.2: Acuplacer test scores and corresponding reading skills (The College Board, 2007)
There are several reasons why I chose the Accuplacer Test. Firstly, the paper-and-pencil tests are (a) economical, (b) have standard questions and uniform procedures, (c) easy to score, (d) strong in technical qualities and standard scores, and (e) the Accuplacer is a standardised test so it reputedly has good reliability and validity. As far as economy is concerned, if we take into account that ISCED-Huíla does not have enough computers yet, and the quality of the internet is not good enough either, it was thought that the pencil-and-paper test would be a better option to the online one. In fact, McMillan and Schumacher (2001: 276) perceptively list the strengths and weaknesses of several data collection techniques, and it was found that for this particular study, the advantages outweigh the disadvantages.

3.5.2.2. The teacher trainee questionnaire

Questionnaires are advantageous because, like tests, they are also (a) economical, (b) can be anonymous, (c) have standard questions and uniform procedures, (d) easy to score, and (e) provide time for subjects to think about responses (cf. McMillan and Schumacher, 2001).

Regarding its structure, the piloted teacher trainee questionnaire required information on four areas: (A) background information of the teacher trainees, (B) reading skills development, (C) academic reading instruction, and (D) the Survey of Reading Strategies (SORs). In total, it consisted of 18 questions, distributed across 5 pages (Appendix D).

Initially, the teacher trainee questionnaire was aimed at finding answers to the second and fourth pilot research questions of this study, namely:

- What strategies do teacher trainees use when reading academic texts and solving their reading problems?
- What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important sources of information for designing and shaping their courses?

In the design of this research instrument attempts were made to follow Hutchinson and Waters’ (1987) framework. According to these authors (1987: 62-3), a needs analysis instrument should contain both a present/current situation analysis and a target situation analysis. The present situation analysis has to do with who the trainees are, what they know, and how they learn (Section A). This background section established the student profile for the study.

The target situation analysis refers to why they need reading skills, and what genre they need the most (Section B). This second section is made up of list and category questions, where respondents indicate or choose from several given options on the number of books they have in their homes, when and why they read, and how they classify themselves as readers. The
questions in these first two sections were mostly in closed form, in which the participants choose predetermined responses. The questions in the third section focused on rating several statements relating to the genre trainees read the most, the importance of reading each genre, the importance of several reading sub-skills, and the usefulness of several reading skills for a teacher trainee.

The choice of the closed format is due to the fact that we were seeking data that could be categorized easily (age, sex, length of learning English, number of books at home). Most of the questions under the academic reading instruction were scaled items. These types of items were used because I was attempting to assess the teacher trainees’ opinions or beliefs on how reading is or should be taught at ISCED-Huíla. For this specific study, and following Bell (2005), Dillman, Smyth and Christian (2009) and Dörnyei (2007), several types of gradations to express opinions are used, namely (i.e. Don’t know, ... Strongly agree; Not very much ... Very much; or Unimportant ... Very important).

For the fourth section I used the Survey of Reading Strategies (SORS), following Sheorey and Mokhtari (2001b). The SORS is an instrument intended to measure the perceived use of the type and frequency of strategies by post-secondary students while reading academic materials in English typically encountered in secondary school and college. This research study used one with 27 items, each of which use a four-point Likert-scale ranging from 1 (“I never do this””) to 4 “I always do this”). Teacher trainees were asked to read each statement and circle the number that applied to them, indicating the frequency with which they used the reading strategy implied in the statement. The higher the number the respondents indicate applies to them, the more frequent the use of the particular strategy is reflected. The survey measures three broad categories of reading strategies: metacognitive strategies, cognitive strategies, and support strategies.

As stated in §2.3.4, **metacognitive strategies** (9 items) are those intentional, carefully planned techniques by which learners monitor or manage their reading. Examples of metacognitive strategies include: having a purpose in mind, previewing the text as to its length and organization, or using typographical aids and tables and figures. **Cognitive strategies** (12 items) are the actions and procedures readers use while working directly with the text. These are localized, focused techniques used when problems develop in understanding textual information. Examples of cognitive strategies include adjusting one’s speed of reading when the material becomes difficult or easy, guessing the meaning of unknown words, and re-reading the text for improved comprehension. **Support strategies** (6 items) are basically support mechanisms
3.5.2.3. The teacher trainer questionnaire

The teacher trainer questionnaire (Appendix E) aimed at soliciting the teacher trainers’ perceptions of the students’ levels of reading proficiency at the time the students start the course, their needs, how their academic reading can best be improved, and how needs analysis can be conducted. More specifically, it aimed at answering RQ2 and 3, respectively:

- What strategies do teacher trainees use when reading academic texts and solving their reading problems?
- What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important sources of information for designing and shaping their courses?)

The teacher trainer questionnaire was an adaptation of the survey designed by the Academic Literacy Research Unit (UNISA, 2006). This adapted questionnaire required information on (a) background information, (b) the teacher as a reader, (c) training in English Language Teaching, (d) teaching experience, (e) the teaching of reading, and (f) conducting academic reading needs analysis. It contained 40 questions in total. Closed, scaled, ranked and checklist items were used, depending on the nature and purpose of each question.

3.5.3. Data collection procedures

Both the reading test and the trainee questionnaire were administered on 5th July 2007. First-year teacher trainees from the day and evening classes were invited to attend a meeting on that day to evaluate their first semester and possibly provide some suggestions to the English Sector for measures to be taken in the second term, and to participate in a study. Exactly 20 students out of 63 turned up. Before the meeting, the teacher trainees were requested to sit for a test and a questionnaire and were assured that both instruments did not have assessment purposes for their academic performance. In other words, they were reminded that their responses would not affect course grades and therefore should answer them honestly. Thus, before they took the Accuplacer test, the purpose of this instrument was explained. The guidelines were read to teacher trainees on how to complete it. They were then given 40 minutes, as recommended from the regulations.

After the test the aforementioned meeting took place, which was followed by the completion of the questionnaire. Apart from the purpose of the questionnaire, students were also informed about the steps involved in the completion of the questionnaire. They were asked to read all the
questions to identify possible problems of interpretation and structure. At the time, no problem arose in that regard.

They were advised to work at their own pace, but not take more than 1½ hours. They all completed it within this time frame. As they returned the completed papers, they were asked to comment on the questionnaire design, content, wordings, and layout.

Meanwhile, the trainer questionnaire was completed at the end of July in the respondents’ own time, and it was returned within a three-day period. Likewise, trainers were asked to comment on the questionnaire design, content, wording, and layout. These comments, together with suggestions from my supervisor were all taken into consideration when revising the instruments for the main study. All the questionnaires from the trainees and trainers were returned. The next section appertains the final changes that were effected.

3.5.4. Coding the research data

All data for the Accuplacer test and the questionnaires was captured on Statistical Package for Social Sciences (SPSS).

*Academic literacy test*

The purpose of the Accuplacer test was to determine the pilot teacher trainees’ reading level and on the basis of their performance in this test, make inferences about their strengths, lacks and needs. The test presented 35 questions to which the participants responded. Numerical coding and scoring was used, with a 0 score allocated to a wrong answer and 1 to a correct answer. In fact, according to the Accuplacer Administrator’s Manual (The College Board, 2007: 25-26), the obtained raw score is equal to the number of questions answered correctly. As advised by that document, the provided table was used to convert the raw score to the Accuplacer scale score (see for example in Table 3.2).

*Questionnaires*

With reference to the questionnaires, the purpose was to seek opinions on and perceptions of several factors relating to academic reading skills and to analyze the academic reading needs of teacher trainees as well as how the process of needs analysis could be conducted at ISCED-Huîla.

Numerical coding and scoring was also used for most responses, using a positive scale ranging from 1-4 scale, considering that “having a positive and negative scale with a zero midpoint
makes it difficult to interpret a zero response as a ‘don’t know’ or a midpoint” (Mackey and Gass, 2005: 54). However, for Question 20 from the teacher trainee questionnaire and Question 36 from the teacher trainer questionnaire a different coding was used since they are ranking questions. These questions represent a comparative decision and not simply an opinion. In order to arrive at these figures a mean rank by item was used. Therefore, as the question is phrased, (1 = very much and 8 = not at all ) the top choices are those that get a much lower mean score.

3.5.5. Statistical analysis of the research data
Descriptive statistics were used to analyze the data. In order to answer the three research questions, all scores from the Accuplacer test were entered into SPSS for statistical analyses, and a range of descriptive statistics was computed, in order to build up an overall picture of the participants’ background, needs and opinions.

The responses from the questionnaires were examined manually and quantified. For each subskill in ranking, 1 is less important and 4 the most important, so that the higher the mean the more important the reading strategy is. Regarding the results from the SORS, in examining reading strategy use among the teacher trainees, Oxford and Burry-Stock (1995: 12) identified three types of usage for general language learning, namely high medium, and low. While they used a scale of 1-5, the scale used in the trainee questionnaire was 1 to 4 so I had to make some mathematical equivalence. Therefore, in this study the ratings were high (mean of 2.8 or higher), medium (mean of 2-2.7), and low (mean of 1.9 or lower). No inferential statistics were employed in the pilot study.

3.5.6. Modifications of research instruments
During the pilot study, some problems in the teacher trainee and teacher trainer questionnaires were noticed. Therefore, I had to make some corrections regarding layout, spacing, formatting, content, wording and ethical aspects.

For example, the layout of the instruments needed to be improved because it was noticed that some questions tended to be cramped and on top of one another in both questionnaires. The formatting needed to be consistent throughout. The numbering in both questionnaires was also changed. Every section in the piloted instruments had a separate numbering sequence (e.g. from 1... 6) instead of a single number sequence running through all the sections. It was decided that the numbering in Section B should follow from the last question of Section A, i.e. if the last question in Section A was 5, the first in Section B should be 6, etc. In fact, this facilitated the task of coding and scoring of the results. In the main study the teacher trainee questionnaire was
completed at home instead of the classroom, so that students could have enough time to think about their responses.

In light of the observations as well as one of the teacher trainers’ suggestions regarding the SORS (i.e. the strategies component), another column was added on the left with the corresponding abbreviations of MET (for Metacognitive strategies), COG (for Cognitive strategies), and SUP (for Support strategies). In fact, this made the questionnaire clearer and more comprehensive. These modifications obviously changed the layout of the instruments, and also confirmed the idea by Seliger and Shohamy (1989: 173), that a pilot study “will significantly improve the quality of the data obtained.”

The contents of the teacher trainee questionnaire changed in same regards, in light of the need for triangulation of results as well as respect for the trainees’ opinion on how needs analysis can be conducted at ISCED-Huíla. The pilot version did not contain a question on the sources of data in needs analysis. This was subsequently included (Question F.36 of the teacher trainee questionnaire). It was also decided to add one more section on how needs analysis is conducted at ISCED-Huíla. Therefore, for the main study this instrument had 23 questions compared to the previous 17 questions. The teacher trainer questionnaire was also modified slightly, with the 40 questions reduced to 39.

As to wording, participants indicated their preferred responses to some questions by writing down their options below the given options. Their suggested options were then incorporated into the revised version where appropriate, e.g. the case of curriculum and syllabus designers, university board of directors, and parents and community as source of data analysis. The final revised copies of both questionnaires as used in the main study are given in Appendix D and Appendix E, respectively.

As to ethical aspects, and differently from what was done at the pilot stage where I requested permission orally and obtained it orally, in the final study, I obtained written consent from the General Director of ISCED-Huíla (see Appendixes G and H). In the main study the participants (trainees and trainers) were reminded that they were free not to participate.

3.5.7. The results of the pilot study

In this subsection, the results from the pilot study are presented and discussed, first with regard to the reading levels of the teacher trainees and then with regard to the types of reading strategies
that the teacher trainees claimed to use the most. Finally, the results of the procedures and sources of needs analysis that can be used at ISCED-Huíla are briefly identified.

3.5.7.1. Reading level of teacher trainees

The Cronbach alpha of the Accuplacer test for the pilot was \( \alpha = .87 \). The results obtained from the Accuplacer test by the participants in the pilot stage are shown in Table 3.3 on the following page. As mentioned in §3.5.2.1 in the pilot study, the minimum and maximum total scale scores of this test are 20 and 120, respectively.

<table>
<thead>
<tr>
<th>Accuplacer Scale Score</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>20</td>
<td>32</td>
<td>104</td>
<td>67.60</td>
<td>57</td>
<td>57</td>
<td>23.36</td>
</tr>
</tbody>
</table>

Table 3.3: Descriptive statistics from the Accuplacer test – Pilot study

As can be seen from Table 3.3, first, of the total number of test-takers (n=20), the minimum score was 32 and the maximum 104 out of 120, and mean was equal to 67.60.

Table 3.4 presents the conversion of the scores obtained in the Accuplacer test. Before moving to the analysis, it is important to point out that for most institutions using Accuplacer test scores, such as Anoka Technical College in the USA (Online document available at http://www.anokatech.edu/commoncontent/pdfs/inttestresultsrev110608.pdf) this is how the results are interpreted for placement purposes (the numbers correspond to the scale score):

a. 20 – 61 --- Reading skills development course: recommended to first attend Adult Basic Education.

b. 62 – 77 --- Reading skills development course.

c. 78 – 120 --- Reading at college level, no further reading comprehension course required. In other words, applicants or test-takers should only be admitted to college-level reading courses provided they score 78 or higher.

<table>
<thead>
<tr>
<th>ESL Reading Skills Score</th>
<th>Frequency</th>
<th>N/Level</th>
<th>%/Level</th>
<th>Reading level</th>
<th>Quartiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>47</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.4: Conversion of the scale scores obtained in the Accuplacer test (The College Board, 2007) (N=20)
It was found that, firstly, the majority of the pilot students had very poor reading skills. Judging from these results, only 35% of the pilot test-takers (i.e. those with a scale score of 78 (i.e. 65% or higher) were reading at university level, while 10% would need a reading skills development course. More than a half of the test-takers (i.e. 55%) would need to attend an Adult Basic Education course on reading, suggesting very low reading levels.

Furthermore, these results show that (a) the values were normally distributed and (b) more than a third of test takers (11 out of 20) were below the level of 55, which is the approved passing score for this component of the Accuplacer (The College Board, 2007: 7). Another important finding apparent from the above table, is the fact that although the mean is equal to 67.60, the median is only 57, which means that there is a log-normal distribution, i.e. it conforms to a bell curve. However, since the mean is larger than the median, the median is skewed to the right. It is apparent from these results that there is a tendency to underperform on this test. Furthermore, the SD of 23.36 indicates that there is a fairly wide spread of results (i.e. divergence in performance or not a fully homogeneous group in terms of reading skill).

Finally, it is important to point out that at least 8 test takers (40% of the total) could not finish the test in the allotted 40 minutes, and 4 of them (20%) could not even go beyond question 15 out of 35. This suggests that they were reading very slowly and effortfully, and had not yet developed the fluency and automaticity that comes with skilled and extensive reading, such as is required at tertiary level. It was this outcome that prompted me to extend the test time in the main study.

3.5.7.2. The reading strategies used by teacher trainees

For the purpose of the pilot study, this subsection only presents the results obtained from the teacher trainee questionnaire section on SORS, which is about the reading strategies used by teacher trainees. The Cronbach alpha index for this specific part was satisfactory (α = .73). Table 3.5 on the following page presents the reading strategies claimed to be used by the respondents while reading academic reading materials in terms of metacognitive strategies (MET), cognitive strategies (COG) and support strategies (SUP).

As can be seen from the data in Table 3.5, the means of the individual items range from a high 3.5 to a low 1.95. In all, 15 of the 27 strategies (55.6%) fell in the high usage group (mean of 2.8 or above), 11 strategies (40.7%) fell in the medium usage group (mean between 2 and 2.7). Only one strategy (3.7%) was reported to be used with low frequency (mean value below 1.9). The two lowest strategies that pilot teacher trainees reported using the least are MET7 (using typographical aids) and COG2 (reading aloud when text becomes hard). With reference to the
subscases, item means for MET range from 3.2 to 1.35. The range for COG is between 3.5 to 1.95, while for SUP the range is between 3.3 and 2.7.

On the three SORS subscales, the averages for these categories revealed a moderate to high strategy usage. The results clearly show a preference for SUP, followed by COG and MET skills. From the questionnaire results alone it would seem that the trainees are fairly strategic readers whom one would expect to perform quite well on an academic reading test. However, one can clearly notice that there is a discrepancy between what the participants claim they use and their actual performance in the academic reading test.

<table>
<thead>
<tr>
<th>Name</th>
<th>Strategy</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET1</td>
<td>Setting purpose for reading</td>
<td>3.2</td>
<td>0.52</td>
</tr>
<tr>
<td>MET2</td>
<td>Previewing text before reading</td>
<td>2.9</td>
<td>1.07</td>
</tr>
<tr>
<td>MET3</td>
<td>Noting text characteristics</td>
<td>2.5</td>
<td>0.86</td>
</tr>
<tr>
<td>MET4</td>
<td>Determining what to read</td>
<td>3.1</td>
<td>1.07</td>
</tr>
<tr>
<td>MET5</td>
<td>Using text features (e.g. tables)</td>
<td>2.22</td>
<td>0.73</td>
</tr>
<tr>
<td>MET6</td>
<td>Using context clues (e.g. synonyms)</td>
<td>2.5</td>
<td>0.95</td>
</tr>
<tr>
<td>MET7</td>
<td>Using typographical aids (e.g. italics)</td>
<td><strong>1.35</strong></td>
<td><strong>0.79</strong></td>
</tr>
<tr>
<td>MET8</td>
<td>Predicting or guessing text meaning</td>
<td>2.37</td>
<td>0.83</td>
</tr>
<tr>
<td>MET9</td>
<td>Confirming predictions</td>
<td>2.44</td>
<td>0.78</td>
</tr>
<tr>
<td>COG1</td>
<td>Using prior knowledge</td>
<td>3.13</td>
<td>0.96</td>
</tr>
<tr>
<td>COG2</td>
<td>Reading aloud when text becomes hard</td>
<td><strong>1.95</strong></td>
<td><strong>1.23</strong></td>
</tr>
<tr>
<td>COG3</td>
<td>Reading slowly and carefully</td>
<td><strong>3.5</strong></td>
<td><strong>0.76</strong></td>
</tr>
<tr>
<td>COG4</td>
<td>Trying to stay focused on reading</td>
<td>3.3</td>
<td>0.94</td>
</tr>
<tr>
<td>COG5</td>
<td>Adjusting reading rate</td>
<td>3.16</td>
<td>0.76</td>
</tr>
<tr>
<td>COG6</td>
<td>Paying close attention to reading</td>
<td>3.3</td>
<td>0.86</td>
</tr>
<tr>
<td>COG7</td>
<td>Pausing and thinking about reading</td>
<td>3.16</td>
<td>0.76</td>
</tr>
<tr>
<td>COG8</td>
<td>Visualizing information reading</td>
<td>3.1</td>
<td>0.94</td>
</tr>
<tr>
<td>COG9</td>
<td>Evaluating what is read</td>
<td>3.3</td>
<td>0.73</td>
</tr>
<tr>
<td>COG10</td>
<td>Resolving conflicting information</td>
<td>3.3</td>
<td>0.73</td>
</tr>
<tr>
<td>COG11</td>
<td>Re-reading for better understanding</td>
<td><strong>3.5</strong></td>
<td><strong>0.61</strong></td>
</tr>
<tr>
<td>COG12</td>
<td>Guessing meaning of unknown words</td>
<td>3</td>
<td>0.84</td>
</tr>
<tr>
<td>SUP1</td>
<td>Taking notes while reading</td>
<td>3.1</td>
<td>0.64</td>
</tr>
<tr>
<td>SUP2</td>
<td>Underlining information in text</td>
<td><strong>3.3</strong></td>
<td><strong>0.57</strong></td>
</tr>
<tr>
<td>SUP3</td>
<td>Using reference materials</td>
<td>2.9</td>
<td>0.91</td>
</tr>
<tr>
<td>SUP4</td>
<td>Paraphrasing for better understanding</td>
<td>2.85</td>
<td>0.49</td>
</tr>
<tr>
<td>SUP5</td>
<td>Going back and forth in text</td>
<td>2.75</td>
<td>0.79</td>
</tr>
<tr>
<td>SUP6</td>
<td>Asking oneself questions</td>
<td>2.7</td>
<td>0.92</td>
</tr>
<tr>
<td>MRS</td>
<td>Metacognitive Reading Skills</td>
<td>2.51</td>
<td>0.83</td>
</tr>
<tr>
<td>CRS</td>
<td>Cognitive Reading Skills</td>
<td>2.82</td>
<td>0.89</td>
</tr>
<tr>
<td>SRS</td>
<td>Support Reading Skills</td>
<td>2.93</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Table 3.5: Reported use of reading strategies per category

We now turn to Table 3.6 which shows the five most preferred and the five least preferred reading strategies of respondents. These strategies are arranged in descending order by their means (that is the most favoured or most often used to least favoured or least used strategy), as reported by the teacher trainees who participated in this study.
It is apparent from this table that the top three most often used are cognitive strategies. This is an interesting finding because, conversely, support strategies in general were more widely used. Also interesting is the fact that the use of cognitive and metacognitive is what distinguishes highly skilled and strategic readers, yet support scored the highest. In fact, there is one support strategy in the most used but none in the least used, where one finds three metacognitive strategies and two cognitive skills. But as said above, only one of these are within the low mean of 1.9, the metacognitive strategy, using typographical aids (e.g. italics, bold, ...). Obviously some caution is needed in interpreting these results, given the discrepancy between the strategies the students claim to use and their actual performance on the academic literacy test.

### 3.5.7.3. Determining the academic reading needs of teacher trainees

Table 3.7 shows the results to answer the third research question in the pilot study: What kinds of needs analysis procedures do ISCED teacher trainers of English perceive to be important sources of information for designing and shaping their courses?

<table>
<thead>
<tr>
<th>Who</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher trainees themselves</td>
<td>1.6</td>
</tr>
<tr>
<td>Curriculum and syllabus designers</td>
<td>2.4</td>
</tr>
<tr>
<td>People working or studying in the field</td>
<td>3.6</td>
</tr>
<tr>
<td>Documents relevant to the field</td>
<td>5.4</td>
</tr>
<tr>
<td>EAP research in the field</td>
<td>5.8</td>
</tr>
<tr>
<td>The university board of directors</td>
<td>6.2</td>
</tr>
<tr>
<td>Prospective pupils</td>
<td>6.6</td>
</tr>
<tr>
<td>Ex-students</td>
<td>7.2</td>
</tr>
<tr>
<td>Parents and community</td>
<td>9</td>
</tr>
<tr>
<td>Employers</td>
<td>9</td>
</tr>
</tbody>
</table>

**Table 3.7: Reported sources of information for academic reading needs analysis**

As can be seen from Table 3.7, the results revealed that teacher trainees (with 1.6) were considered to be the main source of academic reading needs analysis, followed by curriculum and syllabus designers (with 2.4). Parents and potential employers were considered by teacher trainers as the bottom sources (both with the means of 9).
As to when, it was found that 60% of teacher trainers favoured needs analysis at the beginning of the academic year. As to how, i.e., what procedures should be used to assess the academic reading language needs of teacher trainees only assessments came up.

3.5.8. Discussion of the results on needs analysis

In this section the relevant results from the pilot study are briefly discussed in the following order: the reading levels, the reading strategies used by the teacher trainees, and the results from the questions on needs analysis.

The results from the academic literacy tests showed that the majority of the teacher trainees had very weak reading skills. This can either be a reliable reflection of their ability or one could infer that the test was inappropriate or unrealistic. However, given the reliability index of α.=87, an acknowledgement the test is a valid assessment of academic literacy, I decided to continue with the test in the main study.

In fact, these findings are consistent with researchers who found that many first-year university students in other ESL contexts (e.g. Hong Kong and South Africa) tend to read at frustration level (Mason and Krashen, 1997; Pretorius, 2005) and that many applicants arriving at university are not sufficiently equipped to cope with the demands of tertiary level study (Pretorius, 2002).

The results from the SORS revealed three main findings. First, the participants reported high or moderate usage concerning the subscales of the instrument as well as overall use. In fact, of the 27 strategies, only one falls in the low usage category: using typographical aids. The surveyed teacher trainees reported using more support reading skills, (2.93), followed by cognitive reading skills, (2.82), and metacognitive reading skills (2.51). However, it must be borne in mind that this is what the teacher trainees claim to do. If they were such strategic readers as these questionnaire results suggest, then they should not have performed so badly in the reading test. We will deal with this discrepancy in Chapter 4.

Second, the teacher trainees claimed to have a high degree of awareness while reading English for study purposes, and they claimed to resort to different means to achieve their respective purpose of reading (comprehension, evaluation and interpretation). As Alexander and Jetton (2000) point out, awareness – and use – of reading strategies is a characteristic of superior reading comprehension. For Kletzien (1991), poor readers are generally weak in reading skills and using strategies. However, their responses may also mean that these participants are aware of
what they should do because they have been told this many times. But being aware of something is not the same as actually doing it.

Finally, one would need to compare these results with those from the Accuplacer test and from the question on what they reported as being their reading difficulties. As was mentioned previously when reporting the results in §3.5.6, it was found that most of these trainees (65%) tend to read at frustration level. We also saw from the results of the test that 40% of the respondents did not even finish the test.

With regard to the responses related to NA, the most interesting finding was that most of the trainers consider that teacher trainees as the main source of academic reading needs analysis. There are several possible explanations for this result.

First, on the one hand, it may show that for these teacher trainers, needs analysis should be a prerequisite for any course/program or syllabus design to achieve effective instructional outcomes. Second, if we consider the three groups of data sources (i.e. people, documents and special studies) we can see that the participants reported that the top three data sources are people. Third, for these participants, the teacher trainee should be at the centre of the teaching and learning process, in line with arguments by, for example, Freire (1970), Freire and Faundez (1989), and Weimer (2002). As Kilic (2010: 79) puts it, “not putting learners in the center of education means viewing knowledge and learners as immutable entities. However, both knowledge and learners are changeable.” Shawer, Gilmore and Banks-Joseph (2009: 125) state that several specialists have “maintained that teachers approach curriculum in different ways: as curriculum-transmitters, curriculum-developers, or curriculum-makers.”

Finally, we can see that the participants reported that they mainly use assessment as the main tools of needs analysis. But as we saw in the literature review, for needs analysis to be effective, needs analysts should triangulate their data collection by using different tools and activities which should be appropriate for the particular teacher trainees or groups of teacher trainees. As we saw in §2.2.9, among these procedures we can highlight survey questionnaires, learner interviews, review of reading materials, class discussions, dialogue journals, etc.

To sum up, from this section on the discussion of results one can conclude that the pilot study was very useful because the research instruments were found to be satisfactory and the preliminary results of the pilot study gave a glimpse into the reading levels of our teacher trainees at ISCED-Huíla in preparation for the main study. Generally speaking, the pilot test-
takers were average (30%) and below average (65%) readers. Most of these were reading at “frustration level.” Only 5% were reading at “independent level”. From the teacher trainee questionnaire, it was found that the participants reported high or moderate usage concerning the subscales of the instrument as well as overall use of reading strategies. As a subscale, support reading strategies seemed to be the most used. Even so, it was also seen that the three most favoured strategies appeared cognitive strategies.

The findings from the teacher trainer questionnaire showed that there is enough awareness of the benefits of a more learner- (or teacher-trainee-) centred approach in needs analysis. The only query is that the respondents seem to need much more methodological input on how this process can be conducted. In general, I was satisfied with my test instruments and the procedures, with due changes discussed in §3.5.4. In the following section we turn our attention to how the main study was implemented.

3.6. THE MAIN STUDY

The main study took place at ISCED-Huíla in October 2010. At this time we were in the penultimate month of the academic year, which had started in March 2010. The investigation was conducted at the end of their first year, just before they start their course on Técnicas de Leitura (Appendix B) in their second year.

3.6.1. Participants

The participants of the main study were similar to those in the pilot study. They were first-year teacher trainees and teacher trainers at ISCED-Huíla.

There were 45 first-year teacher trainees, 33 male (72.1%) and 12 female (27.9%) out of the total population of 86 students. Twenty-five of these students were from the day class and twenty from the evening class. They were selected using convenience sampling (as described in §3.3). Their age ranged from 20 to 53. The mean age was 27 and 75% of these participants were between 20 and 29 years. Their English learning experience ranged from 4 to 33 years, with a mean of 18.5. Their motivation did not differ much from the cohort in the pilot study. In other words, the students at our institution are generally very motivated and enthusiastic to learn due to the current importance that English plays in the Angolan and world contexts. As to the questionnaires, the 45 teacher trainees who participated in the Accuplacer test completed the corresponding instrument.
Socio-economically, most of the enrolled students come from low-income families. In fact, most high-income students in Angola with high secondary school qualifications tend to seek other fields (like medicine, law, and engineering) rather than education.

The trainer questionnaire was completed by the same 5 teacher trainers who had answered the piloted questionnaire, from the population of 8. They are all my colleagues from the English Department and are Angolan Portuguese-speaking practitioners. Three of them were female. At the time of the main study, they were aged between 30 and 51. They all graduated from ISCED in Teaching English as a Foreign Language (TEFL), and with their teaching experience ranging between 7 and 23 years.

3.6.2. Research materials
After the piloting of the research instruments, the researcher decided to maintain the same three instruments, with the main purpose of triangulating the data using the Accuplacer test (Appendix C), the teacher trainee questionnaire (Appendix D), and the teacher trainer questionnaire (Appendix E). As explained in §3.5.4, the latter two instruments were slightly modified following their trial in the pilot study. These changes were related to layout and spacing, one more section with six questions added for triangulation purposes.

Details on the contents and structure of the Accuplacer test have already been discussed in §3.5.2.1. Regarding its administration, only one change was made, namely the time allotment. It was decided that due to the test-takers’ low reading speed from the pilot study, the time should be extended from 40 to 50 minutes.

Regarding its structure, the teacher trainee questionnaire required information in five categories: (a) background information of these teacher trainees, (b) development of reading skills in general, (c) academic reading instruction, (d) the Survey of Reading Strategies (SORS), and (e) the process of reading needs analysis. The teacher trainee questionnaire consisted of 23 questions, distributed through the five categories.

3.6.3. Data collection procedures
Similar to the procedures for the pilot study, the guidelines for the Accuplacer test were read to teacher trainees. The instructions mainly consisted of informing the participants on how to complete it, and how long it would take. This was during one of their class times. In other words, except for the added 10 minutes for the completion of the test, the rest of the detailed processes of administering it was adhered to as closely as possible as described by the original authors.
With reference to the student questionnaire, respondents were acquainted with the nature and purpose of the study, so that they could present answers that are as fully elaborated as possible. The teacher trainees were given 48 hours to complete the questionnaire at home. At the time of the distribution, the participants were informed of the steps involved in the completion of the questionnaire. Secondly, they were advised to work at their own pace, but return it in three days. Finally, students were informed that their responses would not affect course grades and therefore should answer honestly. Regarding the trainer questionnaire, the instrument was completed in the respondents’ own time, but they were asked to return it within a three-day period.

The teacher trainees and teacher trainers who participated in the pilot study and in the main study were apprised of the aims and procedures of the study and no-one responded or sat for the test against his or her will. Put other way, and as seen in §3.4.1 and §3.4.2, ethical issues were considered during the collection and analysis of data and for the dissemination of the findings.

3.6.4. Data scoring, analysis and statistical techniques
The numerical coding and scoring was also used for most the responses, using a positive scale (e.g., 1-4), as advised by Mackey and Gass (2005: 54). The data collected were computed and analyzed using SPSS. Each teacher trainees’ score on the questionnaire was matched to his or her Accuplacer test result. Cronbach’s alpha was used to measure the internal consistency of the questionnaires. Descriptive statistics and inferential statistics were used to analyze the data. All scores from the three research instruments were entered into SPSS for statistical analyses. For inferential statistics, Spearman’s rho correlation, ANOVAs and Chi-square tests were used.

3.7. CONCLUSION
The aim of this chapter was to report on the research methodology used in carrying out this study and to situate the study within the larger research landscape. It first outlined the main aspects related to research methodology, then discussed matters related to the reliability and validity of the research data. It looked at the sampling techniques that have been used, followed by the ethical issues that have been considered for this study. It finally focused on the two phases of the study, i.e. the piloting stage and the main study. The main conclusion is that the piloted research instruments may be considered as valid and reliable for this research. We now turn to Chapter 4 which presents and discusses the results from the main study.
CHAPTER 4:
RESEARCH FINDINGS AND DISCUSSION OF THE MAIN STUDY

4.0. INTRODUCTION
The aim of this chapter is to present and discuss the data collected and analysed during the empirical main study. The chapter is divided into three main sections. In the first section, the research aims and research questions are restated. The second section presents the results obtained from the five research questions of this study while the third section highlights and discusses the main findings of the study.

4.1. AN OVERVIEW OF THE CURRENT RESEARCH
The purpose of this dissertation is to implement a needs analysis and on the basis of the findings come up with a framework consisting of practical stages and processes, for determining the academic reading needs of teacher trainees who study in an EAP context, based on what was learned from the literature review and pertinent to the given context and based too on the research findings in this study. The rationale originates from an aspiration to update and improve on a small scale an existing ESAP reading programme for which I am responsible.

4.1.1. Research questions
In order to contribute to a better understanding of the academic reading needs of these teacher trainees at ISCED-Huíla, the following five research questions were posed in order to address the research aims (seen in §3.1.3):

6. What are the levels of English academic reading proficiency of teacher trainees before they start their reading course?

7. What reading strategies do teacher trainees claim to use when reading an academic text?

8. What is the relationship between teacher trainees’ academic reading proficiency and their strategy use?

9. What, according to the teacher trainees and teacher trainers, are the perceived reading problems, needs, practices, genres, and skills required in the teacher trainees’ academic, professional, and social lives?

10. What kinds of needs analysis procedures do teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important for designing and shaping their courses (i.e. who or what should be included)?

As stated previously (§3.5.2), the research tools used to address the above research questions were the Accuplacer test (RQ1) and the questionnaires (RQ2-5).
4.2. RESULTS OF THE RESEARCH QUESTIONS

The results will be presented following the order of the above five research questions.

4.2.1. Research question one

The first research question was *What are the levels of English academic reading proficiency of teacher trainees at the time they start their reading course?* As reported in §3.2.1.2, the reliability coefficient of the Accuplacer test on Reading Comprehension is \( \alpha = .87 \). Using the Crobanch alpha index, a reliability coefficient of \( \alpha = .86 \) was obtained with this group of 45 teacher trainees, which is considered as high.

Table 4.1 below shows the overall descriptive statistics in terms of scale scores from the Accuplacer test (ranging from 24 to 113), as well as differential performance at three percentile levels (*cf.* Appendix I for full results). As can be seen from the measures of central tendency in Table 4.1 most of the teacher trainees who took the test were quite young (*Mode* = 23).

<table>
<thead>
<tr>
<th></th>
<th>( N )</th>
<th>Min.</th>
<th>Max.</th>
<th>( M )</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Test Takers</td>
<td>45</td>
<td>20</td>
<td>53</td>
<td>28</td>
<td>25</td>
<td>23</td>
<td>--</td>
</tr>
<tr>
<td>Accuplacer Test Result</td>
<td>45</td>
<td>24</td>
<td>113*</td>
<td>68</td>
<td>57</td>
<td>47</td>
<td>25.22</td>
</tr>
<tr>
<td>25\textsuperscript{th} percentile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>47</td>
</tr>
<tr>
<td>50\textsuperscript{th} percentile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>75\textsuperscript{th} percentile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>98</td>
</tr>
</tbody>
</table>

*Table 4.1: Descriptive statistics from the Accuplacer test – Main study*

*Total raw score for the test was 120*

According to the Accuplacer scoring guidelines, scale scores on or above 78 indicate that testees are reading at university level. The figures in Table 4.1 above show that the teacher trainees’ performance in the test was mostly below accepted standards, with the results clustering around 57. The range in the test results is quite spread, going from 24 to 113. The results show that there is less variation in performance between the 25\textsuperscript{th} and 50\textsuperscript{th} means as there is between the 50\textsuperscript{th} and 75\textsuperscript{th} means. It is also apparent from the standard deviation that the score variation is rather large (\( SD = 25.22 \)); the larger the SD, the greater variation there is in performance (i.e. the group does not behave homogeneously, since most cluster towards the lower end). This is seen more clearly in Table 4.2, which clearly shows that a normal bell curve does not obtain.

In the Accuplacer Coordinator’s Guide (The College Board, 1993: 16-17) three reading levels are identified, viz. Basic reading Skills, Reading Skills Development, and Reading at university level. Table 4.2 illustrates the Accuplacer test results and the number of test takers according to
these levels. The pass mark for an Accuplacer Test on Reading Comprehension is 55. Although the mean in Table 4.1 shows 68, the results from the descriptive statistics show that, of the total number of test-takers (n=45), 24 (53.3%) had a raw score of or below 57.

<table>
<thead>
<tr>
<th>Result</th>
<th>Reading level</th>
<th>Nº of test takers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 61</td>
<td>Level 1: Basic reading skills</td>
<td>24</td>
<td>53.34%</td>
</tr>
<tr>
<td>62 – 77</td>
<td>Level 2: Reading skills development</td>
<td>6</td>
<td>13.33%</td>
</tr>
<tr>
<td>78 – 120</td>
<td>Level 3: Reading at university level</td>
<td>15</td>
<td>33.33%</td>
</tr>
</tbody>
</table>

**Table 4.2: Accuplacer test result, reading level and number of test-takers**

As can be seen from the table above, over a half of the participants (53%) had a score between 0 and 61, which corresponds to reading Level 1, meaning low academic reading proficiency. This suggests that teacher trainees with this result may struggle to cope with university reading demands. Conversely, only 15 students (33%) obtained scores of reading Level 3. In other words, 30 of the 45 students (67%) did not have the requisite reading skills for university and would greatly benefit from a university reading course.

The results in Table 4.2 also seem to suggest a bi-modal outcome, i.e. instead of a normal bell curve with a large ‘average’ group in the middle, there are two “peaks”. For the majority of students, the first peak is at the lower end, then there is a small group of students who peak at the upper end.

Analysing the performance of every test-taker, one-by-one, and their corresponding answers to every question, following the criteria proposed in the Accuplacer Coordinator’s Guide (The College Board, 2007), these data from Table 4.2 coupled with that of Table 3.2, in §3.5.2.1 tend to show that most of these trainees can perform the following functions:

- locate information in a passage by answering literal comprehension questions on even the longest passages, if the question posed and the answer to that question are in the same sentence or in close proximity to each other;
- answer questions in which the wording in the answer is very similar to the wording in the passage or uses minimal paraphrasing;
- answer questions requiring small inferences (including questions asking for the main idea of the passage) if the options do not require fine distinctions; and
- answer questions based on maps and charts.

On the other hand, however, the results show that the vast majority of these teacher trainees have difficulty answering higher-order questions that require:

- drawing conclusions on the basis of the information presented in the passage;
- making inferences from the information presented;
• recognizing the main idea of a passage;
• answering questions that require dealing with a passage as a whole or manipulating the information presented in the passage, and
• making generalizations on the basis of the information in the passage, recognizing what was implied, and answering questions about the author’s tone and purpose.

Finally, despite the fact that reading speed was not measured in this study, I think it is relevant to point out that almost a third of the total number of respondents, i.e. about 33%, did not finish the Accuplacer test within the allotted time of 40 minutes. This suggests that these students read slowly and that the lower-level decoding skills may not yet be fully automatised or that they are not familiar with the language level of the texts.

4.2.2. Research question two

The second research question was **What reading strategies do teacher trainees claim to use when reading an academic text?** The Cronbach coefficients for the teacher trainee questionnaire yielded the following results: Part A: α=.77, Part B: α=.76, Part C: α=.79. And as seen in §3.2.1.2, the reliability index for the entire teacher trainee questionnaire, using the Cronbach alpha index is α=.81. For the specific component on the Sheorey and Mokhtari’s (2001b) Survey Of Reading Strategies (SORS), the Cronbach alpha index is α=.73. All these indices are considered satisfactory.

Table 4.3 (on the following page) presents the overall results obtained from the SORS component of the Teacher Trainee Questionnaire, in terms of individual strategies, as well as types of strategy, i.e. metacognitive strategies (MET), support strategies (SUP) and cognitive strategies (COG). Raw scores are given, ranging from 1 to 4, according to reported usage.

From the data in Table 4.3 above we can see that, on a scale of 1 to 4, the means of the individual items range from a high 3.76 to a low 2.64. With reference to the subscales, item means for metacognitive strategies (MET) range from 3.27 to 2.64. The range for support strategies (SUP) is between 3.40 to 2.69, while for cognitive skills (COG) the means are between 3.76 to 2.87. In all, 24 of the 27 strategies (89%) fell in the **high usage** group (mean of 2.8 or above) and 3 strategies (11%) fell in the **medium usage** group (mean between 2 and 2.7). One of the most striking observations to emerge from the data is that no strategy was reported to be used with low frequency (mean value below 1.9).
Table 4.3: Reported use of reading strategies (N=45)

Table 4.4 on the following page shows the five top (bold italics) and bottom five (bold) of individual reading strategy preferences of respondents arranged in descending order (that is, the most favoured or most often used to least favoured or least used strategy), as reported by the teacher trainees who participated in this study.

Interestingly, it is apparent from Table 4.4 that the five most often used strategies are cognitive strategies. Amongst the five least used strategies, there is one cognitive strategy, three metacognitive strategies and one support strategy. But as said above, none of these are within the low frequency mean of 1.9.
Table 4.4: Reported reading strategies used most and least often by teacher trainees (N=45)

<table>
<thead>
<tr>
<th>Name</th>
<th>Strategy</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>COG6</td>
<td>Paying close attention to reading</td>
<td>45</td>
<td>3.76</td>
<td>.43</td>
</tr>
<tr>
<td>COG12</td>
<td>Guessing meaning of unknown words</td>
<td>45</td>
<td>3.73</td>
<td>.45</td>
</tr>
<tr>
<td>COG3</td>
<td>Reading slowly and carefully</td>
<td>45</td>
<td>3.62</td>
<td>.56</td>
</tr>
<tr>
<td>COG11</td>
<td>Re-reading for better understanding</td>
<td>45</td>
<td>3.58</td>
<td>.69</td>
</tr>
<tr>
<td>SUP5</td>
<td>Going back and forth in text</td>
<td>45</td>
<td>3.40</td>
<td>.69</td>
</tr>
<tr>
<td>SUP6</td>
<td>Asking oneself questions</td>
<td>45</td>
<td>3.29</td>
<td>.79</td>
</tr>
<tr>
<td>COG7</td>
<td>Pausing and thinking about reading</td>
<td>45</td>
<td>3.29</td>
<td>.89</td>
</tr>
<tr>
<td>SUP4</td>
<td>Paraphrasing for better understanding</td>
<td>45</td>
<td>3.27</td>
<td>.78</td>
</tr>
<tr>
<td>SUP1</td>
<td>Taking notes while reading</td>
<td>45</td>
<td>3.27</td>
<td>.69</td>
</tr>
<tr>
<td>MET1</td>
<td>Setting purpose for reading</td>
<td>45</td>
<td>3.27</td>
<td>.75</td>
</tr>
<tr>
<td>COG4</td>
<td>Trying to stay focused on reading</td>
<td>45</td>
<td>3.22</td>
<td>.93</td>
</tr>
<tr>
<td>MET6</td>
<td>Using context clues (e.g. synonyms)</td>
<td>45</td>
<td>3.20</td>
<td>.76</td>
</tr>
<tr>
<td>SUP2</td>
<td>Underlining information in text</td>
<td>45</td>
<td>3.18</td>
<td>.86</td>
</tr>
<tr>
<td>MET8</td>
<td>Predicting or guessing text meaning</td>
<td>45</td>
<td>3.18</td>
<td>.96</td>
</tr>
<tr>
<td>MET4</td>
<td>Determining what to read</td>
<td>45</td>
<td>3.16</td>
<td>.82</td>
</tr>
<tr>
<td>COG8</td>
<td>Visualizing information reading</td>
<td>45</td>
<td>3.13</td>
<td>.66</td>
</tr>
<tr>
<td>COG9</td>
<td>Evaluating what is read</td>
<td>45</td>
<td>3.11</td>
<td>.98</td>
</tr>
<tr>
<td>COG5</td>
<td>Adjusting reading rate</td>
<td>45</td>
<td>3.07</td>
<td>1.07</td>
</tr>
<tr>
<td>COG1</td>
<td>Using prior knowledge</td>
<td>45</td>
<td>3.00</td>
<td>.93</td>
</tr>
<tr>
<td>MET9</td>
<td>Confirming predictions</td>
<td>45</td>
<td>2.93</td>
<td>.98</td>
</tr>
<tr>
<td>MET3</td>
<td>Noting text characteristics</td>
<td>45</td>
<td>2.89</td>
<td>.96</td>
</tr>
<tr>
<td>COG10</td>
<td>Resolving conflicting information</td>
<td>45</td>
<td>2.89</td>
<td>1.19</td>
</tr>
<tr>
<td>MET2</td>
<td>Previewing text before reading</td>
<td>45</td>
<td>2.87</td>
<td>.81</td>
</tr>
<tr>
<td>COG2</td>
<td>Reading aloud when text becomes hard</td>
<td>45</td>
<td>2.87</td>
<td>1.18</td>
</tr>
<tr>
<td>SUP3</td>
<td>Using reference materials</td>
<td>45</td>
<td>2.69</td>
<td>.92</td>
</tr>
<tr>
<td>MET5</td>
<td>Using text features (e.g. tables)</td>
<td>45</td>
<td>2.69</td>
<td>.85</td>
</tr>
<tr>
<td>MET7</td>
<td>Using typographical aids (e.g. italics)</td>
<td>45</td>
<td>2.64</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 4.5 compares the means for the three subscales and the overall mean.

<table>
<thead>
<tr>
<th>Name</th>
<th>Strategy</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>COG</td>
<td>Cognitive strategies</td>
<td>45</td>
<td>2.17</td>
<td>3.75</td>
<td>3.27</td>
<td>.46</td>
</tr>
<tr>
<td>SUP</td>
<td>Support strategies</td>
<td>45</td>
<td>2.50</td>
<td>3.83</td>
<td>3.18</td>
<td>.34</td>
</tr>
<tr>
<td>MET</td>
<td>Metacognitive strategies</td>
<td>45</td>
<td>2.11</td>
<td>3.67</td>
<td>2.99</td>
<td>.39</td>
</tr>
<tr>
<td>ORS</td>
<td>Overall Reading Strategies</td>
<td>45</td>
<td>2.30</td>
<td>3.70</td>
<td>3.15</td>
<td>.29</td>
</tr>
</tbody>
</table>

Table 4.5: Reported use of types of strategy and overall use

The table above shows that all the means are in the high frequency range (from 2.99 to 3.27). Chi-square tests showed no significant differences between these strategies (cognitive vs. support $\chi^2 = 123.5$ (df 112) $p=0.215$; cognitive vs. metacognitive $\chi^2 = 172.4$ (df 182) $p=0.683$; support vs metacognitive $\chi^2 = 127.8$ (df 104) $p=0.056$).

The results obtained on the frequencies of high, moderate and low use of strategy types and overall use across the sample are presented in Table 4.6 on the following page.
It is apparent from this table that the majority of the participants prefer cognitive strategies (87%), followed by supportive strategies (82%) and metacognitive strategies (67%), where we see the largest percentage of moderate use (33%).

<table>
<thead>
<tr>
<th>Use</th>
<th>MET</th>
<th>SUP</th>
<th>COG</th>
<th>ORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>30</td>
<td>37</td>
<td>39</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>66.67</td>
<td>82.22</td>
<td>86.67</td>
<td>91.11</td>
</tr>
<tr>
<td>Moderate</td>
<td>15</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>33.33</td>
<td>17.78</td>
<td>13.33</td>
<td>8.89</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>N total</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 4.6: Frequencies of reported strategy use

4.2.3. Research question three

The third research question was *What is the relationship between academic reading proficiency and strategy use?* A Spearman’s Rank Order correlation was used to determine the relationship between the 45 teacher trainees’ self-rating of three different reading strategies (i.e. metacognitive, support and cognitive strategies, as well as their total strategy score) and their corresponding results from the Accuplacer test on reading comprehension. The outcomes are shown in Table 4.7 below.

<table>
<thead>
<tr>
<th>Spearman’s Rho</th>
<th>Metacognitive</th>
<th>Support</th>
<th>Cognitive</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuplacer</td>
<td>.025</td>
<td>.238</td>
<td>.608**</td>
<td>.372*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.871</td>
<td>.115</td>
<td>.000</td>
<td>.012</td>
</tr>
</tbody>
</table>

Table 4.7: Relationship between reading strategies and Accuplacer test results (N=45)

Table 4.7 shows that no significant correlations were obtained between the teacher trainees’ Metacognitive and Support strategies and their performance on the academic literacy test. However, there was a highly significant and positive correlation between performance on the academic literacy tests and use of Cognitive strategies. Thus, higher use of cognitive reading strategies was associated with higher scores in the Accuplacer test. However, the overall use of reading strategies showed a moderate correlation with academic reading at, $r=.372$, $p=.012$.

Table 4.8, on the following page, reflects the reported reading strategy use according to the three reading levels. Contrary to expectation – and paradoxically – the students with the weaker reading skills claimed greater strategy use. From the data in Table 4.8 one can see that, while every teacher trainee fell in the moderate and high strategy use category in all respects, 56% ($N=25$, *Overall SD=.48*) performed rather poorly on the Accuplacer reading test and only (15) 33%, could read at university level.
A one-way ANOVA were used to see whether there are significant differences between the three reading groups (as the organising factor or independent variable) in terms of their use of reading strategies (as the dependent variable). A Tukey post-hoc test found no significant differences between the three groups: SUP \[F = 2.607, (2,42), p = .086\]; MET \[F = .122, (2,42), p = .886\]; COG \[F = 2.195, (2,42), p = .124\].

<table>
<thead>
<tr>
<th>Strategy Use</th>
<th>ACCUPLACER Reading Level</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET</td>
<td>Level 1: Basic reading skills</td>
<td>24</td>
<td>53.34%</td>
<td>3.06</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>Level 2: Reading skills development</td>
<td>6</td>
<td>13.33%</td>
<td>2.87</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td>Level 3: Reading at university level</td>
<td>15</td>
<td>33.33%</td>
<td>3.00</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>2.98</td>
<td>.45</td>
</tr>
<tr>
<td>SUP</td>
<td>Level 1: Basic reading skills</td>
<td>24</td>
<td>53.34%</td>
<td>3.28</td>
<td>.39</td>
</tr>
<tr>
<td></td>
<td>Level 2: Reading skills development</td>
<td>6</td>
<td>13.33%</td>
<td>3.33</td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td>Level 3: Reading at university level</td>
<td>15</td>
<td>33.33%</td>
<td>3.10</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>3.24</td>
<td>.35</td>
</tr>
<tr>
<td>COG</td>
<td>Level 1: Basic reading skills</td>
<td>24</td>
<td>53.34%</td>
<td>3.63</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>Level 2: Reading skills development</td>
<td>6</td>
<td>13.33%</td>
<td>3.08</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Level 3: Reading at university level</td>
<td>15</td>
<td>33.33%</td>
<td>3.07</td>
<td>.21</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>3.26</td>
<td>.25</td>
</tr>
<tr>
<td>OVERALL</td>
<td>Basic reading skills</td>
<td>24</td>
<td>53.34%</td>
<td>3.32</td>
<td>.48</td>
</tr>
<tr>
<td></td>
<td>Reading skills development</td>
<td>6</td>
<td>13.33%</td>
<td>3.09</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>Reading at university level</td>
<td>15</td>
<td>33.33%</td>
<td>3.06</td>
<td>.28</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>100</td>
<td>3.16</td>
<td>.35</td>
</tr>
</tbody>
</table>

Table 4.8: Reported reading strategy use and the Accuplacer reading level

In the reading questionnaire the teacher trainees were asked how they perceived themselves as readers. Table 4.9 below refers to their reading self-efficacy.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I’m a fast, highly-skilled reader</td>
<td>6</td>
<td>13.3</td>
</tr>
<tr>
<td>2.</td>
<td>I regard myself as an average reader</td>
<td>19</td>
<td>42.2</td>
</tr>
<tr>
<td>3.</td>
<td>I read quite slowly but I usually understand most of what I read</td>
<td>15</td>
<td>33.3</td>
</tr>
<tr>
<td>4.</td>
<td>I read quite slowly and I often have problems understanding what I read</td>
<td>5</td>
<td>11.2</td>
</tr>
<tr>
<td>5.</td>
<td>I struggle with my reading</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.9: Reading self-efficacy - Rank-ordered means and percentage (N=45)

From the data in Table 4.9 we can see that more than a half of the teacher trainees (N=25, 56%) did not consider themselves to be poor readers. In fact, only 5 participants essentially did not feel that they were good readers. Obviously, and again, this contradicts with their performance in the Accuplacer test. In effect, what this finding seems to show is a mismatch between how students perceive themselves as readers and their actual skill level.

So far, it can be seen that the reading strategies that teacher trainees claim to use most while their reading are cognitive reading strategies, followed by support strategies and metacognitive strategies. Their total strategy use showed a significant albeit moderate correlation with academic reading ability, while use of cognitive strategy use showed a robust correlation.
Ironically, students who performed more poorly on the Accuplacer test reported higher use of the three types of reading strategies.

4.2.4. Research question four

The fourth research question was *What, according to the teacher trainees and teacher trainers, are the perceived reading problems, needs, practices, genres, and skills required in the teacher trainees’ academic, professional, and social lives?* Data from the teacher trainee questionnaire and from the teacher trainer questionnaire were used to answer this question. As seen in §3.2.1 and §4.2.2, the reliability index for the entire Teacher Trainee Questionnaire, using the Cronbach alpha index is $\alpha=.81$. The Cronbach coefficients for the teacher trainer questionnaire yielded the following results: Part A: $\alpha=.79$, Part B: $\alpha=.75$, Part C: $\alpha=.80$, Part D: $\alpha=.86$, Part E: $\alpha=.83$, Part F: $\alpha=.77$. The reliability index for the entire Teacher Trainee Questionnaire, using the Cronbach alpha index is $\alpha=.79$.

**Reading problems**

Table 4.10 shows the results obtained from the analysis of the rated academic reading difficulties as perceived by both teacher trainees and teacher trainers (i.e. Question 16 and Question 31, respectively).

<table>
<thead>
<tr>
<th>Teacher Trainees’ Opinions (N=28)</th>
<th>Teacher Trainers’ Opinions (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill</td>
<td>%</td>
</tr>
<tr>
<td>Understanding grammar</td>
<td>39</td>
</tr>
<tr>
<td>Focus on form</td>
<td>36</td>
</tr>
<tr>
<td>Relying on dictionary</td>
<td>32</td>
</tr>
<tr>
<td>Tracking main idea/ argument</td>
<td>11</td>
</tr>
<tr>
<td>Reading slowly</td>
<td>4</td>
</tr>
<tr>
<td>Location of author’s tone/ purpose</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 4.10: Most and least frequent reading problems reported by teacher trainees and teacher trainers**

There was very little overlap in how the trainees and their teachers perceived the most/least pressing problems in reading. From Table 4.10 we can see that when required to identify the academic reading problems faced most often by teacher trainees, the trainees themselves identified lower level aspects of reading such as understanding grammar, focus on form than meaning, and relying on a dictionary. In contrast, the teacher trainers identified higher level conceptual and knowledge based aspects of reading such as *tracking main idea/ argument*, and *background knowledge*.

Graph 4.1 portrays these differences quite strikingly. The academic reading problems that are perceived by teacher trainees to be least important are higher level aspects of reading, such as
tracking main idea/argument, reading slowly (i.e. default pace), and location of author’s tone/purpose. Comparing these findings with those reported by teacher trainers, it can be seen that, while location of author’s tone/purpose is seen at the bottom of both sides, the top three do not match the teacher trainers’ perceptions of these difficulties. Thus, there are clear discrepancies between what teacher trainees and teacher trainers consider to be the reading problems of the student teachers.

One of the most striking observations arising from these two figures is that while understanding grammar is considered as the most serious problem by teacher trainees, the teacher trainers gave it no consideration. Tracking main idea/argument is perceived by the teachers to be the most important academic reading problem in a list of twelve items, while teacher trainees rated it as of far or lesser importance (i.e. the third from the bottom). Finally, it is apparent from the graph and Table 4.10 that while the academic reading problems reported by teacher trainees tend to be bottom-up (i.e. understanding grammar, focus on form than meaning and relying on dictionary), the ones reported by teacher trainers tend to be top-down (i.e. tracking main idea/argument and background knowledge). There are thus noticeable differences of perceptions between teacher trainees and teacher trainers.

Bearing in mind the identification of these reading problems, one would need to look at the skills that these teacher trainees have and where their needs lie (see Table 4.12 and Table 4.13).
Another important finding in this study is the discrepancy between the teacher trainees’ actual reading ability and their perception of what their ESL needs are. For example, they rated reading as the least difficult language skill (10%), while they rated listening as the most difficult (54%). This issue and those in Table 4.12 and Table 4.13 will be taken up again in the Discussion section.

Reading practices

One of the items in the reading questionnaire tapped into literacy practices by way of availability of books in the home. Graph 4.2 (on the following page) shows the books that are reportedly owned by both teacher trainees and teacher trainers, (i.e. Question 7 and Question 9, respectively). (The Y axis represents percentage of respondents).

The data in Figure 4.2 is quite revealing in several ways. First, of particular interest is the finding that, socio-economically speaking, these teacher trainees tend to live in a print-poor home environment, with few or no books in the home, despite the fact that they are university students. Second, there are several respondents who claimed not to have a single book at home. Third, not surprisingly, teachers tend to have far more books than students. Table 4.11 presents the above results broken down according to the three reading levels.

<table>
<thead>
<tr>
<th>ACCUPLACER Reading</th>
<th>None</th>
<th>%</th>
<th>About 10</th>
<th>%</th>
<th>About 20</th>
<th>%</th>
<th>More than 50</th>
<th>%</th>
<th>More than 100</th>
<th>%</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>11</td>
<td>92</td>
<td>13</td>
<td>54</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Level 2</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>42</td>
<td>4</td>
<td>67</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Level 3</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>33</td>
<td>3</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 4.11: Reported number of books and the Accuplacer reading level
These results too, are revealing. From Table 4.11 we can see that the better readers tend to have more books at home, while the weaker reading at Level 1 had no or very few books. A further examination of these results was explored using one-way ANOVA in order to disaggregate the total group results and analyse responses according to smaller subgroups. Using a Tukey post-hoc test, it was found that there was a significant difference between reading group levels and the books they own at home as determined by one-way ANOVA \([F = 6.772, (3,41), p = .001]\). Teacher trainees with more than 50 books had higher results (M=102), followed by those with more than 20 (M=77.17), more than 10 (M=72.29) and finally by those with no books (M=47.92).

**Reading genres**

Table 4.12 compares the types of texts (genres) teacher trainees read the most in Portuguese and in English (Question 13). It is perhaps telling that for this specific question, only 24 of the 45 teacher trainees completed this question.

<table>
<thead>
<tr>
<th>Item</th>
<th>Types of text</th>
<th>In Portuguese</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>1.</td>
<td>Academic texts (e.g. handouts, …)</td>
<td>24</td>
<td>3.19</td>
<td>.75</td>
</tr>
<tr>
<td>2.</td>
<td>Selected chapters of books</td>
<td>24</td>
<td>2.83</td>
<td>.92</td>
</tr>
<tr>
<td>3.</td>
<td>Entire reference or textbooks</td>
<td>24</td>
<td>2.79</td>
<td>1.23</td>
</tr>
<tr>
<td>4.</td>
<td>Reference tools (e.g. dictionaries, …)</td>
<td>24</td>
<td>2.45</td>
<td>.69</td>
</tr>
<tr>
<td>5.</td>
<td>Workbook or library instruction</td>
<td>24</td>
<td>2.39</td>
<td>.5</td>
</tr>
<tr>
<td>6.</td>
<td>Journal articles</td>
<td>24</td>
<td>2.38</td>
<td>.82</td>
</tr>
<tr>
<td>7.</td>
<td>Computer reading materials</td>
<td>24</td>
<td>2.26</td>
<td>.65</td>
</tr>
<tr>
<td>8.</td>
<td>E-mail</td>
<td>24</td>
<td>2.25</td>
<td>1.29</td>
</tr>
<tr>
<td>9.</td>
<td>Newspaper articles</td>
<td>24</td>
<td>2.21</td>
<td>.88</td>
</tr>
<tr>
<td>10.</td>
<td>Examination paper</td>
<td>24</td>
<td>2.21</td>
<td>1.06</td>
</tr>
<tr>
<td>11.</td>
<td>Instruction booklets</td>
<td>24</td>
<td>2.13</td>
<td>.9</td>
</tr>
<tr>
<td>12.</td>
<td>Work of fiction</td>
<td>24</td>
<td>2.13</td>
<td>.9</td>
</tr>
</tbody>
</table>

Table 4.12: Types of texts teacher trainees read the most

According to Table 4.12 above, despite the difference in the order, the top four types of texts (in **bold**) that teacher trainees report to read the most in both Portuguese and English seem to be the same: academic texts (e.g. handouts, …), selected chapters of books, entire reference or textbooks and reference tools (e.g. dictionaries, …).

Interestingly, if one compares these results with the ones in Graph 4.3 below which shows the types of texts that are read the most by both teacher trainees and teacher trainers (Question 13 and 23, respectively), it is found that the top four types of text are similar in the two figures, namely, academic texts (e.g. handouts, …), selected chapters of books, entire reference or textbooks, and reference tools (e.g. dictionaries, …).
Apart from the identification of most frequently used genres by these two groups, the present study has also set out to obtain teacher trainees’ opinions on the importance that they attribute to each of the genres in their studies, profession and social life (Question 14), see Table 4.13.

<table>
<thead>
<tr>
<th>Importance of Reading genres</th>
<th>Studies M</th>
<th>SD</th>
<th>Profession M</th>
<th>SD</th>
<th>Social life M</th>
<th>SD</th>
<th>Total M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected book chapters</td>
<td>3.67</td>
<td>.48</td>
<td>3.07</td>
<td>.92</td>
<td>2.7</td>
<td>.91</td>
<td>3.15</td>
<td>.77</td>
</tr>
<tr>
<td>Photocopied notes</td>
<td>3.56</td>
<td>.75</td>
<td>3.15</td>
<td>.91</td>
<td>2.93</td>
<td>.99</td>
<td>3.21</td>
<td>.88</td>
</tr>
<tr>
<td>Computer reading materials</td>
<td>3.33</td>
<td>.88</td>
<td>3.78</td>
<td>.42</td>
<td>3.11</td>
<td>.97</td>
<td>3.41</td>
<td>.76</td>
</tr>
<tr>
<td>Reference or text books</td>
<td>3.3</td>
<td>1.08</td>
<td>3.37</td>
<td>1.04</td>
<td>2.93</td>
<td>1.07</td>
<td>3.20</td>
<td>1.06</td>
</tr>
<tr>
<td>Workbook instructions</td>
<td>3.3</td>
<td>.78</td>
<td>3.3</td>
<td>.78</td>
<td>3.04</td>
<td>.85</td>
<td>3.21</td>
<td>.80</td>
</tr>
<tr>
<td>User manuals</td>
<td>3.19</td>
<td>1.04</td>
<td>3.33</td>
<td>.73</td>
<td>2.93</td>
<td>.99</td>
<td>3.15</td>
<td>.92</td>
</tr>
<tr>
<td>Reports</td>
<td>3.11</td>
<td>.8</td>
<td>3.22</td>
<td>.75</td>
<td>3.04</td>
<td>.65</td>
<td>3.12</td>
<td>.73</td>
</tr>
<tr>
<td>Instruction booklets</td>
<td>2.93</td>
<td>1.11</td>
<td>2.93</td>
<td>1.07</td>
<td>2.74</td>
<td>.94</td>
<td>2.87</td>
<td>1.04</td>
</tr>
<tr>
<td>Legal documents</td>
<td>2.93</td>
<td>1.07</td>
<td>3.44</td>
<td>1.03</td>
<td>3.41</td>
<td>.79</td>
<td>3.26</td>
<td>.96</td>
</tr>
<tr>
<td>Newspapers articles</td>
<td>2.78</td>
<td>.93</td>
<td>2.96</td>
<td>.92</td>
<td>3.11</td>
<td>1.05</td>
<td>2.95</td>
<td>.97</td>
</tr>
<tr>
<td>E-mail messages</td>
<td>2.78</td>
<td>.8</td>
<td>3</td>
<td>.83</td>
<td>3.19</td>
<td>1</td>
<td>2.99</td>
<td>.88</td>
</tr>
<tr>
<td>Company regulations</td>
<td>2.74</td>
<td>1.06</td>
<td>2.93</td>
<td>1.17</td>
<td>2.93</td>
<td>.99</td>
<td>2.87</td>
<td>1.07</td>
</tr>
<tr>
<td>Letters</td>
<td>2.67</td>
<td>1</td>
<td>2.96</td>
<td>.94</td>
<td>2.81</td>
<td>1.15</td>
<td>2.81</td>
<td>1.03</td>
</tr>
<tr>
<td>Works of fiction</td>
<td>2.63</td>
<td>.84</td>
<td>2.63</td>
<td>1.01</td>
<td>2.44</td>
<td>1.01</td>
<td>2.57</td>
<td>.95</td>
</tr>
<tr>
<td>Company brochures</td>
<td>2.37</td>
<td>1.18</td>
<td>2.78</td>
<td>1.16</td>
<td>2.67</td>
<td>1.07</td>
<td>2.61</td>
<td>1.14</td>
</tr>
<tr>
<td>Total</td>
<td>3.02</td>
<td>.92</td>
<td>3.12</td>
<td>.91</td>
<td>2.93</td>
<td>.96</td>
<td>3.02</td>
<td>.93</td>
</tr>
</tbody>
</table>

Table 4.13: The reported importance of the types of texts by teacher trainees (N=45)

Table 4.13 shows that most of the respondents reported that the top four genres in their studies are related to their academic lives, such as selected book chapters, photocopied notes, computer reading materials and reference or textbooks. As for their professional lives, computer reading materials came out top, followed by legal documents and reference or textbooks. Comparing these results with those of reading for social life, it can be seen that the list is fairly similar. The only difference is in the order, because in social life, the teacher trainees reported to attribute more importance to legal documents, followed by email messages and by computer reading materials and newspaper articles, both. Overall, the top five genres are computer reading...
materials, legal documents, workbook instructions, photocopied notes, and reference or textbooks. Novels, typically associated with pleasure reading, featured at the bottom end, even in social life. Having looked at the different reading genres that teacher trainees tend to read the most, we now turn our attention to reading skills perceived to be most important.

**Reading skills**

Table 4.14 highlights the order of importance of the reading skills perceived to be important for teacher trainees. These ‘to-be-mastered’ reading skills are different from the reading problems reported in Graph 4.1 above. It is often agreed that university students majoring in English should read at appropriate levels of proficiency. However, as Alderson (2000: 1) says, many of them naturally cannot adjust to the increased and varying demands of reading on the higher levels. According to Richek, Caldwell, Jennings and Lerner (1996: 43), to determine whether students have reading problems, instructors need to determine at what level a student is reading and to compare this to the level at which that student should be reading (cf. §2.4.3), an issue that is addressed in Research Question 1. In contrast, item 15 in the teacher trainee questionnaire tried to determine what kinds of reading skills the students themselves thought to be desirable/should be mastered.

<table>
<thead>
<tr>
<th>Importance of Reading skills</th>
<th>Studies M, SD</th>
<th>Profession M, SD</th>
<th>Social life M, SD</th>
<th>Total M, SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing conclusions</td>
<td>3.72, .54</td>
<td>3.6, .65</td>
<td>3.25, .85</td>
<td>3.52, .68</td>
</tr>
<tr>
<td>Critical response</td>
<td>3.64, .49</td>
<td>3.4, .76</td>
<td>2.92, .97</td>
<td>3.32, .74</td>
</tr>
<tr>
<td>Text organisational patterns</td>
<td>3.64, .49</td>
<td>3.36, .76</td>
<td>2.83, .82</td>
<td>3.28, .69</td>
</tr>
<tr>
<td>Reading speed</td>
<td>3.6, .65</td>
<td>3.36, .81</td>
<td>3.08, .88</td>
<td>3.35, .78</td>
</tr>
<tr>
<td>Using context for word meaning</td>
<td>3.6, .87</td>
<td>3.72, .68</td>
<td>3.38, .77</td>
<td>3.57, .77</td>
</tr>
<tr>
<td>Spotting attitude and purpose</td>
<td>3.52, .71</td>
<td>3.4, .5</td>
<td>3.13, .79</td>
<td>3.35, .67</td>
</tr>
<tr>
<td>Previewing</td>
<td>3.52, .65</td>
<td>3.24, .93</td>
<td>2.96, .86</td>
<td>3.24, .81</td>
</tr>
<tr>
<td>Establishing general idea</td>
<td>3.52, .59</td>
<td>3.32, .69</td>
<td>2.92, 1.02</td>
<td>3.25, .77</td>
</tr>
<tr>
<td>Skimming</td>
<td>3.48, 7.14</td>
<td>3.44, .65</td>
<td>2.92, .83</td>
<td>3.28, 2.87</td>
</tr>
<tr>
<td>Scanning</td>
<td>3.48, .87</td>
<td>3.4, .71</td>
<td>3, .89</td>
<td>3.29, .82</td>
</tr>
<tr>
<td>Visual aids</td>
<td>3.4, .87</td>
<td>3.32, .75</td>
<td>2.92, 1.02</td>
<td>3.23, .88</td>
</tr>
<tr>
<td>Stated vs. implied idea</td>
<td>3.4, .82</td>
<td>3.08, .99</td>
<td>3.13, .9</td>
<td>3.20, .90</td>
</tr>
<tr>
<td>Academic vocabulary</td>
<td>3.36, .81</td>
<td>3.24, 1.01</td>
<td>2.83, .87</td>
<td>3.14, .90</td>
</tr>
<tr>
<td>Prediction</td>
<td>3.2, .81</td>
<td>3.32, .8</td>
<td>2.88, .85</td>
<td>3.13, .82</td>
</tr>
<tr>
<td>Inference</td>
<td>2.92, 1.08</td>
<td>2.84, 1.07</td>
<td>2.58, 1.14</td>
<td>2.78, 1.10</td>
</tr>
<tr>
<td>Total</td>
<td>3.47, 1.16</td>
<td>3.34, .78</td>
<td>2.98, .90</td>
<td>3.26, .95</td>
</tr>
</tbody>
</table>

**Table 4.14: Reading skills perceived to be most important for a teacher trainee (N=45)**

The findings from Table 4.14 show that the list of reading skills that these teacher trainees felt that they need the most is topped by drawing conclusions. Although inference comes out last, it can still be seen that most of the importance is given to higher order top-down processes. This may be attributed to the questionnaire items. Nearly all of them (except for speed, and strategies such as skimming, scanning) are in fact higher order aspects of reading.
The data in Table 4.14 above also shows that the top five reading skills that respondents reported to be useful in their studies are, viz.: drawing conclusions, critical response, text organization patterns, reading speed, and using context for word meaning. Comparing these results with those in their professional and social lives, the results offer some useful insight into what skills teacher trainees believe are useful for these domains. For example, while using context for word meaning is considered to be fourth in their academic lives, it is listed first in both professional and social lives. Another interesting point is that reading speed is not placed in the three top skills, although it does seem to be rated high anyway. It is interesting also to note the skills not rated so high, such as academic vocabulary, inferencing and prediction, among many.

Table 4.15 shows that there are quite similar ratings between teacher trainees in levels 1 and 3. In other words, higher order reading skills are rated quite highly across the reading groups.

Table 4.15 shows the above rating of reading skills according to the three reading levels, by highlighting the studies column. The results were ranked in descending order according to the Reading Level 1, given that the majority of the participants fell in this level. The corresponding top skills for Levels 2 and 3 are in bold.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Reading Level 1 (N=24)</th>
<th>Reading Level 2 (N=6)</th>
<th>Reading Level 3 (N=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Drawing conclusions</td>
<td>3.5</td>
<td>.78</td>
<td>2.33</td>
</tr>
<tr>
<td>Critical response</td>
<td>3.38</td>
<td>.711</td>
<td>2.17</td>
</tr>
<tr>
<td>Visual aids</td>
<td>3.38</td>
<td>.875</td>
<td>2.17</td>
</tr>
<tr>
<td>Spotting attitude and purpose</td>
<td>3.25</td>
<td>.794</td>
<td>2.33</td>
</tr>
<tr>
<td>Text organisation patterns</td>
<td>3.25</td>
<td>.847</td>
<td>2.17</td>
</tr>
<tr>
<td>Previewing</td>
<td>3.25</td>
<td>.897</td>
<td>2.33</td>
</tr>
<tr>
<td>Using context for word meaning</td>
<td>3.25</td>
<td>1.113</td>
<td>2.33</td>
</tr>
<tr>
<td>Skimming</td>
<td>3.17</td>
<td>.917</td>
<td>2</td>
</tr>
<tr>
<td>Stated vs. main ideas</td>
<td>3.17</td>
<td>.963</td>
<td>2</td>
</tr>
<tr>
<td>Reading speed</td>
<td>3.13</td>
<td>.9</td>
<td>217</td>
</tr>
<tr>
<td>Scanning</td>
<td>3.13</td>
<td>1.116</td>
<td>2.33</td>
</tr>
<tr>
<td>Prediction</td>
<td>3.13</td>
<td>.85</td>
<td>2</td>
</tr>
<tr>
<td>Establishing a general idea</td>
<td>3.08</td>
<td>1.018</td>
<td>2.5</td>
</tr>
<tr>
<td>Academic vocabulary</td>
<td>2.96</td>
<td>.955</td>
<td>2.17</td>
</tr>
<tr>
<td>Inference</td>
<td>2.71</td>
<td>1.042</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Table 4.15: Reading skills perceived to be important by reading level of teacher trainees (N=45)

Table 4.15 shows that there are quite similar ratings between teacher trainees in levels 1 and 3. In other words, higher order reading skills are rated quite highly across the reading groups.

So far, the focus has been mainly on the questions which focused on the teacher trainee perceptions of academic reading needs, skills, lacks and genres. The next section looks at what
participants consider as being the ideal framework to determine academic reading needs of undergraduate teacher trainees.

4.2.5. Research question five

The last research question was *What kinds of needs analysis procedures do the teacher trainees and teacher trainers of English perceive to be important for designing and shaping their courses (i.e. who or what should be included)?*

The data in Table 4.16 and that in Graph 4.4 show responses to this question. Note that unlike the previous tables, here a *low* score indicates greater preference.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Teacher trainees (N=18)</th>
<th>Teacher trainers (N=5)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>The teacher trainees themselves</td>
<td>1.89</td>
<td>2.89</td>
<td>1.6</td>
</tr>
<tr>
<td>EAP specialists</td>
<td>3.28</td>
<td>1.74</td>
<td>4</td>
</tr>
<tr>
<td>Documents relevant to the field</td>
<td>4.17</td>
<td>1.65</td>
<td>5.6</td>
</tr>
<tr>
<td>Ex-teacher trainees</td>
<td>4.22</td>
<td>1.96</td>
<td>4.4</td>
</tr>
<tr>
<td>EAP research in the field</td>
<td>4.56</td>
<td>2.46</td>
<td>6</td>
</tr>
<tr>
<td>Employers</td>
<td>6.78</td>
<td>2.63</td>
<td>5.2</td>
</tr>
<tr>
<td>Curriculum and syllabus designers</td>
<td>6.8</td>
<td>2.13</td>
<td>3.8</td>
</tr>
<tr>
<td>Future trainees</td>
<td>7.06</td>
<td>2.36</td>
<td>7.4</td>
</tr>
<tr>
<td>The university board of directors</td>
<td>7.78</td>
<td>1.77</td>
<td>6.6</td>
</tr>
<tr>
<td>Parents and community</td>
<td>8.28</td>
<td>2.05</td>
<td>8.6</td>
</tr>
</tbody>
</table>

**Table 4.16: Reported sources of information for academic reading needs analysis**

As can be seen from Table 4.16, the mean results obtained from Question 20 and 36 (from the teacher trainee and the teacher trainer questionnaires, respectively) revealed that both student teachers and teacher educators consider that teacher trainees (1.6) should be the first to be considered in this process. Both groups consider that the opinion of ex-teacher trainees should also be taken into consideration in this process of needs analysis. One of the most striking observations to emerge from the data comparison is that while teacher trainees give a low rating to curriculum and syllabus designers, teacher trainers rate these far more highly.

Graph 4.4 shows the methods considered suitable for needs analysis. Looking at the results displayed in Graph 4.4, it was found that *initial questionnaires* are the most highly rated methods, while *tests* are bottom in the process. Some methods were not even considered to be useful by the participating teacher trainees: *follow-up individual and group interviews, meetings with students, analysis of authentic texts, and ongoing classroom observation.*
However, when asked whether the teacher trainees were taken into account in the design of their learning programmes for the subjects of their course while at ISCED, 100% of the participants reported not having been considered for such a process.

The overall purpose of this dissertation is to present a framework for determining the academic reading needs of teacher trainees who study in an EAP context. So far, the focus has been on the analysis of data collected during the empirical main study in an attempt to propose possible solutions to the problem of dissatisfaction with the entry academic reading level of Angolan undergraduate teacher trainees of English at ISCED-Huíla, in Lubango.

To recap, the results show, firstly, that the majority of the trainees have low academic reading levels. Secondly, there tended to be a mismatch between their reported strategy use and their performance on the academic literacy test. Thirdly, cognitive strategies were claimed to be used more than support and metacognitive reading strategies. A modest correlation was found between self-reported use of academic reading strategies and teacher trainees’ reading proficiency. Cognitive reading strategies, especially, showed a strong relationship to academic literacy. Fourthly, interesting findings emerged regarding the teacher trainees’ background and perceptions. For instance, they have few books in the home, and they do not really see reading as a problem, because to them, listening comprehension is more of a challenge and reading is an ‘invisible’ problem so they are not always aware of it. Finally, there seem to be certain discrepancies between what teacher trainees and teacher trainers consider to be the needs, skills and lacks of the student teachers. Finally, it is suggested by both participating groups that teacher trainees’ opinions should be considered at every stage of their courses, including in the process.
of needs analysis. In what follows we look at the discussion and interpretation of the main findings.

4.3. DISCUSSION

The aim of this section is to discuss and interpret the meaning of the results from the main finding in terms of the original five research questions and to point out their theoretical and practical significance. The discussion focuses on the teacher trainees’ level of reading proficiency, the academic reading strategies they use, the perceived reading practices, problems, needs and skills, and finally on the needs analysis framework that can be used for designing and shaping courses or programmes.

4.3.1. Teacher trainees’ level of reading

One of the most striking results to emerge from the data is that the majority of the trainees had low reading levels. Although decoding was not assessed in this study, following McCormick’s reading levels (1995), the vast majority of these teacher trainees may fall in the frustration level [reading with (less than 90% decoding accuracy and) about 50% or less comprehension] or in the borderline level [reading (with 90-94% accuracy in decoding and) about 55-74% accuracy in comprehension]. Only 33% of the test-takers in the current study (i.e. 15 out of 45) had adequate reading ability to be admitted to a university level reading course. According to the Accuplacer recommendations, over half of these test-takers would need to attend an Adult Basic Education course on reading. This accords with Pretorius (2002) who posits that many applicants arriving at university are not sufficiently equipped to cope with the demands of tertiary level study. In addition, Bean (1996) echoes the “pervasive downbeat faculty perception” that students seem not to be prepared to read at the levels required for university success.

This result resonates with that of many other researchers. Orndorff (1987, in Nel, Dreyer and Klopper, 2004: 96) states that the “inability of many students to read critically and with comprehension may be the single most important problem in tertiary education. Not only do students have difficulty selecting authors’ main ideas and seeing how they have been developed into a coherent whole, but they are also unable to infer, synthesise and restructure ideas, especially from complex texts.” Du Boulay (1999: 1) states that “one of the biggest problems in higher education, but one which is often not fully recognised … is the problem of reading.” A study conducted by Nel, Dreyer and Klopper (2004) at the Potchefstroom Campus of the North-West University indicates that first-year students participating in their study experienced problems across all aspects of the reading components assessed, namely vocabulary, fluency,
reading comprehension and reading strategy use. A case study research conducted by Pretorius (2005: 798) found that students approach reading tasks in a ‘mechanical and passive way, starting at the beginning and wading their way through conceptually dense text to arrive exhausted, demotivated and largely uninformed at the other end.’ Moreover, students had difficulty with high order comprehension processes such as making predictions and elaborating ideas across paragraph boundaries and integrating information across the text. The results clearly demonstrate the need for a course that will help the trainees improve their reading skills. Needless to say, however, it is in the decision of the nature of such a course that the process of needs analysis becomes helpful.

What is the significance of these outcomes for this research and NA as a whole in the Angolan context? At this point it is perhaps important to remind the reader of the importance of NA in course and syllabus design (cf. §2.2.4) and of using an assessment tool like the Accuplacer test to determine academic reading needs (cf. §3.5.2.1).

In fact, the importance and care for the use of this instrument in the Angolan context needs to be stressed: As a formal and standardised assessment instrument, Accuplacer provides an evidence-based approach for guiding our planning, and determining appropriate course placement that can help universities and instructors to tailor exams, to become more flexible and better at figuring out their students needs and how best to meet them, and improve students’ success in university (The College Board, 2007).

Regarding Angola, the higher educational system does not yet have any state mandated university readiness assessment tools for entering students into its universities or even for students who are already at university. Obviously, I am not suggesting these as gate-keeping devices but as tools that can help universities and lecturers to identify the challenges and to provide students with appropriate support. In fact, this is also an ethical problem, meaning that we cannot continue taking students’ money without helping them with their problems. In addition, we also know that designing a valid and reliable placement test is not an easy task for teacher trainers, the majority of whom have not received sufficient formal training in this area (cf. Behrman, 2000; Brown, 2005). Finally, for some of these teacher trainers the whole concept of ESP needs analysis and its teaching methodology may not be deep enough (cf. §4.2.5).

Therefore, it is of paramount importance that ISCED-Huíla develop courses that help graduates acquire the knowledge, behaviour and skills needed to succeed in university and the workforce. To put it bluntly, universities and other stakeholders in Angola need to ensure that students
receive the support necessary to not only earn a degree but also be adequately prepared in their personal and professional lives. In order for that to happen, it is necessary that the English Department works to identify a number of assessment options that can be used by its teacher trainers. From the results obtained in this study, I believe that one of these options includes making use of a tool such as Accuplacer.

Several studies can support this stance. Early Assessment with Accuplacer at the high school offers promising results that could mitigate the university and career dilemmas for high school graduates. For example, it was found that instructors’ assessment scores showed statistically significant relationships between Accuplacer scores and skills necessary to succeed in classes (Coles and Becker, 2011; James, 2006; O’Brien, 1995, in Manto, 2006; The College Board, 2007). Those who succeed in Accuplacer tests are often motivated, hardworking and successful students during their higher education. Nearly 40% of students placed in remedial level college courses fail or withdraw from the courses (Hirsh and Savitz-Romer, 2007). A review by Solomon (2010) found that there is currently an educational crisis in the American Massachusetts district rooted in (1) high school graduates’ lack of academic preparation for college [or university] level coursework; (2) curricular misalignment between secondary and postsecondary systems; and (3) problems with college [or university] placement testing administration. This is clearly also the case in the Angolan universities.

That being so, although the current research is far from exhaustive, it seems to have reached its aim in preparing the ground for identifying the academic reading needs of teacher trainees of English. In fact, even acknowledging the fact that no formal assessment has previously been conducted in the Angolan context, I still believe that a tool such as Accuplacer can be a valuable educational resource that could help Angolan universities address the readiness gaps of their graduates with regard to academic literacy skills and strategies.

**4.3.2. Reading strategies used by teacher trainees**

The results from the SORS revealed four main findings. First, the participants reported high or moderate usage of reading strategies. In fact, of the 27 strategies, no strategy was reported to be used with low frequency. Although the Accuplacer test revealed low reading levels, about 55% of the respondents perceived themselves to be skilled or average readers. From their responses to the questionnaire, it would appear that they were good, strategic readers, yet their performance on the academic literacy test indicated struggling readers. There thus seems to be a mismatch between the outcomes of academic literacy test and the SORS, even though both instruments are
reliable and valid. This issue is taken up again in §4.3.3. For now, the discussion focuses on preferred use of strategies as indicated by the trainees.

Second, the teacher trainees claimed to be high frequency users of cognitive strategies. The top four reading strategies were cognitive: *paying close attention to reading, guessing meaning of unknown words, reading slowly and carefully and re-reading for better understanding*. This seems to support Oxford’s (1990) argument that cognitive strategies are typically found to be the most popular strategies with language learners. Carrell and Carson (1997:54) suggest that “EAP readers must develop the strategies and tactics necessary for coping with the demands of academic reading”. Therefore, students need to use cognitive reading strategies which will help them to solve problems when they read a text. This is also consistent with the research of Parera (2006) who found that respondents rely too much on their “morpho-syntactic knowledge”, or their word-attack skills (Nuttall, 1996), without paying adequate attention to higher order skills.

Third, and as seen in Table 4.4, the five least used reading strategies are: one cognitive strategy (reading aloud when text becomes hard), one support strategy (using reference materials) and two metacognitive strategies (using text features, and previewing text before reading). In fact, it seems as if five of the metacognitive strategies appear to be near the lower end.

A possible explanation for this least preferred strategy use is that when students read academic texts they tend to think that all of the text is important. This can, in part, be explained by the fact that using typological aids, i.e. italics, or boldface, numbers, headings, coloured print, etc. is the least used strategy of all. Needless to say, ignoring these aids which allow the reader to understand what the writer of the text wants to emphasize, may be equal to not considering the importance of text conventions in enhancing the comprehension of content materials.

In this regard, it is extremely worrying that *previewing text* is a least used strategy, considering its importance in reading academic texts. As seen in §2.3.1, current views see reading as an interactive process through which the reader is required to extract meaning from the written text by the interaction of his schema with the contents of the text (Carrell, 1988; Grabe, 2009; Grabe and Stoller, 2011; Nuttall, 1996). Several reading specialists have provided convincing evidence that activating appropriate schemata before reading aids comprehension, and students with well-developed background knowledge comprehend texts better than those with poor schema (Chen and Graves, 1995; Dole, Valencia, Greer and Wardrop, 1991; Yule, 2000; Zhaohua, 2004). For example, a study by Chen and Graves (1995) of Taiwanese college students on effects of previewing and providing background knowledge revealed that the use of a combined treatment
– previewing and providing background knowledge – contributed immensely to a better understanding of the stories. In fact, the more information readers have before they start reading, the more they focus on the most important information of the text, the more likely they will make connections to the text and consequently the more likely they will remember the most important parts. Nuttall (1996: 33) argues that students need to monitor their own comprehension “to recognize that they do not understand a text, find out why and adopt a strategy that will improve matters”. According to Harmer (2007), this can be accomplished through teacher guided instruction and self-initiated strategies. It is important for students to adopt strategies such as these and the use of an instrument like the SORS is useful in NA for identifying strategies that students could be taught.

Likewise, NA can also identify which of the metacognitive skills should be taught, because metacognition is very important in skilled reading. Anderson (2002: 1) defines metacognition as “thinking about thinking”. In literal terms, metacognition means “cognition of cognition” (Carrell, Pharis and Liberto 1989: 648). Metacognitive awareness is considered a key factor for proficient strategic reading. More proficient or successful readers tend to have better awareness of their metacognitive knowledge than less successful readers (Phakiti, 2003). In other words, better readers employ reading strategies in planning, monitoring, evaluating and revising their own reading processes effectively and efficiently, not only while reading but also access and use these strategies to future reading tasks easily and frequently (Carrell, 1989; Sheorey and Mokhtari, 2001b). As a result, they enhance their reading literacy ability, are more aware of the characteristics of the text and the strategies they use, and can engage in higher thinking skills about texts and their relations to those texts (Carrell, 1989; Hudson, 1998; Seligmann, 2012; National Reading Panel, 2000; Sheorey and Mokhtari, 2001b; Zhang, 2001).

4.3.3. Relationship between academic reading proficiency and strategy use

In this study although there were no significant correlations between the teacher trainees’ metacognitive and support strategies and their performance on the academic literacy test, there was a significant and positive correlation between teacher trainees’ self-rating of cognitive reading strategies and their corresponding test results. Overall strategy use showed a significant albeit moderate correlation with academic reading ability.

Another interesting finding was that the weaker readers seemed to claim greater strategy use than the stronger readers. This may have something to do with metacognitive awareness, that is, that the better one is at something, the more accurately and reliably one can assess one’s own
performance (Dörnyei, 2001; Rivers, 2001; Sedikides and Strube, 1997). This also links up with the data in Table 4.8 and Table 4.9.

It is interesting to see that, based on self assessments teacher trainees are either under or over confident and optimistic regarding their strategy awareness, even though the data from the reading test does not support it. It seems as if a ‘Dunning-Kruger effect’ is at work. According to Kruger and Dunning (1999), the Dunning-Kruger effect is a cognitive bias whereby respondents may make poor decisions and reach erroneous conclusions based on their own assessment of their knowledge and ability. In other words, less skilled people tend to rate their abilities higher than average, suffering from illusory superiority, while skilled and competent people rate their performance lower than average, suffering from illusory inferiority. In Pretorius’ (2000a) study, the trainees at Level 1 (the lowest reading level) rated their overall strategy use higher (3.32) than the trainees at Level 3 who were more modest in their assessment (3.06). This problem can be overcome by making these teacher trainees more competent readers so that they can more accurately assess their reading ability.

One would need to evaluate their self-evaluation results in the light of those from the Accuplacer test and from what they reported as being their reading difficulties. As was mentioned previously (§4.2.1), it was found that most of these trainees (approximately 67%) tend to read at a very low level. This is consistent with Pretorius’s (2000a) study who found that many first-year Psychology and Sociology students at the University of South Africa were reading at frustration level, well below their assumed reading level, with an average comprehension level of 53%. Yet, as seen in Chapter Three, similar to the pilot study, the participants in the main study also seemed to overestimate their strategy use and their reading ability.

Four possible explanations can be advanced for this revealing and contradictory outcome of teacher trainees perceiving reading as their least problematical skill, reporting high use of reading strategies and still having low academic literacy skills.

The first possible explanation is that this is a methodological problem inherent in questionnaires – the desire of respondents to appear in a favourable light, leading to halo or social desirability effects. Are the respondents really conscious strategy users, or are they more conscientious to fulfill my expectations of them as readers, because apart from being the researcher I am also their lecturer? The Halo effect or error was discovered by Thorndike (1920) in the course of a research aimed at testing the ability of supervisors to judge their subordinates on the basis of presumably independent features. The results showed that judgments on each independent
feature were strongly influenced by the overall impression of the person being judged. Thorndike defined this phenomenon as a “marked tendency to think of the person in general as rather good or rather inferior and to colour the judgments of the [specific performance dimensions] by this general feeling” (Thorndike, 1920: 25). The finding in the current study is consistent with Lukhele’s (2010) and Oyetunji’s (2011) results. In the former study, aimed at exploring relationships between college students’ attitudes to and perceptions of pleasure reading and their academic performance and reading ability, Lukhele (2010) found that students may have given responses that they were expected to give, or were too embarrassed to answer truthfully. In other words, the participants in Lukhele’s (2010) study gave what appeared to be socially desirable answers, by providing those they thought to be acceptable or appropriate. The main explanation for those findings was the fact that, in contrast to the present study, they were required to write their names in the questionnaire. This may have affected the reliability of the questionnaire.

The second reason for the contradictory result is advanced by Oyetunji (2011) who questions the usefulness, validity and reliability of a strategy questionnaire in contexts where participants’ reading levels are not very strong. It may be the case that the SORS has been used in contexts where literacy resources are good and literacy levels generally high, and then the same tool is used in developing countries but with different results. However, poor readers can be found in any country. The important point is that this tool should perhaps be used with caution with samples of participants with low reading levels. This suggests that because one can only really reliably evaluate one’s own strategy use when one is quite a skilled, strategic reader, the reliability of this questionnaire, at least the section on reading strategies, can be claimed, to a considerable extent, to be reliable and valid when used with fairly skilled readers.

Regarding validity, one would have to look at the construct validity of the questionnaires. For example, it is possible that mismatches exist between mastery of a skill itself and perceptions of what mastery of that skill entails. The questionnaire may be throwing up differences in perceptions of what it means to be a good reader that do not align with mastery levels. The questionnaire may unintentionally be tapping into beliefs about use or practice rather than actual use (see my argument below).

In order to account for the reliability, we can also refer to the reasons advanced by Oyetunji (2011). The fact that although the instrument used in the present study has been slightly modified, the original strategy questionnaire had a reliability rating of .89 and my own alpha index in the main study was also high ($\alpha=.73$, as reported in §4.2). The instrument has been
reviewed and tested many times and has proven to be reliable; it has been used and critiqued by other scholars in the field, like Mokhtari and Richard (2002); all the items in the questionnaire are all related to strategy issues, so the instrument can be said to be both reliable and valid; the items of the present study were categorized in clusters with each cluster addressing a particular strategy to ensure that the instrument measured what it is meant to measure (Oyetunji, 2011:126). However, on reading these strategies in the questionnaire, common sense tells us that these are probably good things to do while reading. Perhaps putting in a few false leads might help to distinguish more clearly strategic readers from non-strategic ones. Another reason maybe that there is a design flaw in the questionnaire that only really comes out when used with non-skilled readers. However, this is beyond the scope of the present study, and is clearly another topic for further research.

The third reason may be that the teacher trainees are just expressing their beliefs as opposed to conviction. Here I use the term ‘beliefs’ following Victori and Lockhart (1995: 224) who define it from the second language acquisition perspective as “general assumptions that students hold about themselves as learners, about factors influencing learning and about the nature of language learning”. In fact, evidence shows that these beliefs play a decisive role in language learners’ success, failure and experiences (Cotteral, 1999). Nevertheless, although Pintrich and de Groot (1990) defend that learners who perceive their studies as important or interesting show higher degrees of perseverance in their work, I also see that any unrealistic positive belief or any inaccurate assessment of individual academic level or proficiency, or wrong assessment of whether they do or do not use reading strategies, may be a handicap to reading.

Generally speaking, readers need to learn to attribute their successes to effort, persistence, motivation, and correct use of specific learning and reading strategies (Alderman, 1999; Linnenbrink and Pintrich, 2002; Ormrod, 2003). Mori (2002) identified four theoretical constructs of motivation applicable in EFL reading contexts: (1) intrinsic value (enjoyment) for reading in English, (2) attainment value (need for succeeding), (3) extrinsic utility (usefulness), and (4) expectancy for success (efficacy beliefs). I suggest that with these teacher trainees, more than one of these facets of motivation may have contributed to this misjudgment of their abilities and practices. Brown (2000: 160) goes on to state “it is easy to assume that success in any task is due simply to the fact that someone is motivated.” For Dweck (1999), if students attribute this success or belief to ability alone, when encountering setbacks they will feel “dumb” and vulnerable and act accordingly. In fact, significant positive correlations have been found among reading self-efficacy, attitudes, and ability. Kush, Watkins and Brookhart (2005) argues that
reading attitudes develop through repeated successes and failures in reading experiences over time, and that attitude and achievement become closely linked only after repeated failure.

The fourth reason that can help to explain these discrepancies is the difference between awareness and use. In other words, there seems to be a high degree of response in a non-personal way, to what the respondents thought an ideal reader generally should do, rather than indicating what they personally did. As Alexander and Jetton (2000) point out, awareness – and use – of reading strategies is a characteristic of superior reading comprehension. Perhaps these trainees’ awareness of what a strategy entails is not always accurate. For example, COG12 (Guessing meaning of unknown words) only works in English if a reader has good knowledge of the morphology of English words and knowledge of the Greek and Roman stems used in many academic words (e.g. bene-, male- etc). A reader also needs to be able to recognise when the context is providing a reliable clue (MET6). This strategy also only works well if the reader also applies COG1 (Using prior knowledge) and MET9 (Confirming predictions).

For Kletzien (1991), poor readers are generally deficient in reading skills and using strategies. Nevertheless, they are aware of what they should do, perhaps because they have been told this many times, but they are still not actually doing it. For instance, smokers are aware that they need to stop smoking but this does not mean that they do stop smoking. Perhaps this is the case with these teacher trainees. These respondents may have had some success in their reading. Nonetheless, success [or even belief] alone will not transform struggling readers into successful readers. To put it bluntly, simply believing something does not make it happen. Reading requires practice, effort and perseverance, not just positive thinking. This study shows that there seems to be a mismatch between what it takes in general to be a good reader (awareness) and what a student personally does when reading (use).

Therefore, from the above it seems that there are two inherent problems one needs to address explicitly – the credibility issue (i.e. does claiming to use a strategy really make one a strategic reader?) and the discrepancy between the findings from the Accuplacer literacy test and from the SORS. In fact, considering that both instruments are reliable and valid, then one would wonder which results are credible. However, despite the credibility issues around SORS (for the four reasons stated above) and the discrepancies between the outcomes of the two research instruments, I would like to highlight that at least three useful findings can still be obtained from the SORS aspect of the questionnaire. Firstly, it was found that cognitive strategies are more frequently used and metacognitive strategies less so. Yet, we know from research (e.g. Dhib-
Henia, 2003; Sheorey and Mokhtari, 2001b; Zhang, 2001) that use of metacognitive strategies is associated with skilled reading. Secondly, some important strategies are given less importance (e.g. MET2, MET9 and COG1) than others. I think that these are all useful pointers for the design of an academic reading module. Finally, a very useful finding from my study is that students seem to be aware of the importance of these reading strategies but may not really know how to properly implement them. This can give us useful feedback for the kind of new focus that is needed for this reading module.

4.3.4. Academic reading practices, problems, needs, and skills
The discussion now focuses on the teacher trainees and teacher trainers’ opinions about the perceived reading needs, practices, genres, and skills required in the teacher trainees’ academic, professional, and social lives. For convenience I focus on five main aspects: exposure to print and access to books, perceived reading problems, reading in Portuguese and in English, types of reading material read by teacher trainees, and important reading skills for study purposes.

Exposure to print and access to reading books
The environment in which one lives can have a profound impact on the development of one’s reading skills. Easy access to books and a thriving reading culture help to support the development of reading skills. For example, if we look at the reality of the so-called literate societies (the USA, the UK, France, Australia, etc.), we can conclude that these countries have facilities that most of the so-called developing countries do not have in sufficient numbers. Among them we can highlight well resourced schools, well qualified teachers, smaller classes; cheap, accessible and appealing newspapers; accessible and available books and other printable materials; existence of public, school and university libraries and the home-literacy environment. These facilities immensely contribute to developing reading attitudes, practices and habits and can help to create and support a culture of reading.

However, we saw in Figure 4.2 above that the results clearly reflect the socio-economic realities of living in a print-poor environment, because some trainees had very few books and others do not even have any. The vast majority of teacher trainees live in an environment with less than 10 books. Day and Bamford (1998:4) argue that “It is simplistic but nevertheless true that the more students read, the better they become at it”. Students are less likely to read a lot if they do not have easy access to books in their environment.

Obviously, the above results are not encouraging because we have seen in the literature review that the amount of reading-related experience is predictive of reading ability and that reading
achievement is closely related to the frequency of shared book reading in the home and to home literacy environment. Chui and Khoo (2005) found that 15-year-old students across 41 countries (N = 193,076) scored higher on tests in mathematics, reading, and science when they had more economic resources in their country, family and school. Basically, we are in the presence of the so-called Matthew effects in academic achievement (Stanovich, 1986): the-rich-get-richer and the poor-get-poorer mechanisms embedded in the social and cognitive contexts of schooling (as seen in §2.3.5, §2.3.6 and §2.4.5). As reported by Cunningham and Stanovich (2001: 137), with regard to reading, we can see that “very early in the reading process poor readers, who experience greater difficulty in breaking the spelling-to-sound code, begin to be exposed to much less text than their more skilled peers.”

Camiciottoli (2001) argues that L2 learners, and likely many others, need to have exposure to target-language reading materials, and to home literacy experiences. These experiences can include a broad range of family activities, such as exposure to literacy, parent-child storybook and picture book reading, as well as opportunities for literacy interactions between the family members. Parents can support their children if they engage in literacy-related activities with them (see for example, Bhattacharya, 2010; de Jong and Leseman, 2001). Day and Bamford (1998: 97) also highlight the need for a wide range of books and other reading materials that will attract students. This includes different genres as well as difficulty levels. A wide range of levels will help ensure that more learners find something at an appropriate level and “progress upward in small steps as their reading fluency develops.” Needless to say, a rich home literacy environment is important not only for the early years of childhood, but also for supporting the formal learning-to-read process at school and at university. An environment like the ones that our teacher trainees live in does not support and encourage reading. As a consequence, it may lead to lower motivation and makes it almost impossible for the student to find pleasure in learning to read. Universities need to be aware of this and find ways to support students and help them develop reading skills and positive reading attitudes.

**Reading problems**

As to reading problems, we saw from the results of the test that about 33% of the respondents read slowly and took long to complete the test. Others did not even finish the test. However, the two most reported reading problems by the trainees are understanding grammar and vocabulary, and focusing more on form than meaning. In other words, these skills have to do with the ability to recognise words fast, accurately and to read fluently. None of the top three problems reported
by teacher trainees have to do with top-down processes. And yet, it is these higher order reading skills that are vital for academic performance.

One wonders if the problem these respondents report has to do with decoding or low vocabulary levels, or both? In fact, in an L2 one can at times struggle with grammar and vocabulary without really having a decoding problem. One would say a student has a decoding problem if they read in a slow and laboured way, word-for-word. But sometimes students encounter many words that they may not understand in a text. To put it bluntly, if one considers that the most frequent words (2,000-3,000 word levels) occur in up to about 80% of all texts (sometimes even higher), then unfamiliarity with this kind of vocabulary suggests that students are not engaged in much reading. Conversely, little reading means they do not encounter these words often enough to recognise them quickly. This may reflect low vocabulary levels, which, by tertiary level, in turn also reflect little exposure to texts.

The other side of the coin is that these teacher trainees are required to take courses of literature. As is well-known, literature requires high levels of understanding of the author’s attitude, tone and purpose. These respondents reported having fewer problems with evaluation and inference skills, like tracking main idea/argument and locating author’s tone or purpose. This confirms Purpura’s (1999) proposition that L2 reading ability at the level of beginners and intermediates was related more to the ability to decode input text at lexical, syntactic, semantic and discourse levels than the ability to perform reading at higher levels of processing such as understanding main ideas, drawing inferences, using context clues and appropriate prior knowledge and synthesizing information. This is so because readers need at least to understand the literal meaning of the text (text-based understanding) in order to make sense of it in a more inferential, transformative evaluative way, what Kintsch (1988) refers to as the situation-based model.

But the teacher trainees’ opinions contradict Hermida’s point that

Perhaps the single most important step of reading academic texts is for students to judge the strength or validity of the author’s arguments. … Teachers need to show our students the importance of evaluating the argument’s effectiveness in making its claims, and considering the evidence the author offers in support of her claim. Students also need to ponder counter-arguments used, and the logical reasoning used by the author. Furthermore, they need to evaluate any inconsistencies of thought, and the relevance of examples and evidence (Hermida, 2009:25).

Interestingly, two of the first three skills from the teacher trainers’ list are top-down skills, which accord with Hermida’s assertion. In fact, the teacher trainers’ opinion further supports the idea advanced by Pretorius (2005:798) who indicated that weak readers/struggling students approach
reading tasks in a “mechanical and passive way, starting at the beginning and wading their way through conceptually dense text to arrive exhausted, demotivated and largely uninformed at the other end.” In addition, students had difficulty making predictions and elaborating ideas across paragraph boundaries and integrating information across the text.

These results are similar to those by Baştürkmen (1998), Chan (2001), Ferris (1998) and Stoffelsma and Spooren (2013) who concluded in their studies that the perceptions of students and instructors regarding reading needs do not match. In other words, we are not only witnessing differences in terms of the two groups of participants, but we are also seeing contradictions between the results obtained from different research instruments, mainly with regard to how teacher trainees perceive themselves as readers and how they actually perform as readers.

Another discrepancy is the fact that reading was rated as the least difficult language skill, while listening was considered as the most difficult. This contradicts Orndorff (1987, in Nel, Dreyer and Kopper, 2004: 96) who states that the “inability of many students to read critically and with comprehension may be the single most important problem in tertiary education. Not only do students have difficulty selecting authors’ main ideas and seeing how they have been developed into a coherent whole, but they are also unable to infer, synthesise and restructure ideas, especially from complex texts.” Moreover, a study conducted by Dunkel (1991) reported that international students’ academic success in the United States and Canada relied more on reading than listening comprehension, especially for those students in engineering, psychology, chemistry, and computer science.

Even though, due to this result from one item of the questionnaire used in the current study we should heed the findings of previous work in this field, regarding the importance of listening comprehension for success in academic settings (e.g. Ferris, 1998; Ferris and Tagg, 1996). Several studies have indicated that efficient listening skills can be more important than reading skills as a factor contributing to academic success (Coakley and Wolvin, 1997; Truesdale, 1990). These specialists argue that listening can prove to be far more daunting for students in a second language classroom, and research has shown that academic listening tasks pose serious challenges to the EFL or ESL student. A reader usually has the opportunity to refer back to a text to clarify understanding, something which a listener in most listening contexts (TV programs, meetings, discussions, lectures, and to a lesser extent, conversation) cannot do. According to Mason (1995), even students at relatively high proficiency levels are often not proficient for the
listening tasks they encounter in academia. Thus, the importance of listening in classroom instruction has been less emphasized than reading and writing. As Nunan points out,

> Listening is the Cinderella skill in second language learning. All too often, it has been overlooked by its elder sister-speaking. For most people, being able to claim knowledge of a second language means being able to speak and write in that language. Listening and reading are therefore secondary skills – means to other ends, rather than in themselves (Nunan, 2002: 238).

According to Mendelsohn (1994, in Gilakjani and Ahmadi, 2011), listening comprehension has long been a somewhat neglected and poorly taught aspect of English in many EFL programs. In fact, while the other skills often receive direct instructional attention, lecturers often assume that students develop their listening skills through “osmosis and without help” (Mendelsohn, 1984, in Oxford, 1993: 205). We will return to this topic in Chapter 5.

**Reading in Portuguese vs. reading in English**

Despite the difference in the rankings, the top four types of texts that teacher trainees report as reading the most in both Portuguese and English seem to be the same: academic texts, selected chapters of books, entire reference or textbooks and reference tools. Unlike Kiray (2002, in Ögeyik and Akyay, 2009) who found that foreign language learners do not like to read in the foreign language for pleasure because of language problems such as lack of fluency and vocabulary, the academic demands of these teacher trainees require them to read in both L1 and L2. The finding may also mean that these participants have reading habits both in the mother and foreign language. Such reported positive practices may be due either to their motivation for reading a lot for their academic responsibilities or to the possibility of students thinking that reading the whole textbook is “a lot”, whereas teachers expect them to read not only their textbook but a lot more besides.

As put forward by Camiciottoli (2001) who examined self-reports from Italian university EFL learners, the amount of L1 reading was one of the predictors of the amount of L2 reading and of L2 reading attitude (willingness to find time for L2 reading). Given that this positive practice of attitude towards L1 reading exists, greater use should be made of it: if it can be encouraged then the teacher trainees will have a firmer foundation on which to improve in L2 reading and this may also have a positive impact on their future professional responsibilities, mainly that of preparing better and proficient readers. One implication for the institution is that there should be a focus on improving academic reading in both L1 (i.e. Portuguese) and L2 for teacher trainees. Since Portuguese is the official language of Angola, EFL students have subjects in Portuguese, but there is no academic Portuguese course being taught at university level. Most of the
Portuguese taught at ISCED-Huîla has a strong structural orientation with the main focus on morpho-syntactic awareness, grammatical and lexical aspects of the language. In this respect, the NA has revealed an area that requires further attention at the university.

**Types of reading material read by teacher trainees**

Similar to what we saw when looking at the language in which the teacher trainees read, and as to be expected in an academic setting, these participants focus more on their course or text books. In fact, the top four types of text are academic texts. In this regard the present study found that these trainees read academic materials across the board, regardless of their proficiency level. In other words, university demands seem to determine the type of text read.

Another promising aspect that deserves attention is the use of online documents, i.e. computer reading materials. As Calkins (1996) puts it, students who do a varied amount of voluntary reading demonstrate positive attitudes toward reading and these readers are considered the best readers. This evidence could imply that, on the one hand, teacher trainees potentially now have a wide range of materials to select to read as they have access to a wide variety of reading materials, either in printed or digital form. On the other hand, the finding is not consistent with findings from other studies (for example, by Hagood, 2003) that indicated that students’ primary preference was for reading online materials.

It is also encouraging to note that the first type of material preferred by the teacher trainees in their profession are computer presented materials, including internet materials via different educational websites. A study conducted by Shen (2006, in Noor, 2011) revealed that 42% of his college students spend an average of more than 3 hours online whereas 57% spend 1 to 2 hours online every day. This is evidence that computers and the internet have become part and parcel of college students’ lives where not only is it used for academic purposes but as a social networking tool. According to Hagood (2003), reading researchers and educators need to redirect their focus on media and online materials as these are central aspects of literacy research. If online literacy is taking over the traditional literacy world, then educators, writers, researchers and software programmers would need to engage with each other to develop online materials which can accommodate the students’ reading needs, behaviours and habits.

Finally, an interesting finding from this data revealed that most of these teacher trainees rarely read works of fiction, i.e. story books and novels, which occur at the bottom of the grid. Unlike what was found in the study by Noor (2011), this finding suggests a negative attitude toward reading for enjoyment. It may also mean that, even with the three literature courses that these
teacher trainees have, they tend not to make the time to read fiction, or rather, they only read them for grade purposes. As a consequence, these trainees seem to overlook the fact that literature is one of the sources of motivation toward building their love for books and reading as well as developing their communicative competence through extensive reading. Moreover, as teachers, they are also expected to value reading in general (and not just for study purposes) and to convey an enjoyment of reading to their students. Another explanation may be concerned with a gender issue, since they are mostly men. In fact, McKay (2001) argues convincingly that using literature as content in ESL/EFL classes provides three major benefits: (a) it demonstrates the importance of authors’ choice of form to achieve specific communicative goals, (b) it is an ideal resource for integrating the four skills, and (c) it raises cross-cultural awareness. Furthermore, “extensive reading increases a learner’s receptive vocabulary and facilitates the transfer to a more active form of language” (Moyo, 1997:47).

Important reading skills for teacher trainees’ studies

With reference to academic reading skills that the participants perceived as being important in the teacher trainees’ academic, professional, and social lives, the results show that for study purposes, drawing conclusions tops the list, followed by critical response, text organizational patterns, reading speed and using context for word meaning. Even though the strategies inferring meaning and reading between lines were amongst the least used strategies, the present study shows that most of the importance is given by students to higher order top-down processes. What these findings suggest is that these participants are aware that these higher-order strategies are important and feel that they should be incorporated in their course.

Several reading specialists (among them, Paran, 1996; Birch, 2002 and Koda, 2005) view top-down reading skills as additive or compensatory once fluent bottom-up processing is achieved. Wallace (2001) reviews research on fostering the learner’s ability to decode words as a prerequisite to reading. Based on the conclusions of various studies, Wallace (2001: 23) explains that in early reading development a strong link exists “between phonemic awareness, the ability to process words automatically and rapidly, and reading achievement.” Schoomen, Hulstijn and Bossers (1998) studied Dutch learners of English. They found that increasingly, as proficiency grew, metacognitive knowledge made a stronger contribution to L2 reading comprehension skill. “[K]nowledge of text characteristics, knowledge of reading strategies, and, to a lesser extent, knowledge of reading goals [are] important domains” (Schoomen, Hulstijn and Bossers, 1998: 98). Similarly, Grabe and Stoller (2002: 148) assert that “metacognitive instruction in text
structure and reading strategies is likely to ... support more advanced reading.” Even so, this may not improve decoding skills in weak students.

In fact, by the time they reach tertiary level students should be able to engage these higher level processes. If they cannot then the institution needs to help them achieve these goals. Even so, sometimes this kind of support may not succeed because students may still lack decoding skills. Therefore, a support programme needs to adopt a broader and differentiated approach, by identifying students with decoding skills and helping them develop fluency and speed, but also attending to higher order comprehension. In fact, the results from the Accuplacer test suggest that this needs to be considered. NA thus helps to identify areas where differentiated support needs to be provided.

So far, we have been looking at several findings from the questionnaire. A point that needs to be highlighted is that caution must be applied in interpreting these results because methodological weaknesses in the design of the questionnaire may have affected the results. Similar to what happened in Hyland’s (1997) study, the precise nature of these participants’ language problems is not specified. Every macro-skill (including reading) builds on several micro-skills as mentioned by Richards and Schmidt (2002: 444): discerning main ideas (skimming), noticing specific details (scanning), making inferences (noticing contextual clues), making predictions (reading critically). More specifically, I should have included under each academic skill the corresponding sub-skills. For example, for listening, one could have included taking brief, clear notes, identifying differing views/ideas, and understanding lecturers’ accents. For reading we could have identifying supporting ideas/examples, reading carefully to understand a text, and understanding organisation of a text, just to cite some. Second, these teacher trainees were tested at the end of their first year as part of NA, while they are preparing to enter the second year where *Técnicas de Leitura* (Appendix B) is taught. Therefore, I think that posttests also should and need to be done, to see whether students actually improve.

### 4.3.5. Needs analysis framework

The aim of this part of the chapter is to discuss and interpret the results obtained from Research Question 5, regarding the kinds of needs analysis procedures that both ISCED-Huña teacher trainees and teacher trainers of English perceive to be important sources of information for designing and shaping the academic reading course according to their students’ needs. The section first summarised the results from this question and then presents the main lesson I learned from it and from the study as a whole.
4.3.5.1. Summary of the results on needs analysis framework

The results from the questionnaires clearly confirm the centrality of the student in a needs analysis framework in an educational context. Furthermore, for these two groups, first, NA was perceived to be a prerequisite for any course/program or syllabus design to achieve effective instructional outcomes. Second, if we consider the three groups of data sources (i.e. people, documents and special studies) we can see that, despite some small differences, both groups of participants consider people to be the most important source of information. In other words, for teacher trainees the top three sources are: (1) the teacher trainees themselves; (2) the EAP specialists; and (3) ex-teacher trainees. For teacher trainers the three top sources are: (1) the teacher trainees themselves; (2) curriculum and syllabus designers; and (3) the EAP specialists.

Placing learners as the primary source of NA is crucial. The views of these participants are aligned with scholars who argue that the teacher trainee should be at the centre of the teaching and learning process (e.g. Evans and Green, 2007; Freire, 1970; Freire and Faundez, 1989; Satsangee, 1991; Sešek, 2007; Weimer, 2002). For Kilic (2010: 79), “not putting learners in the center of education means viewing knowledge and learners as immutable entities. However, both knowledge and learners are changeable.” Shawer, Gilmore and Banks-Joseph (2009: 125) state that specialists have “maintained that teachers approach curriculum in different ways: as curriculum-transmitters, curriculum-developers, or curriculum-makers.” For Yok (1998, in Kilic, 2010: 78), in a learner centered approach, “teachers are not knowledge transmitters anymore; they lead learning and teach learning methods.” Kilic (2010: 80) believes that

In learner-centered teaching, at the stages of decision making, planning, application, and evaluation during the teaching-learning process learners participate in the process willingly, showing interest with determination. The questions of what to teach, how to teach, wherewith to teach, how to evaluate and how to and where to use the evaluation results are not asked from the point of teachers but adapted and asked from the point of learners in learner-centered teaching.

However, it is also important to note that not everyone supports this view uncritically, as it undermines the notion of expert knowledge or technical knowledge. While the technical expert or knowledge expert provides what becomes the course content material, it is the instructional developer’s task to produce instructional components (e.g., handouts, lectures, practice, tests) that facilitate and verify the acquisition of the target knowledge (Dick and Carey, 1996). Kilic (2010) also cautions that this learner-centered approach means that teacher trainers should “improve learners’ responsibility, leave the priorities to learners but not the final decisions.” In other words, teacher trainers should heed the trainees’ voice on what they would like to learn, while the teacher should be responsible for the teaching methods.
Finally, it can be seen that the teacher trainers reported that they mainly use assessment as the main tools of needs analysis. But as we saw in the literature review, for it to be effective, needs analysts should triangulate their data collection by using different tools and activities which should be appropriate for the particular teacher trainees or groups of teacher trainees (cf. 2.2.9).

4.3.5.2. Lessons from the needs analysis process

During this study the application of the NA enabled me confirm some gaps and also discovered issues that I had overlooked or did not think were important. In other words, five lessons can be learned from this research process. Firstly, the findings from the NA confirmed the gaps between the teacher trainees’ academic literacy levels and the proficiency levels that are expected from a tertiary level reader. In fact, these results were similar in both phases of the study, i.e. pilot and main study. This means that teacher trainees and teacher trainers need to include in the training course teaching and learning skills and strategies that can develop academic literacy levels so that students can catch up and become strategic, engaged and fluent readers. Some of these principles, techniques and procedures can be those presented and discussed in §2.6. We will come back to this issue in §5.4, where a framework to determine academic reading needs of these trainees is proposed.

Secondly, it was surprising to discover that there are discrepancies between what trainees think they are good at and what they can really do. This means that the academic literacy programme at ISCED-Huíla needs to include and focus on awareness raising with regard to reading and academic literacy, an issue that has often been overlooked at this institution. In other words, it is often argued that provided that learners discover what their reading difficulties and problems are, they may discover appropriate techniques and strategies to overcome them.

Thirdly, I also did not anticipate the finding that teacher trainees did not really know what it means to read at university or what important aspects and genres are for this level. The fact that fiction comes at the bottom is one example, among many. Therefore, I came to realize that the programme of ISCED-Huíla for academic literacy should focus on several aspects. More specifically, efforts should be made to include a skill-building programme, focusing on cognitive skills, awareness raising, automaticity, strategic reading, fluency development, extensive reading, student motivation, engagement and integrated reading instruction.

Fourthly, it was found that there were differences between teacher trainees’ and teacher trainers’ opinions on what could be considered as important needs for teacher trainees. For instance, the fact that the former indicated lower level skills and the latter higher level skills raise our
awareness of two aspects: (a) the need for balanced reading instruction, and (b) the care a researcher needs to take when eliciting information from questionnaires. In other words, an academic literacy course should include both lower level and higher level skills and we need one or two more research instruments to compare the results obtained from a questionnaire, using different NA instruments, procedures and sources (cf. §2.2.9). Moreover, one needs to consider the validity of research instruments when conducting NA in academic reading skills because a simple reading comprehension test does not produce appropriate results as the Academic literacy test, like the Accuplacer do. Therefore, using the Accuplacer test should become practice at ISCED-Huíla.

Finally, the knowledge I acquired while producing the literature review, more specifically from §2.3 to §2.6, I realized that it is of paramount importance for needs analyst to have a deep understanding of the field in which they are conducting the NA (cf. 5.4 for more details).

4.4. CONCLUSION

The aim of this chapter was to present, analyse and discuss the data collected during the empirical main study in an attempt to propose possible solutions to the problem of dissatisfaction with the academic reading level of Angolan undergraduate teacher trainees of English before taking an EAP reading course at ISCED-Huíla, in Lubango. The chapter was divided into three main parts. This study produced results which corroborate the findings of a great deal of the previous work in this field but also generated some results that are different from several other studies previously conducted.

The next and final chapter summarizes the study and its main findings, it proposes and describes the contextualized needs analysis framework and then discusses the contribution that the current study has made to AL professionals, researchers and course and programme designers. It also looks at the limitations of the study, recommendations and possible areas of further research for the Angolan university context.
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.0. INTRODUCTION

This chapter concludes the study of determining the academic reading needs of teacher trainees. It firstly summarises the study and its major findings. After identifying the limitations of the study, it proposes guidelines for a contextualized framework or methodology for conducting NA at university level in Angola. It then discusses the significance of the current investigation. Thereafter, it proposes areas of further research. Finally, the chapter makes suggestions regarding practical implications for the development of literacy levels in Angolan schools and universities, with specific attention given to reading teacher education and needs analysis.

5.1. OVERVIEW OF THE STUDY

The purpose of the present study was to set up a framework for determining the academic reading needs of teacher trainees who study in an EAP context. The relevant information of this study is contained in the preceding four chapters.

In Chapter 1 we saw that the motivation for the study arose from my own observations and experiences as a teacher trainer and administrator at a teacher training higher institute. It was noticed that several curriculum and syllabus adaptations have been implemented at ISCED-Huíla. However, these decisions were never founded on the grounds of previously identified needs of teacher trainees in order to match these to their personal, academic and prospective professional wants. In other words, academic reading instruction and learning, the design of the academic literacy skills syllabus and academic material selection, were previously conducted or ill-informed decisions regarding teacher trainees’ needs, i.e. a top-down approach was adopted. As a consequence, the academic reading instruction and learning have often been inefficient and inadequate. The present study was conducted in Angola, a developing country, in southern Africa, an EFL context, the teacher trainees are enrolled in a language teacher education major, ELT, and in a socio-economic and cultural context, generally claimed to pose a challenge to the development of a reading culture. The chapter also described the research context, it presented the significance of the study, the methodology of the research, and it outlined the structure of the rest of the dissertation.

Chapter 2 comprised a literature review of needs analysis, as well as issues relating to reading and academic literacy. It first aimed at proposing a framework for determining the academic
reading needs of teacher trainees who study in an EAP context, having looked at definitional issues related to ESP and at the process of NA within one of the branches of ESP, namely EAP. The literature review revealed that given the diversity and complexity of EAP objectives, it is important to conduct an in-depth NA before planning and implementing an EAP curriculum. The review of the literature on reading was focused specifically on issues pertaining to the reading context, broader context of second language reading, the discussion of what reading in EAP entails, and at the issues related to the teaching of reading in an EAP context. Reading is viewed as a complex, interactive process involving linguistic and cognitive variables as well as broader sociolinguistic and socioeconomic factors. Furthermore, it was seen that the ability to read is highly valued in the education context, it is crucial for personal, social, and economic well-being and it is closely related to high-quality academic performance. Finally, it was noted that although there are a lot of studies on academic NA worldwide, this study represents the first attempt in the Angolan educational context to implement an NA in a systematic and scientific manner.

Chapter 3 described the research methodology used in carrying out this study. The approach of the study was analytical in that the data were mostly quantitative, descriptive and exploratory since no specific hypothesis was tested. Three research instruments following the pilot study were used, namely an Accuplacer test, a teacher trainee questionnaire, and a teacher trainer questionnaire. The study was conducted in two different phases: the pilot study and subsequent modification to the research instruments, and the main study. The pilot study was conducted in 2007 with two main purposes. Firstly, to test and revise the research instruments. Secondly, to do some exploratory work to experiment with procedures for analysing the data for the main study. The participants were 20 Year 1 students pursuing a teacher training course in English language teaching and 5 of their teacher trainers. Although the findings of the pilot study indicated that there was a mismatch between teacher trainees’ strategy use and their reading comprehension levels, the reliability and validity of the three research instruments were considered robust enough to be used in the main study.

In Chapter 4 the empirical findings of the main study were presented and discussed. Five research questions gave impetus to the study. The first question aimed at establishing the English academic reading proficiency levels of teacher trainees at the time they start their reading course. The second question attempted to discover the reading strategies teacher trainees claim to use when reading an academic text. The third question examined the relationship between teacher trainees’ academic reading proficiency and their strategy use. The fourth question aimed at finding out the perceived reading problems, needs, practices, genres, and skills required in the
teacher trainees’ academic, professional, and social lives. The final question sought to outline the needs analysis procedures teacher trainees and teacher trainers of English at ISCED-Huíla perceive to be important for designing and shaping their courses.

The Accuplacer reading test and the questionnaire were administered to 45 teacher trainees. Another questionnaire was administered to five teacher trainers. Numerical coding and scoring was used for most the responses. Descriptive statistics and inferential statistics were used to analyze the data. All scores from the three research instruments were entered into SPSS. For inferential statistics, Spearman’s rho correlation was used to look for relationships, while a one-way ANOVA and a Chi-Square were applied to examine if there was a significant difference between trainees reading levels and their needs, home books, and strategy use.

5.2. MAIN FINDINGS

This section presents the summary of the major findings as they relate to the academic literacy test and to the questionnaires.

1. The results from the Accuplacer academic reading test showed that most of the participants in this study come to university with limited levels of reading proficiency.

2. Most of the students were reading at ‘frustration level.’ Only less than 10% would be considered to be reading at “independent level” (cf. McCormick, 1995).

3. There seemed to be a mismatch between their reported strategy use and their performance on the academic literacy test. Based on their self assessments the teacher trainees came across as strategic readers, even though the data from the Accuplacer reading test did not support their self reports. It seems as if a Dunning-Kruger effect obtained, where respondents with poor reading skills reach erroneous conclusions based on their own assessment of their reading knowledge and ability, as seen in §4.3.3.

4. There was a discrepancy between the students’ actual reading ability and their perception of what their ESL needs are. For example, they rated reading as the least difficult language skill (10%), while they rated listening as the most difficult (54%): They also perceived themselves to be ‘average’ readers. This is an interesting result, even though one should be careful in interpreting this because ‘easy/difficult’ does not equate with more/less competent. It seems that their perceptions of what academic reading entails is different from what is actually required/expected at university level. This finding can also feed into the results of the NA, meaning that maybe it also points to the importance of making students
aware of academic listening throughout the course, even if these trainees have a semester on
that in their first year at ISCED-Huíla.

5. Despite their seemingly overrated self reports of strategy use, the total strategy use showed a
significant albeit moderate correlation with academic reading ability. Furthermore, cognitive
reading strategies, especially, showed a strong relationship to academic literacy.

6. Teacher trainees showed little knowledge of what reading at tertiary level really entails,
mainly with regard to reading skills, strategies and genres.

7. The reading strategies that teacher trainees claim to use most in processing an academic text
and solving their reading problems are cognitive reading strategies, followed by support
strategies and metacognitive strategies. Despite the fact that there are credibility issues
around SORS and that there are discrepancies between the outcomes of the two research
instruments, I would like to highlight at least three useful findings that can still be obtained
from the SORS aspect of the questionnaire. Firstly, it was found that cognitive strategies
were more frequently used and metacognitive strategies less so. Secondly, some important
metacognitive and cognitive strategies were rated less important (e.g. MET2, MET9 and
COG1) than others. I think that these are all useful pointers for the design of an academic
reading module. Thirdly, metacognitive strategies are typically associated with skilled
readers. Yet, these strategies did not feature strongly in the questionnaire responses. Finally,
a very useful finding from my study is that students seem to be aware of the importance of
these reading strategies but may not really know how to properly implement them. This can
give us useful feedback for the kind of new focus and teaching practices that are needed for
this reading module. An effective reading programme in the Angolan context may be one
that can successfully narrow that gap.

8. There seem to be certain discrepancies between what teacher trainees and teacher trainers
consider to be the needs, skills and lacks of the student teachers. For example, teacher
trainees identified lower level aspects of reading (understanding grammar, focus on form,
relying on dictionary), while the teacher trainers identified higher level conceptual and
knowledge based aspects of reading (such as tracking main idea/argument, and background
knowledge). In other words, while the academic reading problems reported by teacher
trainees tend to be bottom-up, the ones reported by teacher trainers tend to be top-down.
Finally, coupling this with the fact that there are discrepancies in outcomes between RQ1
and RQ3, it would suggest that some arguments about learner centred pedagogy are
sometimes rather idealistic. Therefore, we should also consult teachers so that their expert or technical knowledge and experience (seen in §4.3) is not ignored in this process.

9. As to the types of genre, the first type of reading material preferred by the teacher trainees in their profession are computer presented materials, including internet materials via different educational websites. Furthermore, most of these teacher trainees rarely read works of fiction, i.e. story books and novels, since these occurred at the bottom of the grid. This may mean that they show a negative association or attitude toward reading for enjoyment and that their literacy practices are functionally driven, relating primarily to study or work demands.

10. The type of materials that teacher trainees reported reading the most in both Portuguese and English seem to be the same: academic texts, selected chapters of books, entire reference or textbooks and reference tools. This means that academic literacy and academic reading skills also need to be developed in L1/Portuguese. Yet, this is not happening in this tertiary education context, conveying the erroneous message that academic support and academic literacy are only associated with the English language.

11. Teacher trainers believed that a NA need be done at the beginning of the academic year only. In addition, they reported that they mainly use assessment as the main tools of needs analysis. The teacher trainers tend not to be aware of the usefulness of an ongoing needs analysis for the promotion of effective teaching and learning environments. In other words, despite their knowledge and experience, teachers can also have a rather narrow conception of things: in fact, this was one of the reasons why learner-centred pedagogy arose in the first place. As can be seen, they had a good grasp of the skills the students needed to succeed in the academic context, but they were not always conversant with current NA procedures and had a rather narrow view of how it could be done, especially with regard to when, and what tools of analysis to use.

Even with these major findings, it is still useful to acknowledge that this study was conducted under several constraints, a topic we now turn to.

5.3. LIMITATIONS OF THE STUDY
Although this study offers a sound basis and worthwhile implications for determining academic reading needs of teacher trainees in an EFL context, like all studies, it also has its limitations.
While some are inherent to the design of the study itself, others were beyond my control. Five issues are highlighted.

Firstly, the use of the reading strategy questionnaire created an unanticipated conundrum. In other words, although teacher trainees reported frequent use of some strategies, it is difficult to know whether they were actually using these strategies. Future exploration and probing is clearly needed. Future research should make use of triangulation and could combine the SORS with the semi-structured interviews or case studies to further examine teacher trainees’ perceived use of the strategies with their actual strategy use.

Secondly, another limitation has to do with sampling problems. For the purposes of this study 45 ELT teacher trainees and 5 teacher trainers at ISCED-Huíla were selected as a source of data. However, clearly, these participants cannot represent all the Angolan ELT students and professionals who use English for Academic Purposes. Generalizations from the ISCED-Huíla to the other Angolan EAP settings must be done with caution. Further studies along these lines should be conducted in other Angolan EAP university settings and with larger samples to gain a broader and deeper understanding of reading skills and needs of Angolan students.

Thirdly, the participants’ previous academic backgrounds were varied. Due to the different characteristics of the participants, the generalization of the results to other populations with different first languages and educational backgrounds may be limited. Thus, caution should also be taken in interpreting the results because these characteristics might have influenced the reading performance levels.

Finally, due to time constraints, reading comprehension was measured only once and within the last month of the second term of the first year. Considering that this is a time when students are known to be less anxious and academically engaged (Symes, Tart and Travis, 2005), it may mean that their overall achievement in Accuplacer literacy test may have been relatively higher than if the test had been administered at the beginning of their first year. In other words, although the objectives of the study as conceptualized were achieved, it could be argued that several test administrations at different stages of the year might have yielded different results. For greater reliability and applicability a long term study is recommended. Therefore, findings from this study should be interpreted with caution.

Having considered some of the limitations of this study, we now turn to the framework that can be used for NA.
5.4. FRAMEWORK FOR NEEDS ANALYSIS

We saw in this study that both participating groups concurred that teacher trainees’ opinions should be considered at every stage of their courses, including the process of NA. In addition, academic reading teacher trainers should analyse teacher trainees’ awareness of strategy use through the use of an instrument such as the SORS.

Following Atai (2000: 30), in order for the ESP system to function properly, the curriculum and course development should not take ‘a one-way top-down approach’. For him, policy makers, syllabus designers, methodologies, materials developers, and teachers should carry out their tasks cooperatively, perceive the real needs of the students and evaluate the effectiveness of the program. This would ensure that the institution is always informed of the changing needs of students and so make its plans accordingly. Teacher trainers and other instructors should not abdicate their content and pedagogic knowledge at the expense of the learner-centred pedagogy, which, although it is good, may become too radical. In other words, consulting learners and being aware of their needs and problems is important. But learners often fresh from high school may not necessarily know what and how things should be taught.

Figure 5.1, on the following page, presents a proposal of what I would consider as being a product of this research study. I think that this model can accommodate these research findings and the Angolan [or African] research context.

From Figure 5.1, I think six aspects need to be stressed. First, to design this framework, five different approaches were considered, namely by Brown (1995), Brown (2010), Hutchinson and Waters (1987), Kaewpet (2009), Munby (1978) and Spector-Cohen, Kirschner and Wexler (2001). Second, the inclusion of an academic literacy test (e.g. Accuplacer test) at tertiary level is crucial to guarantee the validity of the process. Third, the guarantee of the ongoing monitoring is also vital to see how effective the measures really are. In fact, there may be too much to catch by students, e.g. moving from Level 1 to 2 and this to 3. Therefore, one needs to design the syllabi or programmes in a way that realistic goals can be achieved. Fourth, one can see that a need analyst requires deep understanding of what academic literacy entails. In other words, it does not simply take an educational researcher or a specialist on quantitative research to conduct a research like this. Therefore, I now consider and stress the role of expert or technical knowledge (cf. 4.3.5.1) in order to have high-quality results from the NA process. Fifth, the framework considers the point that has been stressed in this study regarding the importance of the use of triangulation through the whole process of NA. It is thought that this would allow the
incorporation of the different opinions and perceptions into a cohesive and learner-centered language reading syllabus or program. Finally, this framework for determining needs analysis of teacher trainees was (and can be) assessed using a modified version of the Checklist for Judging the Adequacy of an Evaluation Design (Sanders and Nafziger, 1976; 1985).

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<tr>
<th>STAGE/ASPECT</th>
<th>TASKS or DETAILS</th>
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<tr>
<td>Preparing for NA</td>
<td>• Defining the Purpose of the NA&lt;br&gt;• Deciding on Methodology&lt;br&gt;• Designing Instrumentation&lt;br&gt;• Piloting the Instruments&lt;br&gt;• Revising the Instruments</td>
</tr>
<tr>
<td>Deciding on the Focus of NA</td>
<td>• Teacher Trainee and Learning Process&lt;br&gt;• Teacher Trainer, and Teaching/ Training Process&lt;br&gt;• Both</td>
</tr>
<tr>
<td>Deciding on the Instrument to Use</td>
<td>• Academic literacy test (e.g. Accuplacer test): Stage 1&lt;br&gt;• Questionnaires: Stages 1 and 2&lt;br&gt;• Interviews: Stage 2&lt;br&gt;• Feedback from Performance and Assignments: Stage 2&lt;br&gt;• Informal Discussions: Stage 2&lt;br&gt;• Combining Technique or Triangulating: Stages 1 and 2</td>
</tr>
<tr>
<td>Deciding on Sources of Information</td>
<td>• Teacher Trainees&lt;br&gt;• Teacher Trainers&lt;br&gt;• Curriculum and Syllabus Designers&lt;br&gt;• Employees&lt;br&gt;• Former teacher trainees&lt;br&gt;• ESP/EAP Professionals&lt;br&gt;• Academic Reading Specialists&lt;br&gt;• Others</td>
</tr>
<tr>
<td>Deciding on When</td>
<td>• Stage 1: Beginning of Academic Year (Whole)&lt;br&gt;• Stage 2: Before End of Year (Intriguing parts of the course only)&lt;br&gt;• Stage 3: Whenever in Need</td>
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<tr>
<td>Conducting the NA</td>
<td>• Collecting Data&lt;br&gt;• Analyzing Data&lt;br&gt;• Interpreting and Evaluating Data&lt;br&gt;• Reporting on Data</td>
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<tr>
<td>Designing the Syllabus or Programme</td>
<td>• Identifying Instructional Goals/Objectives&lt;br&gt;• Analysing Texts to Identify: Linguistic forms, Reading material, Criterion tasks, Reading strategies, and Genres&lt;br&gt;• Identifying Content Areas, Themes and Levels&lt;br&gt;• Developing Materials&lt;br&gt;• Designing Instructional Methods and Selecting Tasks and Activities&lt;br&gt;• Designing Assessment Tools&lt;br&gt;• Disseminating Results</td>
</tr>
<tr>
<td>Implementation</td>
<td>• Teaching&lt;br&gt;• Learning&lt;br&gt;• Assessing</td>
</tr>
<tr>
<td>Evaluating the NA Process</td>
<td>• Evaluating and Revising Instruments&lt;br&gt;• Evaluating and Revising Syllabi or Programme&lt;br&gt;• Implementing Changes&lt;br&gt;• Monitoring Continuously the Process</td>
</tr>
</tbody>
</table>

Figure 5.1: Framework for determining academic reading needs of EAP teacher trainees

We can then conclude that the ISCED-Huíla English Sector should work with teacher trainees to address their concerns about reading and examine and discover how the current underperformance and perception of ability might be altered and so prepare them for the independent reading of university texts. I think that this would assist in achieving the primary
goal of EAP instruction, which is to help L2 students fulfill the requirements of their academic studies so that they can succeed in both university and professional settings (Hyon, 1996). According to Flowerdew and Peacock (2001: 177), “The teaching and learning of EAP presents its own unique challenges, problems, opportunities, failings and successes....”

5.5. SIGNIFICANCE OF THE STUDY TO THE TEACHING/LEARNING CONTEXT
The above findings can make a substantial contribution to four different groups: teacher trainees, teacher trainers, future researchers and other stakeholders.

For teacher trainees in the research setting this study can be an aid in determining the academic reading needs of teacher trainees and improving the already existing program to better meet the needs of these students. It raises awareness of the importance of academic reading NA in the learning process. Aebersold and Field (1997: 37) state that needs assessment makes learners feel confident; it puts some of the decision making in their hands; it puts the responsibility for learning in their hands; it activates the students’ own learning spirals. It can also be a teaching tool because it can help them become more aware and more purposeful in their learning. Furthermore, the research study can help them understand the academic reading needs, genres, lacks and wants of the Angolan EFL teacher trainees in Lubango. Obviously, a counter-argument is that this point only really holds for the student cohort that was involved in the NA. For the cohorts who come later this could be done every 4th or 5th year, considering that this is a four-year course.

For teacher trainers at ISCED-Huíla, the findings from this study give them confidence to justify their choices of contents, materials, and teaching methods, and to design a program in terms of topics and materials that are responsive to the needs of their teacher trainees. This can maximize the likelihood of student participation, where the focus on satisfying learner needs will help the learners to insist to learn and apply what they learn.

For future researchers this study may serve as a guide for investigating the academic reading needs of teacher trainees, a research topic that, so far, has been very scarce or non-existent in the Angolan context.

For other stakeholders, this study can help administrators, employers and others to better understand some of the underlying factors of students’ low performance throughout the course, to know when and how to introduce changes, if deemed necessary, so as to promote learners in their progress throughout the program (White, 1988). Hutchinson and Waters (1987) hold that...
the relationship between necessities as perceived by a sponsor or an ESP teacher, and what the learners want or feel can be at extreme poles. However, they suggest that learners’ perceived wants and wishes should be considered carefully, and due to the objective and subjective reality of needs, each learning situation should be considered uniquely and systematically.

To sum up, this study could serve as a reference point for Angolan and African administrators, syllabus designers and reading researchers and practitioners of adult literacy and for those who are interested in determining academic reading needs of teacher trainees. This study has provided significant information about the determination of academic reading of teacher trainees in an Angolan higher institution context. The next section proposes recommendations towards the ongoing practice and research about the development of literacy levels in Angola, teacher education, development of literacy levels at ISCED-Huíla and needs analysis.

5.6. RECOMMENDATIONS

“Um país se faz com homens e livros”
(i.e. A country is built with people and books)
Monteiro Lobato

The above saying by this Brazilian writer can be an excellent start to this section. From the above, and drawing on current findings and the literature on EAP and existing theories and approaches in NA and reading, some key recommendations can be advanced.

5.6.1. Recommendations for developing literacy levels in Angola

On the assumption that prevention is better than cure, it is important to raise literacy levels so that students do not come to university ill-equipped to cope with academic demands. Therefore, three recommendations can be presented in this regard.

1. A rich home literacy environment is important not only for the early years of childhood, but also for supporting the formal learning-to-read and reading-to-learn processes at school and at university. Teacher trainees need to have exposure to target-language reading materials, and to home literacy experiences. These experiences can include a broad range of family activities, such as exposure to literacy, parent-child storybook and picture book reading with them, engaging children and students in literacy-related activities, as well as opportunities for literacy interactions between family members, and the need for a wide range of books and other reading materials that will attract students (see for example, Bhattacharya, 2010; De Jong and Leseman, 2001). This includes different genres as well as difficulty levels. A wide range of books at different levels will help ensure that learners find something at their
appropriate level and “progress upward in small steps as their reading fluency develops” (Day and Bamford (1998: 97). Obviously, this links more explicitly to two issues: (a) economic factors; and (b) national literacy assessments. In other words, support is linked to socio-economic factors because if per capita increases, then home background support also tends to follow. Otherwise the state has to step in and compensate for print poor environments by providing quality schooling with a strong literacy orientation. As seen in §1.3.2, although the Angolan public resources represent 46.4% of the GDP, less than 10% is for education (i.e. 8.09%). And only about 28.6% of the share allotted to education is for primary education which impairs the country’s prospect of achieving universal primary education. What is encouraging is the fact that the state is prepared to step up to the plate by training more teachers, building and equipping more schools, etc.

2. Regarding national literacy assessments, it is important that there are regular assessments at various grade levels to keep a check on the pulse of literacy development in L1 (i.e. Portuguese) and L2 or foreign language (i.e. English). Angola has never participated in any of the large scale international or African literacy assessments such as PIRLS, SACMEQ or TIMMS studies (§1.3.2), thereby leaving the country with no formal evidence to assess the levels of literacy, numeracy and science. In fact, it is important to note that even if countries perform poorly in these assessments (like many African countries do), the literacy problem is acknowledged formally, education stakeholders are mobilised to sit up and take notice, feedback from assessments can help in setting short and long term goals, etc. Therefore, the Angolan government and other stakeholders should act urgently to ensure participation in these national literacy assessments.

3. Considering that “a nation that reads is a nation that learns” (Pretorius, 2000: 39-40), local and national government, as well as private stakeholders should strive to make reading material available to people who cannot afford them in order to promote family literacy through storybook reading, reading workshops, reading practices, etc. As McElvany and Arlet (2009) put it, this would bring clear advantages like (a) the intensity of the one-to-one interaction between parent and child, (b) the opportunity to establish a strong tradition of positive reading behaviour, and (c) the possibility of direct feedback. Implementing family literacy at preschool level is important, but it also needs to be continued and sustained through primary school.
5.6.2. Recommendations for developing literacy levels in schools and universities

1. In the Angolan schooling and university context a widespread ER approach urgently needs to be implemented, both in Portuguese and English. Apart from that, reading in these languages also needs to be taken seriously in schools, adequate time for it factored into the daily timetable, books made easily accessible, and early reading instruction must be sound and good. For this to happen Angola needs teachers who are knowledgeable about reading. In fact, in developing countries with high poverty levels, the onus is on formal educational institutions to provide a print-rich environment for their students, to compensate for the lack of this in homes and communities. This calls for a multi-level approach, involving state, provincial, school and university level involvement.

2. Reading researchers and educators need to direct their focus on media and online materials as these are central aspects of current literacy practice. Angolan students cannot be left behind in the electronic age. If online literacy is taking over the traditional literacy world, then educators, writers, researchers and software programmers need to engage with each other to develop online materials which can accommodate the students’ reading behaviours and habits in the 21st century.

4. Course designers and reading practitioners should incorporate both lower level and higher order comprehension skills to ensure a balanced diet in the reading course. In fact, it is usually argued that by the time they reach tertiary level teacher trainees should be able to engage these higher level processes. If they cannot, then the institution needs to help them achieve these goals. Even so, sometimes this kind of support may not succeed because students may still lack foundational decoding skills. Therefore, a support programme needs to take on more responsibility, by attending to improving both basic decoding skills as well as higher order comprehension.

5. A fair balance should be developed in skills development programmes between strategic and linguistic training. In other words, the academic reading programme at ISCED-Huíla should provide normal language work to boost both linguistic proficiency and reading ability. In addition to that, this balance should be integrated with explicit reading strategy training to promote skilful academic reading, which will, in turn, enhance academic achievement. I also defend that it is of paramount importance for reading strategies to be part of reading instruction in a second language context (see Martínez, 2008). As argued by Sheorey and Mokhtari (2001), such instruction can help promote an increased awareness of the mental
processes involved in reading and the development of thoughtful and constructively responsive reading. More specifically, this programme should focus on cognitive and metacognitive skills, strategic reading, awareness raising, automaticity development, fluency development, ER, student motivation, engagement and integrated reading instruction.

6. The findings in this study also point to the need for a critical examination of reading instruction in Portuguese as well as English. Therefore, I think there should be a focus on improving academic reading in both L1 and L2 at every level in Angola so that literacy knowledge can be transferred and mutually reinforced between the languages. Improving academic reading in L1 should occur in schools so that by the time these teacher trainees come to tertiary level they do not have to play catch up. Sadly, even though Portuguese is the official language of Angola and EFL students have subjects in Portuguese, there is no academic Portuguese being taught at university level. Much of the Portuguese taught at ISCED-Huíla focus on grammar and vocabulary aspects of the language.

5.6.3. Recommendations for reading teacher education

1. It is crucial to train teachers who are knowledgeable about reading and who are themselves good readers and can be positive reading models for their students. There is a need to prepare teachers who can teach in content areas and who can model, teach, and assess academic literacy and academic reading.

2. It is important to raise teacher trainees’ awareness of the fact that literature is one of the sources of motivation toward building their own and their future students’ love for books and reading as well as developing their communicative competence through ER. Moreover, as teachers, they are also expected to value reading in general (and not just for study purposes) and to convey an enjoyment of reading to their students. McKay (2001) argues convincingly that using literature as content in ESL/EFL classes provides three major benefits: it demonstrates the importance of authors’ choice of form to achieve specific communicative goals; it is an ideal resource for integrating the four skills, and it raises cross-cultural awareness. Furthermore, “extensive reading increases a learner’s receptive vocabulary and facilitates the transfer to a more active form of language” (Moyo, 1997:47).

3. I whole heartedly support McKool and Gespass’s (2009) recommendation that “Teacher preparation programs should encourage future teachers to read widely and frequently, not only professional materials, but also texts that they find personally interesting and compelling. We cannot assume that students who are preparing to be teachers do not love to
read”. Furthermore, they should have a clear sense of how a love of literacy can come from many avenues, genres, and texts (Lesesne, 1994). The term *globalization*, which combines *globalization* and *localization*, suggests an excellent framework for the kind of reading education we need in the 21st century: local but with a global perspective.

Regarding my own experiences, we also saw in §4.3.1 that the findings from this study are of great importance for NA as a whole in the Angolan context. Firstly, I concur with the role that NA plays in course and syllabus design (seen in §2.2.4). I also support the use of an assessment tool like the Accuplacer test to determine academic reading needs (seen in §3.5.2.1).

Secondly, using triangulating in a research project like this allows us to consider several voices. Therefore, I would recommend the use of various instruments, such as the three research tools that were used in this study, plus focus groups or face to face interviews to probe the factors that lead to discrepant responses. One would need to combine the SORS with semi-structured interview to further examine teacher trainees’ perceived use of the strategies with their actual strategy use.

Thirdly, the use of a formal and standardised assessment instrument, like the Accuplacer test, is of great importance because the Angolan higher educational system does not have any state mandated university readiness assessment tool. Finally, it was seen in §4.2.5 that for some of these teacher trainers the whole concept of ESP needs analysis and its teaching methodology may not be deep enough. Therefore, I do believe that to prepare teacher trainees for personal, academic and professional lives, the English Department should work to identify a number of assessment options that can be used by its teacher trainers. One of these options includes the use of Accuplacer each year or similar academic literacy instruments such as those developed in South African universities, for example the TALL (Test of Academic Literacy Levels), a test developed at the University of Pretoria (cf. Weideman, 2012) to better identify student needs and monitor skill development.

In conclusion, despite its constraints, the current study can be a valuable first step in formulating a methodological framework for NA research in this area. It is my wish that it will inspire other researchers to expand the investigation by building upon the foundation that has been laid here.

### 5.6.4. Recommendations for further research

We have seen that there is a paucity of research in academic reading needs analysis, especially in Angola. The following paragraphs reflect what I feel are areas that merit further research.
It was seen that a considerable number of teacher trainees could not finish the Accuplacer test in the allotted time. This suggests that reading speed, fluency and automaticity is an area for further research, even at tertiary level. One of the areas that merit further research is to examine whether these trainees have a decoding problem (i.e. the ability to recognise words fast, accurately and to read fluently), or if they have a grammar or vocabulary level problem. In fact, the latter may occur because too many unfamiliar words occur in the texts at tertiary level, which in turn also reflects little exposure to expository texts.

The fact that teacher trainees struggle with vocabulary might also mean that their vocabulary development needs to be given attention. Perhaps future research could include a vocabulary levels assessment to see whether they know both the 2000-3000 high frequency words as well as the academic words.

Another aspect that could be looked at in the future is a further analysis of teacher trainees’ higher reported use for some reading strategies over others. The reasons for this tendency and related factors (e.g. reading proficiency, academic background, etc.) merit further investigation.

We saw in §2.3.2 that there are several factors that may affect academic literacy development as it relates to the individual, family and educational system. Therefore, looking at the results from this study, further studies, which take these and other variables into account, will need to be undertaken in the Angolan educational context. Furthermore, how well students read in their LoLT, Portuguese, is an area that merits further investigation.

While this study provides robust evidence that the teacher trainees do not have the requisite academic reading ability, at the same time the students have clearly indicated that listening comprehension is a challenge. From this result, one can conclude that this is an area that merits further investigation at ISCED-Huíla, due to the imbalance in the attention given to each of the four academic language skills, since while there is only one subject that focuses on both academic speaking and academic listening skills (i.e. one semester for each skill construct), a subject taught in Year 1, academic reading and academic writing have separate yearly subjects each (Year 2 and Year 3, respectively).

Finally, since this is not an intervention study, no control group was used, meaning that no comparisons were made on teacher trainees’ pre- and post-needs analysis determination and strategy measures. To have a more complete picture of the effect of needs analysis and strategy instruction on reading achievement of Angolan ELT teacher trainees, a control group (traditional
instruction without needs analysis and strategy instruction) and an experimental group (needs analysis and strategy instruction) should be designed to analyze their performance differences. Therefore, future research should also involve interventions with different groups to examine the effects of individual learner differences such as motivation, age, previous academic background, gender and attitude.

5.7. CONCLUSION

The purpose of this dissertation has been to implement a needs analysis and on the basis of the findings come up with a framework consisting of practical stages and processes, for determining the academic reading needs of teacher trainees who study in an EAP context. In this study we inferred from the literature review and the results of the study itself that the employment of under/unqualified teachers, particularly in the primary schools, has had a negative impact on the quality of reading instruction and has contributed to the poor performance of learners at several levels. To make things worse, Angola is a print-poor country with a widespread lack of teaching materials. Consequently, most of the teachers have to develop their own teaching materials and reading programmes, even without any training and experience in material design and development. Furthermore, the reading culture in Angola has attained very discouraging achievement, skill instruction in education is very weak, and improvement of the quality of education does not happen overnight, but in medium and long term.

In order to overcome these challenges, reading should be considered as one of the top skills at school and higher education levels for many reasons. Firstly, it is nowadays axiomatic that reading is one of the most fundamental skills that students need while at school and at university, along with the very important tasks of managing time and taking effective notes. Secondly, reading is not simply an additional tool that students need at university, since it constitutes the very process whereby learning occurs (Rose and Hart, 2008). Thirdly, students are often not prepared to read at the levels required for university success (Bean, 1996), an assessment that echoes the pervasive downbeat faculty perception. Moreover, it is an opinion consistent with researchers who found that some first-year university students tend to read at frustration level (Hermida, 2009; Mason and Krashen, 1997; Pretorius, 2005) and that several applicants arriving at university are not sufficiently equipped to cope with the demands of tertiary level (Pretorius, 2002). Finally, Erickson, Peters and Strommer (2006: 122) argue that learning a discipline involves developing familiarity with the ways of being, thinking, writing, and seeing the world of those experts in the discipline. They go on to point out that reading academic texts published
by disciplinary experts permits students to immerse themselves in the culture of the discipline and facilitates learning its conventions, discourse, skills, and knowledge.

In Pretorius’s (2000: 46) words, “improved study packages, the creation of more reader-friendly texts, pedagogical shifts to student-centred teaching approaches and outcomes-based education are not going to be fully effective unless attention is also given to the development of reading skills”. In order for that to happen, I think that pre- and in-service training courses on NA and reading instruction should be provided by educational authorities, with careful NA conducted to ensure the sound design of such courses. This would ensure that current trends and practices are strongly encouraged and established, authentic commitment of teachers as well as ongoing formal and informal needs analysis and assessments of readers’ outcomes are guaranteed, course and teaching effectiveness are permanently evaluated, and, high expectations for the students are set, and students are assisted “in achieving those expectations by means of purposeful and principled reading instruction” (Grabe and Stoller, 2001: 202) and by focusing on strategic reading, fluency development, extensive reading, student motivation and integrated reading instruction (Buehl, 2011; Grabe, 2009; Hellekjær, 2009; Hermida, 2009; Herrera, Perez and Escamilla, 2010; Janks, 2010; Seligmann, 2010; Zwiers, 2008). Obviously, all these academic reading and literacy skills and strategies can be taught and developed in both L1/Portuguese and L2/English, the two major LoLT of the country.

In sum, the present generation must bequeath to future generations a legacy of an endowed environment and of a holistic national development. For that to happen, I think that Angolan society must imbibe good reading habits, parents must inculcate in their children reading habits, governments and stakeholders must finance teacher preparation and resource allocation for schools, universities and libraries, teachers must prepare their students for unaided school and university reading, and students must seek and use effective and efficient ways of moving from learning-to-read to reading-to-learn. By so doing, we could build a better Angola with people and books, the point made by Monteiro Lobato (cf. §5.6). Finally, I would not like to close this section and this dissertation without stressing the pertinent point made by Evershed (1994) that,

*To read is to empower,*
*To empower is to write,*
*To write is to influence,*
*To influence is to change,*
*To change is to live.*
APPENDIX A:
THE ANGOLAN ORGANIGRAM OF THE EDUCATIONAL SYSTEM

REPÚBLICA DE ANGOLA
MINISTÉRIO DA EDUCAÇÃO
ORGANIGRAMA DO SISTEMA DE EDUCAÇÃO
(Elaborado com base na Lei 13/01 de 31 de Dezembro)

ENSINO SUPERIOR
PÓS-GRADUAÇÃO

ACADÊMICA

Doutoramento
(4 - 5 anos)

PROFISSIONAL

Mestrado
(2 - 3 anos)

Especialização
(duração variada)

ENSINO SECUNDÁRIO
SEGUNDO CICLO

Formação média normal
(com Forma I)

Ensino geral

Ensino média técnica

1-2 anos

Ensino régular
(3 anos)

Ensino adulto
(3 anos)

PRIMEIRO CICLO

Formação prof. básica

duração variada

Ensino geral

Ensino média técnica

1-2 anos

Ensino régular
(3 anos)

Ensino adulto
(3 anos)

ENSINO PRIMÁRIO (obrigatório)

Ensino geral

Educação de adultos

(Ensino regular)

Educação de adultos

(Ensino adulto)

EDUCAÇÃO PRÉ-ESCOLAR

Iniciação (1 ano)

Jardim Infantil (2 anos)

Creche

(INIDE, 2012)
APPENDIX B:
PROGRAMME OF ACADEMIC READING SKILLS AT ISCED-HUÍLA

INSTITUTO SUPERIOR DE CIÊNCIAS DA EDUCAÇÃO
ISCED-HUÍLA
DEPARTAMENTO DE LETRAS MODERNAS
REPARTIÇÃO DE INGLÊS

PROGRAMA DE
TÉCNICAS DE LEITURA
(2º ANO DE LINGUISTICA/INGLÊS)

1. OBJECTIVES
   a. show understand of what literacy is, and how it relates to reading;
   b. develop intensive and extensive reading skills they need to cope with linguistic, sociocultural and
discoursal demand of different subjects in language, literature, linguistics, teaching methodology,
research methodology and school administration;
   c. build strong reading strategies to help students read independently and effectively so as to learn
subjects of the course in meaningful ways;
   d. expand vocabulary and to develop techniques for its acquisition/learning, and strategies for
dealing with new/unfamiliar words;
   e. develop the reading speed and the ability to skim and scan, to make the reading process easier
and faster, and to facilitate the later ‘re-learning’ of the material;
   f. help students be capable of interpreting and evaluating what is read, by discriminating between
facts and opinions;
   g. assist students learn a considerable amount of connected, coherent, and stimulating content
knowledge from complex integrated tasks;
   h. develop the skills necessary to read and analyse academic articles;
   i. promote their interest to read different types of texts with an acceptable degree of critical
awareness to enable the selection and adaptation of appropriate reading materials for the their
(prospective) pupils/students.

2. DURATION OF COURSE AND ASSESSMENT
   Students will receive 4 academic hours of tuition a week, for approximately 26 weeks a year. While units
vary in length, the teaching should aim to complete each unit in roughly 5 sessions (2 and ½ weeks).
Time should, of course, be allocated for students’ presentations, writing assignments, reading weeks, and
feedback from tests.
   With reference to assessment, students will have four summative tests, and each will be added to the
closest formative tests for an average mark. The summative tests will be designed to take 100 minutes
(except the compulsory final exam, which takes 120 minutes). Illnesses and emergencies are
unavoidable. However, this does not mean that students may miss whenever they wish. Attendance and
punctuality are required in this class.

3. MATERIALS IN USE
   These are the key books for the course. But the tutor will, of course, provide students with the specific
resources for each unit. Other very useful materials can be obtained from the Web. This is the case of
the last unit (see course outline).

4. COURSE OUTLINE

1. LITERACY
2. VOCABULARY
3. COMPREHENSION
4. INTERPRETATION AND EVALUATION
5. HOW TO READ AND ANALYSE ACADEMIC ARTICLES
APPENDIX C:
THE ACCUPLACER TEST

NAME_________________________ID#_________________________DATE_____/____/____

COMPANION™
TO
ACCUPLACER

LEVELS OF ENGLISH PROFICIENCY
READING SKILLS

THIS TEST BOOK IS NOT REUSABLE. DO NOT USE IF THE SEAL IS BROKEN.

THIS TEST BOOK MUST NOT BE TAKEN FROM THE ROOM.
DO ALL OF YOUR SCRATCH WORK IN THIS BOOK.

Copyright © 1995, 1998, 2002 by College Entrance Examination Board
All rights reserved.

02VL.10
READING SKILLS
Suggested Time – 40 minutes
35 Questions

For each question in this test, select the best answer from the four choices (A), (B), (C), and (D). Mark your choice on the answer sheet.

Questions 1-35. Read each passage, and then answer the questions. Some passages have one question and some have two questions. Pick the best answer and mark your choice on the answer sheet.

EXAMPLE:
Gavin lived in the city from 1984 to 1989.

When did Gavin live in the city?
(A) After 1989
(B) Before 1984
(C) Between 1984 and 1989
(D) Neither in 1984 nor in 1989

The correct answer is (C), “Between 1984 and 1989.”

1. Books written by Agatha Christie, a mystery writer, have been translated into over 100 languages.

What is being said about Christie’s books?
(A) They are hard to read in English.
(B) They are read throughout the world.
(C) They are important to people in the United States.
(D) They are made into films.

2. The body feels hotter when there is a lot of moisture in the air because sweat does not evaporate easily in moist air.

The passage suggests that
(A) evaporation cools us.
(B) moisture in the air makes you feel cool.
(C) moisture causes evaporation.
(D) it is easy to sweat.

GO ON TO THE NEXT PAGE
APPENDIX D:
TEACHER TRAINEE QUESTIONNAIRE

This questionnaire is designed to help identify academic reading needs at Instituto Superior de Ciências da Educação - ISCED, Lubango in Angola. Please answer each question carefully based on your own opinion and learning experience. The results will be used for the completion of a Master's Degree in Applied Linguistics at the University of South Africa (UNISA). We guarantee that the data you provide will be treated confidentially and with the most secrecy possible.

Joaquim Sapalo Castilho Cacumba

A. BACKGROUND INFORMATION

1. Age. Please circle.
   1. Less than 20  2. 20-29  3. 30-39  4. 40-49  5. 50 or older

2. Sex. Please circle.
   a. Female  b. Male

3. Please state the year you are studying now _________.

4. How long have you been learning English? Please circle.
   a. 1-4 years  b. 5-9 years  c. 10-14 years  d. 15-19 years  e. more than 20 years

5. Where did you study the English language before college? Tick all the relevant options.
   a. I studied English as a subject at school.
   b. I attended an English-medium school.
   c. I lived abroad.
   d. I did ELT at college.

6. What is your weakest area of English? Please choose one.
   a. Listening comprehension
   b. Reading comprehension
   c. Speaking
   d. Writing

B. DEVELOPMENT OF READING SKILLS IN GENERAL

7. How many books (approximately) do you have in your home? Please circle one.
   a. none  b. about 10  c. more than 20  d. more than 50  e. more than 100

8. What is your attitude to reading in general? Please circle.
   a. I really enjoy reading and I read a lot.
   b. Reading is OK. I sometime read a book or magazine.
   c. Reading is OK, but I don’t really read much. I only read when I have to read for study purposes.
   d. Reading is a problem for me and I don’t enjoy reading at all.

9. When do you read in English? Tick all the relevant options.
   a. When studying
   b. When preparing lessons for teaching
   c. At home
   d. At work
   e. In my everyday life
   f. Others (please specify) ______________

10. Why do you read in English? Tick all the relevant options.
    a. For religious purposes
    b. For study purposes
    c. For work-related purposes
d. For enjoyment 

e. For human power 

f. For information 

g. Others (please specify) ________________________________

11. How would you classify yourself as a reader, generally? Please circle.

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

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

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

d. I read quietly slowly and I often have problems understanding what I read.

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

C. ACADEMIC READING INSTRUCTION

12. To what extent do you agree with the following statements? Circle the appropriate column.

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>DK</th>
<th>SD</th>
<th>QA</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Reading is probably the most important skill for second or foreign language learners at school or even after school</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. A curriculum should respond to the interest and needs of individual students</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Teachers should be encouraged to serve as models of reading for their students</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Knowledge of different vocabularies is crucial for reading comprehension</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. One can understand the words and the sentences yet not comprehend the meaning of academic/technical discourse</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Reading can only be developed by means of continual practice</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Time spent reading is important for students’ reading growth</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. The difficulties one has reading academic materials are caused more by the difficulty of the subject than by the level of English</td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Which of these do you read the most during your studies? Put a cross in the appropriate column.


<table>
<thead>
<tr>
<th>In Portuguese</th>
<th>In English</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. newspapers</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>b. journal/ magazines articles</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>c. e-mail messages/ Web materials</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>d. academic texts (e.g. handouts)</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>e. reference tools (e.g. dictionaries)</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>f. examination papers</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>g. instruction booklets</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>h. others (Please specify and rate)</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

14. How would you rate the importance of reading each of these types of texts for your studies, your future profession of teaching English, and for your private/social life? Circle in the appropriate column.

1. Don’t know 2. Unimportant 3. Quite important 4. Very important
### 15. How would you rate the importance of learning each of these skills for your studies, your future profession, and for your private/social life? Circle in the appropriate column.

<table>
<thead>
<tr>
<th>Skill Description</th>
<th>In your studies</th>
<th>In your future profession</th>
<th>In your social/private life</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. reading quickly</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>b. understanding a writer’s attitude and purpose</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>c. reading in order to respond critically</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>d. recognizing text organisation patterns</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>e. previewing the parts of a book (e.g. title, index)</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>f. understanding specialist vocab.</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>g. understand visual aids (e.g. graphs, tables)</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>h. slow reading to understand the details of the text</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>i. establishing a general idea of the content (skimming)</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>j. locating specific information (scanning)</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>k. using context to find out what words mean</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>l. predicting what information will read next</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>m. inferring meaning and ‘reading between lines’</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>n. identifying stated and implied main ideas</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>o. drawing conclusions from a text</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

### 16. What kinds of problems do you typically have when you read? Circle as many options as necessary.
1. I am a slow reader, because I read word by word.
2. I don’t really have any problems with my reading.
3. I focus too much attention on form at the expense of meaning.
4. I forget what I've read by the time I get to the bottom of the page/end of section.
5. I have limited background knowledge.
6. I have problems understanding diagrams, graphs and tables.
7. I have problems making inferences from the information presented.
8. I rely heavily on the use of the dictionary for word meaning.
9. It's not easy keeping track of the main idea or argument.
10. There are lots of words that I don't know.
11. There are several grammatical structures that I have problems understanding.
12. I cannot answer questions about the author's tone and purpose.

17. Which of these reading skills do you think are the most useful for a teacher trainee like you? Please circle.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. analyzing written materials</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. general reading comprehension</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. knowledge of vocabulary</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. reading critically</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. evaluating and reading for author’s viewpoint</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. reading quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. summarizing factual information</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. summarizing material</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. synthesizing information from more than one source</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j. other(s) (please specify): _____________________________</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

D. READING STRATEGIES

18. How often do you use each of these reading strategies when you read any text? Please circle the appropriate column: 1. Never 2. Seldom 3. Sometimes 4. Always

<table>
<thead>
<tr>
<th>Name</th>
<th>Strategy</th>
<th>Frequency of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>MET1</td>
<td>Setting purpose for reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET2</td>
<td>Previewing text before reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET3</td>
<td>Noting text characteristics</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET4</td>
<td>Determining what to read</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET5</td>
<td>Using text features (e.g. tables)</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET6</td>
<td>Using context clues (e.g. synonyms)</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET7</td>
<td>Using typographical aids (e.g. italics)</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET8</td>
<td>Predicting or guessing text meaning</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>MET9</td>
<td>Confirming predictions</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG1</td>
<td>Using prior knowledge</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG2</td>
<td>Reading aloud when text becomes hard</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG3</td>
<td>Reading slowly and carefully</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG4</td>
<td>Trying to stay focused on reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG5</td>
<td>Adjusting reading rate</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG6</td>
<td>Paying close attention to reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG7</td>
<td>Pausing and thinking about reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG8</td>
<td>Visualizing information reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG9</td>
<td>Evaluating what is read</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG10</td>
<td>Resolving conflicting information</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG11</td>
<td>Re-reading for better understanding</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>COG12</td>
<td>Guessing meaning of unknown words</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP1</td>
<td>Taking notes while reading</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP2</td>
<td>Underlining information in text</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP3</td>
<td>Using reference materials</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP4</td>
<td>Paraphrasing for better understanding</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP5</td>
<td>Going back and forth in text</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>SUP6</td>
<td>Asking oneself questions</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
E. THE CONDUCTION OF ACADEMIC READING NEEDS ANALYSIS

19. Were you given the programmes for every subject taught in the course of Linguística/Inglês at ISCED-Lubango?
   a. No
   b. Yes (please, circle the subjects):
      i. Didáctica Geral
      ii. Francês I
      iii. Informática
      iv. Introdução aos Estudos Linguísticos
      v. Introdução aos Estudos Literários
      vi. Língua Introdução I
      vii. Metodologia de Investigação Científica
      viii. Pedagogia Geral
      ix. Psicologia de Desenvolvimento
      x. Psicologia Geral
      xi. Técnicas de Expressão em Língua Inglesa

20. In your opinion, who do you consider to be the main source of information for academic reading needs analysis at ISCED-Lubango? (Put them in order of importance: 1 = very much – 8 = not at all)

   [ ] The teacher trainees themselves
   [ ] People working or studying in the field
   [ ] Ex-students
   [ ] Documents relevant to the field
   [ ] Prospective pupils
   [ ] Employers
   [ ] EAP research in the field
   [ ] Ex-students
   [ ] Parents and community
   [ ] The university board of directors
   [ ] Others (please specify):

21. Were you asked for your opinion in the design of the programmes for the subjects of your course of Linguística/Inglês at ISCED-Lubango?
   a. No
   b. Yes (please, circle the subjects):
      i. Didáctica Geral
      ii. Francês I
      iii. Informática
      iv. Introdução aos Estudos Linguísticos
      v. Introdução aos Estudos Literários
      vi. Língua Inglesa I
      vii. Metodologia de Investigação Científica
      viii. Pedagogia Geral
      ix. Psicologia de Desenvolvimento
      x. Psicologia Geral
      xi. Técnicas de Expressão em Língua Inglesa

22. If yes, which of these procedures did the teacher use to assess your needs before the design of the programme of the subject?
   a. Student questionnaire
   b. Individual or group interviews
   c. Meeting with all the students
   d. Classroom observation
   e. Diagnostic Tests

23. Do you have any other comments which might be helpful in assessing what reading skills are expected of you by the University, how Linguística/Inglês course should prepare teacher
trainees for their future success, or anything else relating to your English language skills and needs? If so, please write them here, or use a separate sheet of paper:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

THANK YOU VERY MUCH FOR YOUR CO-OPERATION!

Lubango-Angola, October 2010
APPENDIX E:
TEACHER TRAINER QUESTIONNAIRE

This questionnaire is designed to help identify academic reading needs at Instituto Superior de Ciências da Educação–ISCED, Lubango in Angola. Please answer each question carefully based on your own opinion and learning experience. The results will be used for the completion of a Master’s Degree in Applied Linguistics at the University of South Africa (UNISA). We guarantee that the data you provide will be treated confidentially and with the most secrecy possible.

Joaquim Sapalo Castilho Cacumba

B. BACKGROUND INFORMATION

   2. Less than 20  3. 20–29  4. 30–39  5. 50 or older

   a. Female  b. Male

15. What is your mother tongue?

__________________________________________

16. What other languages do you speak in your home?

__________________________________________

17. What is your educational level or qualification?

__________________________________________

18. What is your area of specialization in ELT?

__________________________________________

B. THE TEACHER AS A READER

7. In which language do you do most of your reading?

__________________________________________

8. How long have you been teaching English? Please circle.
   a. 1–4 years  b. 5–9 years  c. 10–14 years  d. 15–19 years  e. more than 20 years

9. How many books (approximately) do you have in your home?
   b. none  b. about 10  c. more than 20  d. more than 50  e. more than 100

10. What kind of books do you enjoy reading? Please circle.
    a. biographies
    b. Western fiction (cowboy stories)
    c. romance fiction (love stories)
    d. detective stories
    e. academic books
    f. non-fiction
    g. science fiction
    h. spy fiction–thrillers
    i. plays
    j. religious books

11. When did you last read a book? Please circle.
    a. within this week
    b. a week ago
    c. last fortnight
    d. a month ago
    e. a year ago
    f. more than a year ago
12. What is your attitude to reading in general? Please circle.
   e. I really enjoy reading and I read a lot.
   f. Reading is OK. I sometime read a book or magazine.
   g. Reading is OK, but I don’t really read much. I only read when I have to read for study purposes.
   h. Reading is a problem for me and I don’t enjoy reading at all.

13. When do you read in English?
   a. when studying
   b. when preparing lessons for teaching
   c. at home
   d. at work
   e. in my everyday life
   f. others (please specify) ________________________________________________

14. Why do you read in English?
   a. for religious purposes
   b. for study purposes
   c. for work-related purposes
   d. for enjoyment
   e. for human power
   f. for information
   g. others (please specify) ________________________________________________

15. How often do you buy magazine or newspaper? Please circle.
   a. never
   b. every day
   c. occasionally
   d. once a week
   e. once a month

16. List the newspapers that you usually read:

__________________________________________________________________________

__________________________________________________________________________

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

__________________________________________________________________________

__________________________________________________________________________

18. How would you classify yourself as a reader, generally?
   19. I’m a fast, highly-skilled reader and I seldom have problems understanding what I read.
   20. I regard myself as an average reader – I understand most of what I read.
   21. I read quite slowly but I usually understand most of what I read.
   22. I read quietly slowly and I often have problems understanding what I read.
   23. I struggle with my reading. I read slowly and most of the time I don’t really understand what I’m reading.

C. Teaching experience
   19. For how many years have you taught at the following levels? Please circle.
   a. primary school? (Grades 1 – 4) ....................................................
   b. lower secondary school? (Grades 5 – 6) .............................................
   c. secondary school? (Grades 7 – 8) .....................................................
   d. high secondary school? (Grades 9 – 12) .............................................
   e. university? .................................................................
20. What subject(s) and years do you teach? Please circle.
   a. Subject 1 _________________________ Year(s) ______________________________________
   b. Subject 2 _________________________ Year(s) ____________________________________________
   c. Subject 3 _________________________ Year(s) ____________________________________________
   d. Subject 4 _________________________ Year(s) ____________________________________________
   e. Subject 5 _________________________ Year(s) ____________________________________________

21. How often do you take your students to the ISCED library to take out books or to read? Please circle.
   a. never
   b. 1 period a term
   c. 1 period a fortnight
   d. not very often
   e. 1 period a month
   f. 1 period a week

22. How many periods in the timetable are allocated to reading in your subject? Please circle.
   a. None
   b. 1 period a term
   c. 1 period a fortnight
   d. not very often
   e. 1 period a month
   f. 1 period a week

23. What kind of books do your students read during the reading periods? Please circle.
   a. journal articles
   b. newspaper articles
   c. works of fiction
   d. entire reference or textbooks
   e. selected chapters of books
   f. photocopied notes
   g. workbook or library instructions
   h. computer-presented reading materials
   i. other (please specify): ________________________________________________________________

D. TRAINING IN ENGLISH LANGUAGE TEACHING
24. During your teacher training, what training were you given in reading theories and methods? Please circle.
   a. nothing
   b. a brief overview
   c. very little
   d. a thorough training

25. Have you had any further in-service training or formal/informal training since you started teaching? Please indicate:
____________________________________________________________________________________

26. What were you taught about reading and literacy development during your teacher training? Please indicate:
____________________________________________________________________________________

E. THE TEACHING OF READING
27. Do you think attention is given to reading at ISCED-Lubango? Please circle.
   a. too little
   b. adequate
   c. too much

28. Do you think that the students in your classes do sufficient reading? Please circle.
   a. too little

206
b. a reasonable amount

c. too much

29. In which areas or what aspects of teaching would you like to know more about?

_______________________________________________________________________________

_______________________________________________________________________________

30. How would you describe the reading situation at ISCED-Lubango?
   a. there is a strong culture of reading at ISCED
   b. too much is done about reading at the school
   c. the teachers don’t really feel qualified to deal with reading
   d. there is poor motivation and lack of interest

31. What kinds of problems do your pupils typically have when they read? Circle as many as necessary.
   g. They are slow readers, because they read word by word and rely too heavily on visual information.
   h. They don’t really have any problems with their reading.
   i. They focus too much attention on form at the expense of meaning.
   j. They forget what they’ve read by the time they get to the bottom of the page/end of section.
   k. They have limited background knowledge.
   l. They have problems understanding diagrams, graphs and tables.
   m. They have problems in making inferences from the information presented.
   n. They rely heavily on the use of the dictionary for word meaning.
   o. It’s not easy keeping track of the main idea or argument.
   p. There are lots of words that they don’t know.
   q. There are several grammatical structures that they have problems understanding.
   r. They tend not to answer questions about the author’s tone and purpose.

32. What teaching activities and strategies do you often use to overcome the above problems? Use a separate sheet if required.

_______________________________________________________________________________

_______________________________________________________________________________

33. Which of these reading skills do you think are the most useful for teacher trainees?

<table>
<thead>
<tr>
<th>Skill</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>k. analyzing written materials</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>l. general reading comprehension</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
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<td>3</td>
</tr>
<tr>
<td>n. reading critically</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>o. evaluating and reading for author’s viewpoint</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>p. reading quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>q. summarizing factual information</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>r. summarizing material</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>s. synthesizing information from more than one source</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>t. Making inferences</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>u. other(s) (please specify):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

34. How can teacher trainees be helped to improve their skills at reading for comprehension?

_______________________________________________________________________________

_______________________________________________________________________________

35. Can reading be taught effectively in isolation? Account for your answer.

_______________________________________________________________________________

_______________________________________________________________________________
F. CONDUCTING ACADEMIC READING NEEDS ANALYSIS

36. In your opinion, who do you consider to be the main source of information for academic reading needs analysis at ISCED-Lubango? (Put them in order of importance: 1 = very much - 8 = not at all)

☐ The teacher trainees themselves
☐ People working or studying in the field
☐ Ex-students
☐ Documents relevant to the field
☐ Prospective pupils
☐ Employers
☐ EAP research in the field
☐ Ex-students
☐ Parents and community
☐ The university board of directors
☐ Others (please specify):

37. What do you think is the best procedure to assess the academic reading language needs of teacher trainees of English at ISCED-Lubango?

a. Initial questionnaire
b. Follow-up individual and group interviews
c. Meeting with students
d. Structured interviews
e. Meeting with other teachers
f. Analysis of authentic texts
g. Ongoing classroom observation
h. Tests
i. Assessments

38. What constraints must be taken into consideration when conducting needs analysis at ISCED-Lubango?

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

39. Do you have any other comments which might be helpful in assessing what reading skills are expected of your students by the University, how Linguística/Inglês course should prepare teacher trainees for their future success, or anything else relating to your English language skills and needs? If so, please write them here, or use a separate sheet of paper:

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

THANK YOU VERY MUCH FOR YOUR CO-OPERATION!

Lubango-Angola, October 2010

Adapted from:
Academic Literacy Research Unit. 2006. Reading questionnaire. University of South Africa (UNISA): Pretoria.
APPENDIX F:
PERMISSION GRANTED TO USE THE ACCUPLACER TEST

Subject: Accuplacer: Access Information
From: support@accuplaceronline.com (support@accuplaceronline.com)
To: kymcastilho@yahoo.com;
Date: Sunday, May 6, 2007 8:50 AM

Your username and password for access to Accuplacer are:

Username: 
Password: 

Subject: RE: Accuplacer: Access Information
From: Murphy, Suzanne (SMurphy@CollegeBoard.org)
To: kymcastilho@yahoo.com;
Date: Tuesday, May 15, 2007 6:21 PM

Please see below.
Suzanne Murphy
Associate Director
ACCUPLACER
405 642 9891

-----Original Message-----
From: Castilho Cacumbe [mailto:kymcastilho@yahoo.com]
Sent: Tuesday, May 15, 2007 6:19 AM
To: Murphy, Suzanne
Subject: RE: Accuplacer: Access information

Dear Suzanne,

I'm glad to inform that our account has been activated
and I could already access it.
APPENDIX G:
REQUEST TO CONDUCT RESEARCH AT ISCED-HUÍLA

Solicitação da Permissão para a Investigação de Mestrado no ISCED-Huíla

Ao: Director Geral do ISCED-Huila
    PO Box 230
    ... Lubango-Angola

Cc:
    ➢ Chefe de Departamento de Letras Modernas
    ➢ Chefe da Repartição de Inglês

Eu, Joaquim Sapalo Castilho Cacumba, venho por este intermédio solicitar ao Exmo. Senhor Director Geral do ISCED-Huila a permissão da recolha de dados a partir dos estudantes e docentes do curso de Linguística/Inglês no ISCED-Huila. Este processo vai envolver uma prova escrita e dois questionários, sendo um para os estudantes e o outro para os docentes.

Os dados servirão para a conclusão da Dissertação do meu Mestrado em Linguística Aplicada na UNISA (University of South Africa). O meu tópico tem a ver com “Determinação das necessidades de leitura académica dos professores-formandos no ISCED-Huila.”

Tendo em conta que a leitura académica é um pressuposto fundamental na ascensão pessoal, social e profissional do professor-formando, espero que com o vosso consentimento e dos participantes, os dados a obter deste estudo possam espelhar a necessidade e os procedimentos a utilizar na determinação das necessidades dos formandos, antes da selecção de conteúdos, estratégias e métodos de desenvolvimento e remediação de habilidades de leitura académica.

Sem mais qualquer assunto, espero que Vossa Excelência consentirá que se conduza esta investigação.

Lubango, aos 21 de Outubro de 2010.

Assinatura,
APPENDIX H:
PERMISSION GRANTED TO CONDUCT RESEARCH

REPÚBLICA DE ANGOLA
MINISTÉRIO DE ENSINO SUPERIOR E CIÊNCIA E TECNOLOGIA
INSTITUTO SUPERIOR DE CIÊNCIAS DA EDUCAÇÃO
ISED-HUÍLA

GABINETE DO DIRECTOR GERAL

NOTA N° 190/GAB.DIR.GERAL/ISED-HUÍLA/MESST/2010

TO WHOM IT MAY CONCERN AT UNISA

27 October 2010

Re: Joaquim Cacumbe: Master’s Degree in Applied Linguistics at the University of South Africa (UNISA)/Determining Academic Reading Needs

I hereby give my consent for ISCED-Huila in Lubango, Angola to Joaquim Sepalo Castilho Cacumbe to conduct a research for his MA Dissertation on Determining Academic Reading Needs using the student teachers and teacher educators of this institution, at the University of South Africa (UNISA).

I understand that this involves one test for teacher trainees, one questionnaire for teacher trainees, and one questionnaire for teacher educators. I understand that the participant’s anonymity and privacy will be completely protected at all times.

In giving consent but I am not guaranteeing that my staff and their students will participate. The participation is voluntary.

We agreed to this research because of the perceived benefits to students’ lives through reading extensively, strategically and fluently so they can become better persons, students and professionals.

Raimundo Luken, Ph.D.
### RESULTS FROM THE ACQUISACER TEST

**APPENDIX I:**

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(Continued)
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