# Addressing the Digital Divide: Using CALL material to teach grammar to learners of English First Additional Language in classrooms with limited computer and multimedia resources

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Thesis presented in fulfilment of the requirements for the degree of Master of Philosophy (Hypermedia for Language Learning) in the Faculty of Arts and Social Sciences at Stellenbosch University

> Supervisor: R.O. du Toit March 2012

#### **Declaration**

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March 2012

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#### **Abstract**

Because English is the most widely-spoken second language in South Africa, it is becoming increasingly important for learners to be able to master the English language, including English grammatical structures; not only to do well at their internal and external school examinations, but also to communicate effectively in a progressively anglicised educational, occupational and commercial society. Educators of English First Additional Language (FAL) often have to augment existing textbook material, especially in the field of grammar teaching and learning, as many of the more recent textbook publications do not make sufficient provision for the communicative teaching and learning of grammatical structures. One way in which textbook material could be augmented would be to develop interactive multimedia learning material for the teaching of grammar. However, many South African English FAL classrooms are underresourced in terms of computers and other technological tools needed to use such interactive computer assisted language learning (CALL) material. The learners being taught in these technologically barren classrooms may fall far behind their peers in terms of exposure to interactive educational technology, i.e. they may become victims of the digital divide.

The objective of this study was to investigate whether the digital divide could be addressed with the development and use of computer assisted language learning material that makes provision for learner interactivity and could be used in classrooms with minimal access to technological tools. To determine the attitudes of educators with regard to grammar instruction in general, as well as the use of technology in the teaching and learning of grammar and the general accessibility of technology in English FAL classrooms, educators of English FAL at nine rural, Afrikaans-medium schools situated in low-income communities in the Western and Northern Cape were asked to complete a questionnaire. The results of this survey were used to ascertain what kind of multimedia learning material would be suitable for use in technologically challenged English FAL classrooms. As part of this study, exemplar material has been developed to make a recommendation regarding the type of multimedia material that could be used in technologically under-resourced classrooms.

### **Opsomming**

Aangesien Engels die taal is wat die meeste as tweede taal in Suid-Afrika gebesig word, raak dit toenemend belangrik vir leerders om die Engelse taal, insluitende die grammatikale strukture van Engels te bemeester; enersyds om goed te doen in hulle interne en eksterne skooleksamens en andersyds om effektief te kan kommunikeer in 'n toenemend verengelsde onderwys-, werks- en ekonomiese gemeenskap. Opvoeders van Engels Eerste Addisionele Taal (EAT) moet baiekeer bestaande handboekmateriaal aanvul, aangesien baie van die nuwe handboeke nie voldoende voorsiening maak vir die kommunikatiewe onderrig en leer van grammatikale strukture nie. Een manier waarop handboekmateriaal aangevul kan word, is om interaktiewe multimedia-leermateriaal te ontwikkel om grammatika te onderrig. Baie Suid-Afrikaanse klaskamers is egter nie voldoende toegerus met rekenaars en ander tegnologiese materiaal wat nodig sou wees om sodanige interaktiewe rekenaar-ondersteunde leermateriaal te gebruik nie. Leerders wat onderrig word in sulke tegnologies swak toegeruste klaskamers mag dus toenemend tekort skiet in vergelyking met hulle meer bevoorregte tydgenote.

Die hoofdoel van hierdie studie was om te ondersoek of hierdie digitale skeiding aangespreek kan word deur die ontwikkeling en gebruik van rekenaar ondersteunde leermateriaal wat, terwyl dit voorsiening maak vir leerder-interaktiwiteit, ook gebruik kan word in klaskamers met minimale toegang tot tegnologie. Om die houdings van opvoeders ten opsigte van grammatika-onderrig in die algemeen, sowel as die gebruik van tegnologie in die leer en onderrig van grammatika; en die algemene beskikbaarheid van tegnologie in Engels EAT klaskamers te ondersoek, is opvoeders aan nege plattelandse, Afrikaans-medium skole geleë in lae-inkomste woonareas in die Wes- en Noord-Kaap gevra om 'n vraelys te voltooi. Die uitslag van hierdie ondersoek is gebruik om vas te stel watter tipe multi-media leermateriaal geskik sou wees vir gebruik in tegnologies swak toegeruste Engels EAT klaskamers. As deel van hierdie studie is voorbeeld-materiaal ontwikkel om 'n aanbeveling te maak rakende die tipe materiaal wat onder hierdie omstandighede gebruik sou kon word.

# **Acknowledgements**

	would	like	to	thank	the	fol	llowing	peop	le:
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Ms R. du Toit, my thesis supervisor, for her guidance and patience;

Ms E. Bergman, for guidance during my first year of the course;

My husband, Mark, my children Aidan and Angela and my mother, Gertrude, for their ongoing support and love.

Grammar is the logic of speech, even as logic is the grammar of reason.

- Richard C Trench

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#### **List of Abbreviations**

CALL: Computer-Assisted Language Learning

FAL: First Additional Language

FET: Further Education and Training

CASS: Continuous Assessment

NCS: National Curriculum Statement

CAPS: Curriculum and Assessment Policy Statement

OBE: Outcomes-Based Education

WCED: Western Cape Education Department

NSC: National Senior Certificate

L1: First Language

L2: Second Language

SLA: Second Language Acquisition

LTSM: Learning and Teaching Support Material

SAIDE: South African Institute for Democratic Education

ICT: Information and Communication Technology

CMC: Computer-Mediated Communication

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#### Chapter 1

#### Introduction

#### 1.1 Introduction

#### 1.1.1 English in South Africa

South Africa is a multilingual country, with eleven official languages and fifteen more mentioned in the constitution (South Africa.info, 2011). English is widely accepted as the country's lingua franca, as it is understood by South Africans across the country and is the dominant language of commerce, politics and the media (South Africa.info, 2011). It is, however, not the most widely spoken home language in the country. The following table (Table 1.1), based on figures obtained from the 2001 census, indicates the distribution of home languages in South Africa:

Table 1.1 Distribution of home languages in South Africa (Source: MediaClubSouthAfrica.com)

Home Language	Spoken as home language by (% of population)
Afrikaans	13.3
English	8.2
IsiNdebele	1.6
IsiXhosa	17.6
IsiZulu	23.8
Sepedi	9.4
Sesotho	7.9
Setswana	8.2
SiSwati	2.7
Tshivenda	2.3
Xitsonga	4.4
Other	0.5

It could be assumed that the distribution of home languages in South Africa, as illustrated in Table 1.1 above, could also be applied to school-leavers. The assumption could therefore be made that most school-leavers in South Africa do not speak English as their home language. However, it is a reality that they need to be proficient in English to be able to enter highly competitive careers or to be accepted at tertiary institutions.

# 1.1.2 The Role of Grammar in the English First Additional Language Learning Programme

The ability to communicate efficiently in English is an important asset in South Africa, as pointed out in the preceding paragraphs. As discussed in more detail in Chapter 3 of the current study, many researchers agree that, in order to communicate meaning successfully at more than a basic level, knowledge of how to build and use certain grammatical structures is needed (Cook, 2001; Swan, 2002; Roach, 2003; Noonan, 2004). Without knowing these structures, second language learners may find communication in the target language challenging. Being able to use grammatical structures appropriately and correctly may also be an important asset in the highly competitive employment market. Therefore, knowledge of grammatical structures and the ability to use this knowledge effectively for communication are becoming increasingly essential for learners, not only to perform well in their English examinations at school, but also to use English for communicative purposes in work, study and even social surroundings.

Currently, it is required of learners of English First Additional Language (FAL) in the Further Education and Training (FET) phase (i.e. Grades 10 to 12) to write three formal examination papers twice a year, in addition to the Continuous Assessment (CASS) activities that they have to complete. Paper 1 tests the learners' comprehension, summary, language and editing skills, Paper 2 tests the learners' knowledge of

prescribed literature and Paper 3 tests the learners' skill at producing a variety of creative and functional writing pieces (Department of Education, 2007).

To pass English in the FET phase learners should score a minimum of 30%, which is calculated by adding together the CASS marks (25% of the final mark) and the formal examination mark (75% of the final mark). Grammatical competence is assessed in Section C of the Language Paper (Paper 1) and, to a certain extent, in the Writing Paper (Paper 3) (Department of Education, 2007).

Because the formal assessment of grammatical structures forms such a small part of the actual total mark allocation, formal grammar instruction is often neglected in the English FAL classroom. The National Curriculum Statement: First Additional Languages (NCS FAL, 2003), as well as the National Curriculum and Assessment Policy Statement: English First Additional Language (CAPS English FAL, 2010)<sup>1</sup>, make provision for the teaching and learning of grammar as one of the four Language Learning Outcomes or Skills (as referred to in the CAPS English FAL), of which Grammar is Outcome / Skill 4.2 However, wide-ranging policy confusion and insufficient support to educators have led to a general misinterpretation of the objectives of Outcomes-Based Education (OBE) on which these curriculum statements are based (Govender, 2009), amongst others in the area of grammar instruction. Educators have seemingly been interpreting the teaching of grammar in English FAL in diverse ways: ranging from not teaching grammar at all, to completely ignoring the directives of the National Curriculum Statement, in using outdated, non-communicative methods to teach grammar. The latter group of teachers may follow traditional methods of grammar instruction and often resist constructivist, learner-centred approaches to learning. They may hold the belief that "communicative skills and metalinquistic awareness can be

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<sup>&</sup>lt;sup>1</sup> In the current study, reference is made to both the NCS English FAL (2003), which is still in use at the time of writing, as well as to the CAPS English FAL, which is to be introduced in Grade 10 from January 2012. At the time of writing, the Subject Assessment Guidelines for Languages (2007) and the Learning Programme Guidelines, Languages (English), 2008, are also still in use.

<sup>&</sup>lt;sup>2</sup> Learning Outcome / Skill 1: Speaking and Listening; Learning Outcome / Skill 2: Reading and Viewing; Learning Outcome / Skill 3: Writing and Presenting; Learning Outcome / Skill 4: Language (NCS English FAL, 2003; CAPS English FAL, 2010)

taught adequately through teacher explanation of grammatical rules, followed by mechanical drills and an occasional communicative exercise" (Blyth, 1997:50).

In addition to the above, the NCS FAL requires learners of English FAL to complete a large number of formal assessment tasks. The compilation and assessment of CASS assignments leave many educators with little time for activities that do not form part of the formal continuous assessment. Once again, this may lead to educators neglecting activities that do not form part of the prescribed programme of assessment, e.g. exercises aimed at improving the grammatical skills of learners. The CASS programme for English First Additional Language as set out in the NCS Subject Assessment Guidelines (SAG) for Languages requires grammar to be tested only once as a formal continuous assessment task in Grade 12. In Grades 10 and 11, learners are not required to write a formal non-examination assessment task to test their knowledge of grammatical structures (Department of Education, 2007). Against the backdrop of this apparent marginalization of explicit grammar instruction by the compilers of the English FAL curriculum, one of the objectives of this study is to investigate whether the negligible role assigned to the teaching and assessment of grammatical structures in the English FAL curriculum is justified, i.e. to come to a conclusion whether grammar should be taught at all and, if so, to make a suggestion how it should be taught for it to enhance the second language learner's ability to communicate effectively in English.

Statistics obtained from the Western Cape Education Department (WCED, 2011) indicate that English FAL learners generally do not score well in the grammar section of Paper 1. Table 1.2 indicates the question analysis of the November 2009 English First Additional Language Paper 1 of the National Senior Certificate (NSC) Examination. The question paper indicated is used to test the learners' comprehension, summary and language skills.

The question breakdown as indicated in Table 1.2 is as follows:

Question 1: Comprehension; Question 2: Comprehension; Question 3: Summary;

Question 4: Visual Literacy; Question 5: Language and editing skills.

Table 1.2 WCED Question Analysis, English First Additional Language, Paper 1, November 2009 Senior Certificate Examination

AVERAGE PERCENTAGE PER QUESTION: ENGLISH FIRST						
	ADDITIONAL LANGUAGE, PAPER 1					
QUESTION:	1	2	3	4	5	TOTAL
						FOR
						PAPER
Max. mark	20	10	10	18	22	80
Average:	58,8%	45,3%	55,5%	66,8%	28,2%	50,0%
WCED						
Number of	29 310	29263	29204	29307	29198	29321
Candidates:						
WCED						
Average:	61,1%	48,6%	59,6%	70,3%	28,8%	52,5%
District						
Number of	5935	5934	5918	5940	5919	5941
Candidates:						
District						

Taking into account the information indicated in Table 1.2 above, it is apparent that in the Western Cape Province, as well as in the district<sup>3</sup> indicated, NSC candidates scored the lowest marks in Question 5, which tested the learners' language and editing skills, i.e. their knowledge and application of grammatical structures (see Addendum A).

The inability of some English FAL learners to grasp, understand and use grammatical structures adequately often has a detrimental effect on their ability to communicate effectively in the target language, amongst others in the area of creative and functional writing, which is referred to as Skill 3 in the CAPS FAL document. To illustrate this

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<sup>&</sup>lt;sup>3</sup> District to be kept anonymous by request of WCED, but known to researcher.

point, examples of two Grade 12 learners' efforts at creative writing are supplied in Figure 1.1 below:

#### Learner A:

#### **FRIENDS**

There is many different kinds of friendship my friends that I have. is very important to me Because they are people like my own sister or family When we are together we spent alot of times one day we have decided to go mall to, and we come their and go to shopping a lot clothes and something like that. And I want to explain the valu of friendship. And friends are their to help you for weeks I am very sick at home and they now it.

#### Learner B:

#### MY ROLE MODEL

My role model are my mom i choose her as my role model because i want, to be just like as hes is. I have a reason why i had made that choose because she good mom, and in our house did she plays too roles mother and father she was always there when we need her. She talent and like to work she did gives us as love and care for us alone. She always said give those how dont have oneday they can help you. My mom is very good person thats why i want, too be just as good personalitie.

Figure 1.1 Examples of Grade 12 learners' writing: September 2010 Examination, Paper 3, English First Additional Language

If one considers that, at the time of writing these paragraphs, these learners have had approximately eight years of formal English FAL instruction and that they have not once failed English up to this stage, it becomes clear that obtaining 30% in the English FAL examination does not necessarily mean that these learners, and others like them, are proficient users of the English language. The challenge for English FAL educators thus remains to improve learners' ability to "use language instructions and conventions appropriately and effectively" for a variety of purposes (Department of Education,

2003:13); not only to prepare them for their school-leaving examination (National Senior Certificate) at the end of their Grade 12 year, but also to prepare them to communicate effectively in various occupational and social situations. It would therefore be beneficial for educators of English First Additional Language to explore ways in which they could assist learners to improve their grammatical abilities. One way to do this may be to use Computer-Assisted Language Learning (CALL<sup>4</sup>) material to teach grammar.

#### 1.1.3 Teaching grammar with technology

To date textbooks have been the learning and teaching support material (LTSM) most frequently used by South African educators of English FAL. After the introduction of Outcomes-Based Education (OBE) in 1998, textbook material also began to reflect a shift from content-based teaching and learning material, to a more learner-oriented approach, based on the attainment of outcomes. However, this paradigm shift also affected the compilation of learning material in the prescribed textbooks, as many of the "new curriculum" English FAL textbooks, e.g. Study and Master English, Grade 11; Oxford Successful English, Grade 11 and Focus on English, Grade 11 and 12, supply the educator and learner with ample reading (Learning Outcome 2) and speaking (Learning Outcome 1) activities, but with fewer activities focusing on the attainment of grammatical skills. Therefore, language educators who wish to teach their learners grammatical structures may have to augment textbook material or even create their own learning material. One way to supplement existing textbook material is for teachers to develop CALL material that would suit their educational needs and the needs of their learners. An example of CALL material that could be developed by educators is supplied in Chapter 5 of this study.

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<sup>&</sup>lt;sup>4</sup> The term CALL will in this study refer to the use of computers and computer technology in language learning in the broadest sense of the term, as done by international organizations like CALICO and EUROCALL. The Department of Basic Education uses the terms e-learning and ICTs when referring to the use of technology in education and these terms, together with CALL, will all refer to the use of different kinds of technologies in education and especially language learning.

In the sections that follow, an overview is given of the use of CALL and e-learning in South African schools and some plans and strategies employed by the South African Department of Basic Education to introduce Computer-Assisted Learning in South African schools are briefly discussed.

#### 1.1.4 Teaching and learning with technology in South African schools

Since the introduction of an outcomes-based approach to education in South Africa, pedagogic emphasis has shifted from being authoritarian and teacher-centred to being more focused on encouraging learners to develop critical thinking. In this educational paradigm, the role of the educator is mainly to mediate learning and to assist learners to acquire knowledge for themselves. In addition to making the paradigm shift required by the National Curriculum Statement (NCS), it is also expected of teachers to be "...mediators of learning, interpreters and designers of learning programmes and materials...and subject specialists" (Department of Education, 2003:5). Educators are thus challenged by the curriculum to find new and innovative ways to teach (Bialobrzeska & Cohen, 2005).

As learners and educators live in a world that is increasingly dominated by electronic media, it is expected of them to become familiar with the use of new technologies in the classroom. It is, however, a reality that many South African schools are underresourced in terms of technology for classroom use. Therefore, some teachers possibly also need support to find practical ways to integrate technology into technologically limited classroom environments.

Furthermore, the expectance that teachers should use electronic media in the classroom has given rise to the question whether teachers generally perceive these technologies to be beneficial to the teaching and learning process. While there may be claims to the contrary, some research findings have shown that there may be a perception amongst some South African educators that using computers in the

classroom may enhance teaching and learning. In one such study, conducted by the South African Institute for Distance Education (SAIDE) in 2003, 60 educators from 21 schools situated in both rural and urban areas in KwaZulu Natal, Gauteng and the Western Cape reported that having computers in their schools benefited them, their learners, their schools and their communities (Bialobrzeska & Cohen, 2005).

However, even if educators are of the opinion that their teaching will be enhanced by the use of technology, they have to know how to use these technologies to support teaching and learning. They therefore need to reassess the nature of the learning process in their classes (Bialobrzeska & Cohen, 2005). This implies that educators must be willing to make changes to the way that they teach, as well as equip themselves to make use of technologies in the classroom, in order to enhance the process of teaching and learning with the use of technology.

#### 1.1.5 Plans and strategies employed by the Department of Basic Education

The plans and strategies of the South African Department of Basic Education with regard to e-learning and the use of Information and Communication Technology (ICT) in education are stated in the White Paper 7 on e-learning, entitled *Transforming Learning and Teaching through Information and Communication Technology*, which appeared in the Government Gazette, 2 September 2004. In this White Paper, it is stated that 6,4% of South Africans have access to and use the Internet, compared to 72% of United States citizens. It is further stated that the disparities in South African society are expressed in the degree to which ICTs are integrated into education. At the time when White Paper 7 was gazetted, more than 19 000 South African schools did not have computers for teaching and learning. While making provision for the possibility that this scenario may have changed in recent years through government and private sector intervention, these figures may still imply that a significant number of learners, including learners of English FAL, may currently not have regular access to the Internet or computers. Developers of electronic learning and teaching support material, whether educators or commercial software development companies, should take this possibility

into account, if such material is to be developed to be used as a teaching and learning aid by educators.

In the above-mentioned White Paper on e-learning, it is further stated that the educational focus on "production of materials, resources and learning experiences, that may include the use of the Internet; CD-Rom; software; other media and telecommunications" (Department of Education, 2004:13) is one of the aims of e-learning. In 2005, the Western Cape Education Department (WCED) also released the *Five Year Strategic and Performance Plan 2005/6 – 2009/10*, in which it announced the implementation of training programmes in the use of ICTs for educators across all learning areas. The Strategic plan of the WCED affirms that "...the WCED will develop its internal capacity, especially among teachers, to prepare for the use of curriculum digital content..." (Department of Education, 2004:7) "... to ensure that educators are trained in the use of ICTs to support their teaching programmes" (Department of Education, 2004:21).

An example of a training programme as mentioned above, is the *Intel* ® *Teach to the Future Training Course*, which focuses specifically on the compilation of interactive learning material, where educators are taught skills to help learners to complete a well-researched project using either Microsoft PowerPoint® or Microsoft Word®, or by designing a website. As part of the training, educators are taught how to perform the activities themselves, before facilitating the projects in the classroom - hence the programme slogan "train the trainer." Despite the positive aspects of the course, which essentially supplies educators with the skills to use computer technology as part of their lessons, there are also some factors that, in some instances, may hamper the implementation of the projects. The drawbacks of implementing this programme may be, amongst others, that many schools do not have computer laboratories; computer laboratories are often not accessible to language educators and learners, i.e. computer laboratories may be maximally utilized by educators and learners of subjects other than languages, e.g. Mathematics, Physical Science or Computer Application Technology; many learners cannot complete the activities at home, because they do not have

access to a home computer; many educators are not sufficiently computer literate and may find it extremely challenging to assist the learners to compile the final project.

In an attempt to improve the computer literacy of educators, the Western Cape Education Department, in partnership with *Microsoft*, has launched a training programme for educators called *Microsoft Partners in Learning*. This training programme endeavours to train educators to utilize *Microsoft*-based programmes in the classroom and for administrative purposes. The programme content encompasses a range of computer user skills, from the most basic to more intermediate and advanced skills. In this programme, teachers are used as peer educators. In spite of these positive aspects, many of the skills obtained in this programme could go to waste if educators do not have the means to employ them in the classroom.

Other initiatives taken by the Department of Education to foster e-learning in schools include electronic content resources like *Mindset*, which develops content resources and makes it available via satellite television. The Department of Basic Education also supplies supplementary Internet, multimedia and print supplements, specifically aimed at Grade 12 learners. This includes a Telematics programme that has been developed in conjunction with the University of Stellenbosch. Another initiative by the Education Department is *Thutong*, an educational Internet portal that provides digital content resources to educators.

In spite of the above-mentioned and other initiatives taken by the Department of Basic Education in the field of e-learning, there is often a "strong contrast between e-learning ideals that have been put forward by education policy makers in South Africa, and the realities and challenges facing e-learning practitioners in rural and disadvantaged areas of the country", as pointed out by Conradie and Roodt (2004:1).

The Department of Basic Education concedes that "there is a gap in the ability of learners and teachers to use...technologies effectively, to access high-quality and

diverse content, to create content of their own and to communicate, collaborate or integrate ICTs into teaching and learning" (Department of Education, 2004:11).

#### 1.1.6 The Digital Divide

According to Gudmundsdottir (2010), in a paper called *From digital divide to digital equity: Learners' ICT competence in four primary schools in Cape Town, South Africa,* the term *digital divide* is generally used to describe the disparity in access to and use of information and communication technology.

Another, yet comparable, definition of the term *digital divide* is supplied by Brett & González-Lloret (2009:366), who refer to the digital divide as a "two-tiered system in which those with access to technology are given an unfair advantage over those without."

Already in 2002, Herselman & Britton referred to the "knowledge gap or digital divide" at learner level in South Africa in terms of "resource advantageous...learners on one side of the spectrum and resource-deprived...learners at the opposite end" (270). They voice the concern that an increasing percentage of South African learners could find themselves becoming resource-disadvantaged learners. In effect, Herselman & Britton (2002) argue that South African learners who do not have adequate access to technology in the classroom suffer an unfair disadvantage, compared to those who have access to technological resources in the classroom.

As can be seen, this divide is very relevant to the South African educational scenario, not least in the field of second language education. Although learners live in a technologically dominated world and may expect technological stimuli in the classroom, not all schools are adequately resourced in terms of computers and Internet connectivity for use in the English First Additional Language classroom. It could therefore be argued that many South African language classrooms remain technologically barren as a result of the digital divide.

Furthermore, one could argue that the utilisation of computers in the learning environment is a result of the increasing computerisation of society in general. Learners are increasingly compelled by the sociocultural environment in which they live to use computer technologies, which would, in turn, have an effect on the way that they express their thoughts. There could, however, be a dichotomy between a social reality where computers have become dominant instructional tools and their own socioeconomic reality, where exposure to computer technology is, at best, minimal. These learners run the risk of falling behind their more fortunate peers in terms of the learning of technological skills, unless this rift, or digital divide, can be addressed, even if only to a certain extent, in the classroom. It remains a challenge for educators to overcome these barriers and to find ways to integrate technology meaningfully into the teaching and learning of languages.

#### 1.2 Research problem

How could educators of English First Additional Language employ interactive CALL material that focuses specifically on the teaching and learning of grammar in schools where there are limited computer resources?

#### 1.3 Aim of the study

The aim of the study is to investigate whether it is possible for English FAL educators who work in schools where there is a shortage of technology to implement certain CALL concepts like Computer-Mediated Communication or autonomous learning environments to use CALL material that focuses mainly on a communicative approach to the teaching of grammar in learning and teaching support material as set out in the NCS English FAL, as well as in the CAPS English FAL.

In order to ascertain whether said CALL material could be used in the way described, the attitudes of a sample group of English First Additional Language educators towards grammar instruction and CALL, their level of computer literacy, as well as the accessibility of CALL material and other relevant technological tools in their schools will be investigated by means of a questionnaire (Appendix B i). These aspects are discussed in more detail in Chapter 5 of this study.

In the following section, an overview of the chapters will be supplied:

#### 1.4 Overview of the Chapters

In Chapter 2, literature will be reviewed to ascertain the theoretical principles that would underpin the CALL material to be developed for the purpose of this study. In this chapter, an overview of theories of learning, as well as theories specific to second language acquisition are included. Although the learning theories of Behaviourism, Cognitivism and Constructivism will be discussed, special emphasis will be given to Constructivist learning theory, as this is the theory ascribed to by the South African National Curriculum Statement. Furthermore, methods of and approaches to language and grammar instruction will be reviewed at the hand of current literature, as well as approaches typically relevant to the teaching of grammar in the second language classroom.

Because the CALL material to be developed for the purpose of this study will focus on the teaching of grammar, Chapter 3 will present a literature review on the topic of the teaching of grammar, specifically in the additional language scenario. In this chapter, various definitions of grammar will be supplied, as gleaned from literature in the field of language learning and teaching. The question of whether and how grammar should be taught in the second language classroom will be investigated. Some approaches to the teaching of grammar will be discussed, as well as the role of grammar in the NCS English FAL.

In Chapter 4, Computer-Assisted Language Learning (CALL) will be discussed. Firstly, a historical overview of the development of Computer-Assisted Language Learning will be given. In this chapter, it will also be investigated how CALL ties in with various theories of learning. The use of Computer-Mediated Communication (CMC) will be discussed, as well as alternatives available to educators who may find the employment of CMC challenging, as a result of limited ICT resources.

In Chapter 5, the sample group for the survey to determine educators' interest to use CALL materials and the technology available to them is described. A description is given of the method of data collection, i.e. a questionnaire, as well as an analysis of the responses to the questions posed in the questionnaire. An example of a series of lessons that incorporates CALL material to teach grammar in the one-computer classroom scenario, based on the literature review and the findings of the survey is presented at the end.

Chapter 6 supplies an analysis of the research findings and suggestions for further research.

#### **Chapter 2**

Literature Review: Learning Theories

#### 2.1 Introduction

Educators should be aware of the different theories that strive to explain how learning takes place, in order to ensure that teaching has been performed successfully. Learning theories abound, and the generally accepted view of how learning happens has changed several times over the last hundred years. In this chapter, an overview of some theories of learning that have been popular over the last century will be given. In addition to general theories of learning, some theories that pertain specifically to the acquisition or learning of a second language will be discussed. Furthermore, methods and approaches of language and grammar instruction will be reviewed at the hand of relevant literature, as well as approaches typically applicable to the teaching of grammar in the second language classroom.

As mentioned in Chapter 1, the focus of this study is to investigate whether CALL material suitable for use in technologically challenged classroom environments would be useful in the teaching of EFAL grammar and whether said CALL material could be developed within the theoretical framework of the NCS. According to Alessi & Trollip (2001:16), the development of "effective materials (in any medium) that facilitate learning require an understanding and appreciation of the principles underlying how people learn." More specifically referring to the design of instructional multimedia, they advise that "(t)he underlying basis of designing instructional multimedia is the theory of learning." (Alessi & Trollip, 2001:41) This implies that there should ideally be a link between the philosophies of learning and the development of educational software.

#### 2.2 Learning Theories

Even though there is a clear distinction between general theories of learning and the learning theories that pertain specifically to second language learning, general learning theories are often applied in the teaching and learning of additional languages. In the following section, the most popular learning theories of the last century are discussed, as well as their application in the field of second language learning. This is followed by an account of some theories of second language learning.

The major learning paradigms that were developed in the course of the twentieth century are the Behaviourist, Cognitive and Constructivist learning theories. In this chapter, these three theories are discussed, as it is proposed that learning material, including CALL material, should not necessarily be based exclusively on one of these theories, but could take on an eclectic approach, i.e. it could include activities based on more than one theory of learning, depending on the type of activity and the desired outcome (Dexter, 2002).

Support for this inclusive approach is evident from literature on the subject: Alessi & Trollip (2001:40, 41), advise educators to "adapt an eclectic approach to instruction, eschew labels such as objectivist or constructivist, and use a combination of all available methodologies and approaches." Similarly, Levy & Stockwell (2006: 27) argue that there has recently been a tendency by the designers of CALL material to "draw on two or more theoretical perspectives." Cook (2001:181) gives additional support for the utilization of more than one learning theory when stating that "(n)o single (educational) model at present covers all the teacher's needs."

Further support for the notion that the design of learning material could be based on a range of learning theories is supplied by Jonassen (1994), who makes a distinction between stages of learning, which he matches up with learning theory approaches. In essence, this means that an educator could elect to use different learning theory approaches, depending on the learning stage attained by the individual learner. In the first stage, which Jonassen (1994) labels *Introductory Learning*, learners may have little

prior knowledge of the subject. The most suitable theoretical approaches at this stage would thus be either behaviourist or cognitive. The second stage, *Advanced Knowledge Acquisition*, follows on the first. In this stage, the learner may not yet possess expert knowledge of the subject and it is suggested that constructivist approaches may be introduced at this stage, in conjunction with behaviourist and/or cognitive approaches. In the third stage, *Expertise*, the learner is able to make informed decisions on the subject at hand. At this stage, the educator may employ constructivist approaches exclusively (Jonassen, 1994).

As the principles of the NCS FAL (2003), as well as the CAPS English FAL (2010), are primarily influenced by Constructivist Learning Theory, it is proposed that the CALL material to be developed as part of this study will, to a major extent, be influenced by constructivist principles of learning and teaching, while incorporating elements of behaviourist and cognitive theories of learning.

In the next section of this chapter, behaviourist, cognitive and constructivist learning theories will each be discussed separately, mainly to give an overview of the theories and to indicate how these theories relate to language learning and teaching.

#### 2.2.1 Behaviourist Learning Theory

The learning theory of Behaviourism is essentially based on the idea that learning takes place when an individual's behaviour is modified in response to events (stimuli) taking place in his or her environment (Beatty, 2010); where the new behavioural pattern is repeated until it becomes automatic. In a behaviourist approach, the mind is seen as a black box and the learner as an empty vessel that could be filled with knowledge by the educator, not taking into account any possible thought processes that may occur in the mind of the learner and which may influence the process of learning (Demízerin, 1988). In this way, behaviourists consider learning to be an overt behaviour that can be observed and measured by somebody else.

Furthermore, behaviourist theory holds that, although it is impossible to observe the thought processes that occur in the mind of the learner directly, it is possible to observe what goes into the mind (stimulus) and the response elicited by that stimulus. .

Behaviourist theory also places emphasis on the consequences of the response (reinforcement). Essentially a theory of psychology, behaviourism focuses on responses that are overtly observable, i.e. those that can be perceived, recorded and measured objectively (Brown, 2000). The behaviourist theorist Twaddell (1935, as cited in Brown, 2000), stated that "(t)he scientific method is quite simply the convention that mind does not exist..." Such an extreme expression of behaviourist principles reinforces the idea that prior knowledge does not play any role in the acquisition of new knowledge. In the context of second language acquisition, this would imply that first language proficiency plays no role whatsoever in the acquisition of a second language.

Learning, in the behaviourist view, is the establishment of habits that are a consequence of reinforcement and reward. This implies that a highly complex task, such as the learning of a second language, may be mastered by breaking it down into smaller units or chunks, which may lead to the formation of habits as correct or incorrect responses are rewarded or punished (Brown, 2000).

The role of the educator, in the context of behaviourism, is to supply stimuli and reinforcement that would lead to the desired response and subsequent behavioural change (learning) in the learner. The educator is viewed as the expert on the subject, whereas the learners are seen as the passive recipients of knowledge (Beatty, 2010); consequently teaching approaches and methods based on behaviourist learning theory can be described as being teacher-centred. Central to Behaviourist Learning Theory is the premise that the educator makes all the decisions concerning the content to be taught, as well as skills to be tested, which allows for no or very little learner autonomy. The use of such methods would not take into account any prior knowledge that the learner may have on the subject at hand (Beatty, 2010). For example, the language educator following behaviourist principles, would most probably view language learning

not as the result of problem solving, but as a mechanical process which leads to habit formation. Language learning is thus controlled by the consequences of behaviour. In this paradigm of learning, learning only comes about as a result of positive or negative reinforcement, which bring about conditioning and, ultimately, the formation of habit. In this approach, feedback is very important, the more immediate, the better. As behaviourist theory accepts that learning can be the same for each learner, all the learners could get the same learning material and should be able to progress at the same pace.

Although behaviourist theory is often applied to the study of first language learning, behaviourist-inspired methods and approaches have also been applied in second-language classrooms. Research in the field of second language learning suggests that the learning of a second language is closely linked to first language acquisition (Ortega, 2009); therefore it is not surprising that the same theoretical framework has been used in both first and second language classrooms.

According to Demízerin (1988), the use of behaviourist theory and principles in language learning and teaching has received considerable criticism, notably because its emphasis on imitation does not make provision that human beings may learn at different rates and would not necessarily imitate new structures at the same rate. Furthermore, the behaviourist practice of habit-formation exercises may actually be detrimental to second language learning, as it may inhibit the learner's intrinsic ability to produce language. Similarly, the compulsive rote learning of grammatical rules and drills may inhibit the spontaneous and creative use of language structures in new situations. Additionally, behaviourist theory does not explain how social influence affects learning and it does not take into account that language learning is a highly complex process in which unobservable intervening variables may occur between stimulus and response (Demízerin, 1988).

In recent years, a purely behaviourist approach to learning and teaching has become virtually defunct, as learning theorists increasingly started to explore theories that are

more centred on the individual learning process. However, Jonassen (1994) suggests that behaviourist methods and approaches or learning material influenced thereby, may still have a place in the teaching and learning process and could be used when learners have very little prior knowledge about a skill or content area. Tasks that may be included when following such an approach, would typically require a low degree of processing, e.g. paired association, discriminations or rote learning. Newly taught knowledge would be tested frequently, which would serve as a method of reinforcement (Jonassen, 1994).

In the following section, two learning theories that are more concerned with how learning takes place in conjunction with cognitive and social factors, i.e. Cognitive Learning Theory and Constructivist Learning Theory, are discussed.

#### 2.2.2 Cognitive Learning Theory

Cognitive Learning Theory was developed as a response to perceived insufficiencies in the behaviourist approach. One of the criticisms against behavioural psychology was that certain social behaviours were left unexplained by it, e.g. the ability of individuals to model behaviour observed in others. These perceived shortcomings in behaviourist theory influenced some learning theorists to diverge from the traditional operant conditioning principle that learning only takes place as a result of reinforcement.

Cognitive theory began to surpass Behaviourism during the 1970s as the leading paradigm of learning psychology (Alessi and Trollip, 2001:19).

Cognitive theory assumes that insight and intentional patterning play a role in the ultimate responses performed by learners. According to proponents of the cognitive approach, one of the main features of second language acquisition is the construction of a system of knowledge that can eventually be used involuntarily for speaking and understanding. According to Altenaichinger (2003), a second language is acquired when learners have built up a knowledge system, which can be called upon automatically for speaking and understanding. Consequently, when learners

automatically use learned features of the second language, it may be the result of knowledge that the learner has acquired previously, or it may be possible that the new knowledge fits into an existing system, e.g. the learners' first language (Altenaichinger, 2003).

The adoption of cognitive philosophy to replace behaviourist theory gave rise to numerous theories of learning which are underscored by cognitive principles. In the next section, three of these theories are discussed, i.e. Piaget's Cognitive-Developmental Theory, Bandura's Social Learning Theory and Vygotsky's Theory of Social Development.

#### 2.2.2.1 Piaget's Cognitive-Developmental Theory

Jean Piaget, a Swiss psychologist, formulated the Cognitive-Developmental Theory, that established him as one of the most pivotal figures in modern psychology (Tryphon & Voneche, 2007).

According to Piaget's theory, children move through developmental stages which represent increasingly comprehensive ways of thinking. In this way, children are continually exploring their environment, in order to construct new ways to deal with it (Crain, 2000).

Piaget proposed four developmental periods, through which children may pass at different rates (Crain, 2000:112, 113). Although Piaget ascribed ages to each of the developmental stages, Crain (2000:112) emphasizes that these stages reflect "comprehensive ways of thinking", rather than being solely determined by the learner's age, as they deal with the nature of developmental change and are not genetically determined.

Piaget's General Periods of Development can be summarized as follows:

Table 2.1 Piaget's Periods of Development (Adapted from Crain, 2000:113)

Developmental	Age range	Cognitive Development
Period		
Period I:	Birth - 2 years	Physical action schemes, like sucking,
Sensori-Motor		grasping and hitting are organized to
Intelligence		deal with the immediate world.
Period II:	2 – 7 years	Symbols and internal images are used
Preparational Thought		for unsystematic, illogical thinking,
		which is different from that of adults.
Period III:	7 – 11 years	The capacity to think systematically is
Concrete Operations		developed, but only in reference to
		concrete objects and activities.
Period IV:	11 –	The capacity to think systematically,
Formal Operations	adulthood	abstract and hypothetically is
		developed.

Although Piaget did not focus exclusively on education or language learning, some elements of his theory could be considered when designing CALL material to teach grammar to learners of English First Additional Language (FAL). For example, when developing such learning material, the developer should take the age range of the learners into account, when deciding how to present the grammatical rules included into the learning material.

The learning material that will be developed as part of this study will be aimed at learners in the FET stage (Grades 10-12). These learners would therefore fall into Piaget's period of Formal Operations and should, according to this theory, be able to think systematically, abstract and hypothetically. They should, for example, be able to

grasp a concept like Active and Passive Voice and to apply the grammatical rules in context.

#### 2.2.2.2 Bandura's Social Learning Theory

Central to Bandura's Social Learning Theory is the premise that people often learn more rapidly by observing the behaviours of others. This suggests that learning may take place as the result of an inner representation that guides the performance of the learner (Crain, 2000). Bandura theorized that social observation teaches people what the possible consequences of an action may be - a process that he called vicarious reinforcement (Crain, 2000).

Bandura argues that a model cannot be imitated unless close attention is paid to it. This could only happen if the learner perceives the model to be of sufficient interest. Bandura found television to be a very powerful presenter of models with appealing characteristics that are readily imitated (Bandura, 1977, as cited in Crain, 2000). Taking this notion into account, a developer of learning material would have to ensure that the learning material is designed or presented in such a way that learners would want to pay close attention to it, in order to imitate or learn the learning component presented.

In order for models to be imitated some time after observation, there has to be a way for learners to remember their actions in symbolic form, as humans tend to remember events best when associating them with verbal codes. Bandura termed this concept stimulus contiguity (Crain, 2000). Subsequently, when developing learning material, it would have to be kept in mind that actions and words or symbols should be employed simultaneously, to ensure that learners remember and imitate them later.

Bandura makes a distinction between language acquisition and performance of new responses. This implies that learners may see and learn about new grammatical

structures, for example, but may not necessarily use them. Actual performance of new knowledge may depend on reinforcement and motivational variables.

Patsula (1999) suggests that, when designing instructional material that adheres to the principles of the Social Learning Theory, designers should aim at teaching students how to model cognitive processes and behaviours by making use of real-world problems. In this regard, Patsula (1999) suggests two types of modelling, i.e. behavioural modelling, which demonstrates how the activities should be done and cognitive modelling that refers to the reasoning that learners should use while performing the activity.

# 2.2.2.3 Vygotsky's Theory of Social Development

According to Lev Vygotsky's Theory of Social Development, learning depends on the sociocultural environment, without which the mind would not develop (Hall, 2007) An important concept in this theory is that cognitive development potential is limited to a specific time span, which Vygotsky termed the zone of proximal development. According to Vygotsky, the zone of proximal development has three learning stages that range between the lower limit of the learner's knowledge and the upper limits of what the learner potentially could accomplish. These learning stages can be summarised as follows:

- Stage 1: assistance provided by more capable others (e.g. teacher);
- Stage 2: assistance by self;
- Stage 3: internalization; automatization and
- Stage 4: de-automatization: recursiveness through prior stages.

Vygotsky claimed that the most efficient instruction takes place when activities are performed within a learning environment perceived as supportive and when appropriate guidance, mediated by tools, is given to learners (Patsula, 1999). Some proponents of this theory regard language as the most important sociocultural tool, as it is used by the expert to teach the learner how to use other tools (Hall, 2007). The instructional tools

mentioned can include "cognitive strategies, mentors, peers, computers, printed materials or any other instrument that organizes and provides information for the learner" (Patsula, 1999). These tools would support learners to complete a task near the upper end of their zone of proximal development. This support could be systematically withdrawn once the learner has moved to a higher level of confidence.

In the next section, some key concepts in Cognitive Learning Theory will be discussed briefly.

# 2.2.2.4 Key Concepts in Cognitive Learning Theory

The following key concepts in Cognitive Learning Theory, i.e. Information Processing, Semantic Networks, Schema Theory and Dual Coding, aim to explain how knowledge is acquired and retained in individuals:

Alessi & Trollip (2001:19) identify the concept of *information processing* as being the most dominant school of cognitive learning psychology. According to this approach, input is firstly entered into a sensory register, where information is retained for up to four seconds, before it decays or is replaced. Some sensory input may be transferred form the sensory register to the short-term memory, where it may be retained for up to 20 seconds or more. Integral to the concept of short-term memory is the notion that 5 to 9 (7 plus or minus 2) items or chunks of information can be stored in short-term memory at any given time. Information from short-term memory may be stored in long-term memory, which has unlimited capacity. Some of this retention may be the result of learning practices such as rote memorization and over-learning.

The cognitive theory of *semantic networks* equates the learning process to the biological view of the connections in the human brain. In the same way that brain cells are interconnected, pieces of information or nodes are theorized to be linked in a vast network. All cognitive activities are deemed to be the result of nodes being activated by other nodes that continue to activate other information. The assumption made by this

school of thought is that prior knowledge is crucial for the acquisition of new knowledge (Alessi & Trollip, 2001). Cognitive theory recognizes that responses are also the result of insight, which can be directed to the concepts behind language, such as traditional grammar and to the communicative functions of language. When learners practise a variety of activities in novel situations, assimilation of what has previously been learnt will follow. This may create further situations in which existing language resources are insufficient, so that the learner will have to modify or extend existing language resources. Cognitive theory therefore recognizes that learning could take place through the mistakes made by learners.

Another dominant cognitive school of thought is the concept of *schema*, which refers to an internal structure of knowledge, where new information is compared to existing cognitive structures. This internal knowledge structure is used to comprehend and organize information in long-term memory. According to this theory, learning takes place when schemata are adapted to incorporate new knowledge, or when new knowledge is modified to accommodate existing schemata (Landry, 2002). In second language learning, this would imply that, when learning new concepts in the second language, the learner should be able to draw upon similar concepts in the first language, in order to facilitate the understanding of the new concept.

The theory of *dual coding* proposes that new information is remembered more easily when presented in both verbal and non-verbal format. (Paivio, 2006). Central to this theory is the premise that human cognition involves two specialized cognitive subsystems, one of which is dedicated to language processing, whereas the other subsystem deals with non-verbal information. Paivio (2006:3) refers to the enhancement of learning through the employment of non-verbal cues as "the concretisation of knowledge through imagery and pictures." The application of dual coding in instructional design would thus entail the use of both words and images.

The concept of cognitive learning theory, as proposed by theorists like Bandura, Piaget, Vygotsky and others, is closely linked to constructivist learning theory, which is discussed in the next section of this study. Constructivist learning theories, of which the

basic premise is that learners construct their own knowledge, particularly developed out of Piaget's theories of cognitive development (Hall, 2007). Additionally, Constructivism is also closely tied to the Vygotskian principle that learning develops within a social environment (Hall, 2007).

### 2.2.3 Constructivist Learning Theory

When eighteenth-century philosopher Giambattista Vico published a treatise on the construction of knowledge between 1710 and 1712, in which he asserted that humans can only understand knowledge that they have constructed themselves, he expanded on an educational philosophy that had been around many years before his time (Von Glasersfeld, 1996).

#### 2.2.3.1 Some definitions of Constructivism

Constructivism, as a theory of knowledge and learning, describes learning as a selfregulatory process, where the learner constructs new representations and models of reality from existing personal models of the world. Fosnot & Perry (2005) emphasise that constructivism is not a description of teaching, but rather a theory about learning: They emphasise that one should not regard learning as the result of development; but should rather view learning and development as being the same thing, as learning constantly compels the learner to reorganise existing knowledge. Introducing constructivist principles into the teaching and learning process would imply a rejection of the traditional notion that exact copies of teachers' knowledge and understanding can be incorporated by learners for their own use; the idea is rather that learners construct their own knowledge (Fosnot, 2005). In this way, learners assess constantly how the activities they are performing as part of their learning process are helping them to gain understanding of the topic at hand. Generally, the adoption of constructivist principles in the learning environment allows students to use techniques like experiments and real-life problem solving to create more knowledge and to reflect on or verbalise how their understanding of something is changed (Fosnot, 2005)

The basic principles of constructivism are characterised by Cooper (2007) as being: "(i) The use of prior knowledge for new learning; (ii) active involvement in the learning process though problem solving; and (iii) knowledge which is continually changing." Constructivist principles are thus underscored by the idea that learning is an active process, where the learner constantly uses sensory input to construct meaning, in effect "learning as they learn" (Can, 2009).

Similarly, Levy & Stockwell (2006:122) assert that, in the constructivist view on learning, each learner forms their own version of knowledge, because people learn optimally through active exploration. Furthermore, interaction between learners and their peers is an essential element of the learning process, as learning occurs within a social context (Levy & Stockwell, 2006).

In their definition of constructivism, Alessi & Trollip (2001) contrast constructivism to objectivist philosophy. In the objectivist view, learning could be described as the process of interpreting the objective (real) world through our senses and responding appropriately to occurrences in the real world. Constructivist learning theory, in contrast, recognizes that knowledge is constructed in the head of the learner, and is not received from an outside source. This idea is reiterated by Can (2009:61): "We have to recognize that there is no such thing as knowledge 'out there' independent of the knower, but only knowledge we construct for ourselves as we learn."

In this regard, Von Glasersfeld (2005:5) states that "...we cannot afford to forget that knowledge does not exist outside a person's mind."

Within constructivism, there are different schools of thought, e.g. radical constructivism, social constructivism and moderate constructivism. In its most radical form, constructivist theory holds that only the individual's own interpretation of the external world matters in the acquisition of knowledge (Von Glasersfeld, 2005), whereas, according to the social constructivist school of thought, learning is inherently social. Moderate constructivism holds that a real world does exist independently of the individual, yet the individual's experience of reality would differ from that of others,

confirming that there is no objective truth. This, in turn, suggests that the results of learning may be different for each individual learner and, as humans can never know what the exact nature of the real world is, it is only the interpretations of the individual that matter (Allesi & Trollip, 2001).

### 2.2.3.2 The constructivist classroom

In the constructivist paradigm, learners are empowered to take ownership of ideas. In this view, it is accepted that teachers have control over what they teach, but not on what and how their learners learn (Brooks & Brooks, 1999). The teacher therefore takes on the role of facilitator (Von Glasersfeld, 2005; Beatty, 2010), whereas the learners act on and in their environment and take control of the learning process. Von Glasersfeld (2005:7) calls this a modification of the teacher's attitude, which he describes as "the realization that students perceive their environment in ways that may be very different from that intended by the educators."

To create a constructivist learning environment, the educator should emphasise the process of learning, rather than the process of teaching. Learners should be allowed choice and negotiation of goals, strategies and methods of assessment, which should be primarily formative. In the constructivist classroom, learners should ideally be allowed time to reflect on their performance and they should take ownership of learning activities. In this regard, Fosnot & Perry (2005:34) suggest that "reflection time through journal writing, representation in multisymbolic form and/or discussing connections ... may facilitate reflective abstraction." Furthermore, the constructivist educator should view contradictory statements made by learners as part of the learning process (Brooks & Brooks, 1999, Fosnot & Perry, 2005) and should regard errors as an essential part of the learning process that should not be avoided or trivialized.

The adoption of constructivism as dominant learning paradigm challenges educators to create a different teaching and learning environment, where they, as well as their learners, can explore constantly. (Brooks & Brooks, 1999). In South Africa, this paradigm shift was brought along with the adoption of Outcomes-Based Education.

Sesemane (2008: 65) identifies certain differences between the traditional and the constructivist classroom. These differences are summarised in the following table (Table 2.2):

Table 2.2 Differences between the traditional and the constructivist classroom (Sesemane, 2008)

Traditional classroom	Constructivist classroom
Learners mostly work alone.	Learners work primarily in groups.
Curriculum is presented in part to	Curriculum is presented as whole to part,
whole; basic skills are emphasised.	with the emphasis on the big concept.
Knowledge is inert.	Knowledge is active, situated in living
	worlds.
Strict adherence to a fixed	Pursuit of learner questions is highly
curriculum is highly valued.	valued.
Learning occurs with programmatic	Meaningful learning is useful and
repeated activities.	retained, building on what the learner
	already knows.
Curricular activities rely heavily on	Curricular activities rely heavily on
textbooks and workbooks of data	primary sources.
and manipulative materials.	
Learners are viewed as empty	Learners are viewed as thinkers with
vessels, into which information	emerging theories about the world.
could be poured.	
Teachers generally behave in a	Teachers generally behave in an
didactic manner, disseminating	interactive manner, mediating the
information to learners.	environment for learners.
Teachers seek the correct answers	Teachers seek the learners' point of view
to validate learner lessons.	in order to understand how learners learn.
Assessment of learner learning is	Assessment of learner learning is
viewed as separate from teaching	connected to teaching and occurs
and occurs almost entirely through	through observation of learners at work
testing.	and through exhibitions and portfolios.

The following section gives an overview of how constructivist principles are recognised in the NCS.

# 2.2.3.3 Constructivist Theory as encompassed in the National Curriculum Statement

The NCS FAL (2003) essentially adheres to constructivist principles. In the learning field of Generic First Additional Language, which for most South African learners is English, language is described as a tool which should be used to allow learners to "think and acquire knowledge, to express their identity, feelings and ideas, to interact with others, and to manage their worlds" (Department of Education, 2003:9). In propagating the notion that language should be used for critical and creative thinking, the NCS FAL "recognizes that knowledge is socially constructed through the interaction between language and thinking" (Department of Education, 2003:10). It is further stated in the NCS FAL that learners should learn to "use language appropriately in real-life contexts ... express ... their own ideas, views and emotions confidently ... to become independent and analytical thinkers" (Department of Education, 2003:10). This description of the language learning process adheres to the constructivist paradigm, as it allows learners to manage their own learning experience. In addition to the above, the communicative value of language and its role in fostering independent, critical thought in learners are emphasised by the NCS FAL.

The underlying constructivist principles of the NCS FAL are also present in the CAPS FAL, which is to be introduced in the FET phase in Grade 10 in 2012. It is clearly stated in the CAPS FAL (2010:10) that "language is a tool for thought and communication." The specific aims identified in the CAPS FAL include that the learning of an additional language should equip learners to obtain the language skills they need for accurate and appropriate communication and to be able to use the language to "find out more about the world orally and in writing" (Department of Basic Education, 2010:12). The aim of

teaching should also be to encourage learners to become life-long learners. Furthermore, it is stated in the CAPS FAL (2010) that language learning, including the learning of an additional language, should equip the learners to make sense of their world, which is a key concept of constructivist theory.

In the CAPS FAL, the statement is made that "this curriculum aims to ensure that children acquire knowledge and skills in ways that are meaningful to their own lives" (Department of Basic Education, 2010:5). This implies that learning should not be done in isolation, but that it should be made relevant to the learners' broader life experiences. Problem-solving and critical decision making, the ability to learn co-operatively as part of a group and learner self-organisation are highlighted as important educational skills that learners should acquire through the curriculum (Department of Basic Education, 2010:6-7). Like the NCS FAL, the CAPS FAL is based on the principles of social transformation, active and critical learning and progression of content and context of subjects from simple to complex (Department of Basic Education, 2010:6).

In conclusion, the learning theories as described in the preceding section of this study are usually applied to the general process of learning in humans, including how humans learn languages. There are, however, theories that are especially relevant in understanding how additional languages are learnt. Some of these theories of second language learning are discussed in the next section:

### 2.3 Theories of second language learning

Some theorists who made a considerable contribution to the field of second language acquisition are Stephen Krashen (Input Theory); Noam Chomsky (Universal Grammar Theory) and John H. Schumann (Acculturation Theory). In the sections that follow, these theories, as well as the concept of fossilization, as put forth by Larry Selinker, are briefly discussed:

### 2.3.1 Stephen Krashen's Input Theory

Stephen Krashen based his theory, also known as Krashen's Monitor Model, on a set of five basic hypotheses, which are briefly described below.

The Acquisition-Learning Hypothesis theorises that language acquisition and language learning are separate processes. Acquisition refers to a subconscious process that is identical to the process that children utilize when acquiring their first language (Mitchell & Myles, 1998). Acquisition requires meaningful interaction in the target language and emphasis is placed on meaning rather than on form (McLaughlin, 1987). Learning, according to this hypothesis, is the product of formal instruction and it involves a conscious process, which results in conscious knowledge about the language, e.g. knowledge of grammatical rules. According to this hypothesis, acquisition is more important than learning (Schütz, 2007).

The Monitor Hypothesis explains that the function of learning is solely to act as a monitor or editor. This monitor is the result of the grammatical rules that have been learnt. Through employing the monitor, the learner is able to correct and edit utterances; the monitor is therefore responsible for fluency in the second language (McLaughlin, 1987). Given enough time, with focus on form and knowing the grammatical rule involved, a learner might make use of the monitor to consciously correct errors (Schütz, 2007).

According to Krashen's Natural-Order Hypothesis the rules of language are acquired in a predictable order, which is dependent on the age of the learners, their second language background and conditions of exposure to the second language (McLaughlin, 1987). It is further suggested that, just as there is a natural sequence in the way children pick up their first language, so there is one for the second language (Schütz, 2007).

The Input Hypothesis is Krashen's explanation of how second language acquisition takes place (Schütz, 2007). This hypothesis is concerned with acquisition and not with learning and states that the learner improves and progresses along a natural order when second language input that is one step beyond the current state of linguistic competence is supplied. It is suggested that syllabus design should therefore be based on natural communicative output, to provide for individual variation in linguistic competence, as not all learners would progress at the same pace (Schütz, 2007).

According to the Affective Filter Hypothesis, the role of the affective filter is to determine how receptive to comprehensible input a learner is going to be, as variables like self-motivation, self-confidence and anxiety play a facilitative role in second language acquisition. If the learner suffers from low self-confidence and anxiety, the affective filter will be raised and will prevent the learner from acquiring the language (Schütz, 2007).

# 2.3.1.1 The Implications of Krashen's Theory for Language Teaching

The Natural Approach to Foreign Language Teaching, as formulated by Krashen & Terrel in 1993, places emphasis on simulating aspects of natural acquisition in the classroom. This implies that the language used in the second language classroom should be one step ahead of the acquisitional level reached by the learner.

Application of Krashen's theory requires that the syllabus should be based on the individual needs of the learners. Therefore, designers of learning materials should take into account the cognitive and acquisitional level of each learner, so that learning materials could be designed to be one step ahead of the learner's level of competence. However, it may be difficult to ascertain the acquisitional levels of individual learners if classes are overcrowded, as is the case in many South African schools. As Krashen's theory does not explain exactly how learner competence should be determined or tested, empirical assessment of his theory is also difficult to perform (Zafar, 2009).

Even though widely criticized (McLaughlin, 1987; Mitchell & Myles, 1998), Krashen's ideas have been very influential in the field of language learning and teaching (Atkins, 2000; Malik, 2008).

### 2.3.1.2 The Role of Grammar in Krashen's View

According to Krashen, the teaching of grammar can only result in acquisition of a second language when the students show interest in the subject and when the target language is used as a medium of instruction (Schütz, 2007). This implies that, if the learners are interested enough and the teacher sufficiently skilful, requirements for comprehensible input would be met, therefore the affective filter would be low with regards to the language of instruction.

Besides Stephen Krashen's Input Theory, several other theorists have influenced understanding of how a second language is learnt. In the following paragraphs, two of these theories are briefly discussed, i.e. Chomsky's Universal Grammar Theory and Schumann's Acculturation Theory.

# 2.3.2 Universal Grammar Theory

The Universal Grammar Theory, as formulated by Noam Chomsky, claims that "certain principles of the human mind are...biologically determined and specialized for language learning" (McLaughlin, 1987:91). Chomsky argues that the core of human language must comprise a universal set of principles and parameters, which contributes to similarity between languages (Mitchell & Myles, 1998).

Universal Grammar Theory is mostly interpreted as a general theory of language learning, and does not focus specifically on the acquisition of a second language. However, as the theory is concerned with language competence and less with

performance, it impacts the teaching of a second language in the sense that, according to this theory, educators have to assess the learners' proficiency in the second language against their proficiency in the first language. English FAL educators therefore also have to employ learning material that would take into account the level of proficiency that learners have reached in their first language. This, in turn, implies that language learning material should, ideally, be tailored towards the individual needs of learners.

### 2.3.3 Acculturation Theory

This theory, as developed by John H. Schumann, claims that the second language learner's view of the speakers of the language that she is learning, their society and how much she wants to be assimilated into that group, are important factors in second language learning success (Johnson, 2001).

Schumann's theory mentions the role played by social distance in second language acquisition. The concept of social distance acknowledges that social factors, e.g. learners' socio-economic standing and / or ethnic background may influence the extent to which they would learn an additional language and the "nature and extent of the input to which they are exposed" (Ellis, 1994:197).

### 2.3.3.1 Fossilization

The Acculturation Theory is closely linked to the concept of "fossilization", i.e. when a learner's acquisition of a second language reaches a stage beyond which it will not progress (McLaughlin,1987; Daniels, 2004), as put forth by Selinker in 1972. While the Acculturation Theory is predominantly concerned with natural language learning, Selinker's definition of fossilization also encompasses instructed language learning (Daniels 2004).

Several factors have been identified by Selinker as playing a role in the fossilization process, i.e. transfer of language; transfer of training; the strategies employed for second language learning; the strategies used in second language communication and whether the target language material is overgeneralised (Daniels, 2004).

For many learners of an additional language, the opportunities to use and practise the second language may be limited to the classroom environment and to complete certain oral and written assessment tasks required to pass a school-based or external examination. Such learners may fossilize as soon as they have acquired the language sufficiently for them to get by in class. Daniels (2004) concludes that fossilization is not necessarily a permanent state, which implies that, with careful consideration of strategies and learning material used in the second language classroom, learning of the second language may be resumed, even after the learner has appeared to fossilize.

### 2.4 Approaches and methods in second language learning

In literature pertaining to second language teaching and learning, frequent reference is made to two concepts, i.e. *methods* and *approaches* employed in the teaching of an additional language. As these terms could possibly be interpreted ambiguously, the next section of writing will supply a definition of each term, as well as examples of some methods and approaches used in second language teaching.

Rodgers (2001) defines *methods* as "a systematic set of teaching practices based on a particular theory of language and language learning". Similarly, Brown (2000:171) describes a method as "a generalized, prescribed set of classroom specifications for accomplishing linguistic objectives." Thus, according to these definitions, the concept of *methods* refers to specific steps or actions followed when teaching.

An *approach* is defined by Rodgers (2001) as "language teaching philosophies that can be interpreted and applied in a variety of different ways in the classroom" and by Brown (2000:171) as "(t)heoretical positions about the nature of language, the nature of

language learning and the applicability of both to pedagogical settings." An *approach* therefore refers to principles that would influence the teaching process and would not necessarily lead to specific steps or actions that should be pursued.

Approaches and methods used in second language instruction are important considerations when designing learning material, as the approach employed by the educator will often determine whether the educator would be able to use the developed material successfully. Rodgers (2001) illustrates the link between theory and practice as follows (Figure 2.1):

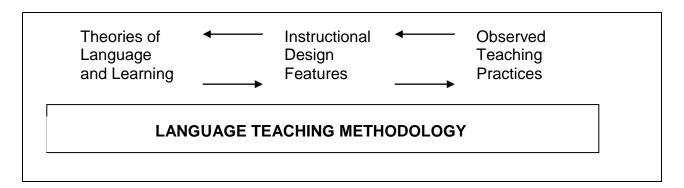


Figure 2.1 The Link between Theory and Practice (Rodgers, 2001)

From Rodgers's (2001) illustration above, it is evident that he views learning theories, features of instructional design and teaching practice as interconnected elements, interacting as part of an overall language teaching methodology.

On the subject of which methods or approaches are most suited to the teaching of an additional language, Brown (2000:14) states that "language teaching is not easily categorized into methods and trends." In this regard, he suggests that each teacher should develop an overall approach to various language learning situations. Cook (2001:199) defines "teaching method" as a cover term for a variety of language learning scenarios and highlights the idea "that there is no single idea that suits all students and teachers" (201), thus propagating the notion that language teaching should not be confined to a single method or approach.

In the section that follows, the Grammar Translation Method will be discussed concisely, predominantly because of its historic popularity in the second language learning scenario in South Africa. Thereafter, a discussion of Communicative Language Teaching will follow, as this is the approach which is endorsed by the NCS FAL (2003), as well as the CAPS FAL (2010).

## 2.4.1 The Academic Style (Grammar Translation Method)

The Grammar Translation method, also known as the Academic Style, placed significant emphasis on the explanation of grammar and translation as teaching techniques (Cook, 2001:201). This approach, traditionally used to teach Latin, is also called the Classical Method (Brown, 2000:15). The Grammar-Translation method remains a standard methodology in modern language learning classrooms, even though many newer methods have been introduced into language learning and teaching (Brown, 2000).

When employing the Grammar-Translation method, the target language would be used only occasionally, with instruction taking place in the learners' first language. When using this method, vocabulary is taught by means of lists of isolated words. Much emphasis is placed on the explanation of grammatical rules. Learners are expected to read difficult classical texts in the target language at an early stage; texts are used solely as exercises in the analysis of grammatical structures and little attention is afforded to the context of the texts. Furthermore, learners are often expected to translate sentences from the target language into the first language, while correct pronunciation in the target language is not regarded as being important (Brown, 2000).

Many authors in the field of language teaching and learning do not regard the Grammar-Translation method as a way in which communicative competence in the target language is created. In this regard, Cook (2001) holds that the academic style does not teach learners directly to use the target language in real-world situations and that the sole aim of Grammar-Translation is to create language knowledge, not communicative competence.

Similarly, Brown (2000:16) points out that the Grammar-Translation method "does virtually nothing to enhance a student's communicative ability in the language". Brown (2000:16) calls the Grammar-Translation method "a method for which there is no theory."

Over the past three decades, the Grammar-Translation method has fallen out of favour with language practitioners and educators and has been replaced with more communicative methods of teaching a second language. The current predominant approach to language teaching and learning, Communicative Language Teaching (CLT) will be discussed below:

# 2.4.2 Communicative Language Teaching

Since the 1970s, the predominant approach to language teaching and learning has been Communicative Language Teaching (CLT). Richards (2006) distinguishes between Classic Communicative Language Teaching, as practised from the 1970s to the 1990s, and what he terms Current Communicative Language Teaching, as practised from the late 1990s to the present. According to Richards (2006) the difference between CLT and the traditional approaches to language teaching, which were predominantly in use up to the 1960s, is that Communicative Language Teaching places emphasis on using grammatical rules and other language structures to enhance communicative competence in the target language, whereas the traditional approaches focused more on teaching grammatical rules in isolation, with less emphasis on the ability to use these rules for communicative purposes.

In the section that follows, some definitions of CLT will be briefly discussed.

### 2.4.2.1 Definitions of Communicative Language Teaching

According to Rodgers (2001), CLT encompasses a broad set of principles which include the communicative importance of language. Rodgers (2001) holds that the goal of classroom activities should be authentic and meaningful communication and stresses the importance of fluency as an element of communication. In this view, communication entails the incorporation of different language skills and learning is a process of inventive construction that involves trial and error.

Similarly, according to Cook (2001), the Communicative Approach to language teaching places emphasis on the ability to use language appropriately, rather than on teaching grammatical rules in isolation, i.e. the rationale for teaching is not grammatical knowledge, but rather the ability to use grammar for a purpose.

Another, yet similar definition of CLT is supplied by Brown (2000), who defines CLT by means of the following characteristics, which have a close connection to one another: In CLT, the classroom goals are focussed on communication as a whole, and not solely on grammatical or linguistic competence; the language techniques that are used as part of this approach are meant to encourage learners to use language practically and authentically; fluency and accuracy underlie and complement communicative techniques and learners are encouraged to use the target language creatively in unrehearsed contexts. This definition of CLT is also reiterated by Malik (2008), who states that CLT "emphasizes the development of communication skills in authentic language use and classroom activities where students are engaged in real-life communication exchanges in the target language."

Both Brown (2000) and Rodgers (2001) advise that CLT should be described as an approach, rather than as a method. In this regard, Brown (2000:266) states that CLT is a "unified but broadly based theoretical position about the nature of language and of language learning and teaching." Rodgers (2001) emphasises that CLT advocates do not prescribe any set of practices that should be followed in order to realize the

principles of CLT and concludes therefore that CLT should be regarded as an approach and not as a method.

The above definitions of CLT all emphasise that the target language should be taught in such a way that learners could develop the skills needed to use it appropriately in real-life situations. CLT places the emphasis on interaction in the target language as a means to enhance communication, with a strong connection between the language structures learnt in the classroom and activities outside of the classroom. Language learning material that adheres to the principles of CLT should thus focus on activities which would hone the communicative skills of learners in the target language, e.g. role plays and simulations based on real-life scenarios. If such material focuses on the teaching of grammatical structures, such structures should not be taught in isolation, but rather as part of a broader communicative scenario.

In the section that follows, it will be discussed how the principles of CLT are encompassed in the NCS FAL.

# 2.4.2.2 Communicative Language Teaching Principles in the NCS FAL and the CAPS FAL

The NCS FAL (2003) and CAPS FAL (2010) ascribe to the communicative approach to language learning and teaching.

In the NCS FAL and CAPS FAL, CLT is defined in the following way: "The communicative approach to language teaching means that when learning a language, a learner should have a great deal of exposure to it and many opportunities to practice or produce the language by communicating for social or practical purposes. Language learning should be a natural, informal process carried over into the classroom where the literacy skills of reading / viewing and writing / presenting are learned in a 'natural' way – learners read by doing a great deal of reading and learn to write by doing much writing" (Department of Education, 2003:47; Department of Basic Education, 2010:21).

Furthermore, both the NCS FAL and the CAPS FAL place emphasis on language as "a tool for thought and communication" (Department of Education, 2003:9; Department of Basic Education, 2010:10). Language is also described both documents as a means for learners to express and validate their own ideas and as a means to think creatively, analytically and critically. The assumption that language should be used as a tool for communication is central to the concept of CLT. Language teaching should, therefore, focus on broadening the communicative skills of learners. The implication for the teaching of grammar is that it should not be taught in isolation, but that learners should be encouraged to use the learnt grammatical rules in order to communicate in authentic situations.

In the chapter that follows, literature pertaining to the teaching of grammar in second language learning and teaching will be reviewed.

# **Chapter 3**

# Literature review: Grammar in Second Language Teaching and Learning

### 3.1 Introduction

Although grammar is considered to be the component of language that connects other language elements, e.g. sound and meaning, linguists and language practitioners hold differing opinions about whether grammar should be taught in second language classrooms (Cook, 2001). This debate has intensified since the increasing popularity of Communicative Language Teaching from the 1980s onwards.

Before deciding on the type of learning and teaching support material to be used to teach grammar, second language educators should be aware of how grammar could be defined; how grammar is learnt; whether it should be taught; the most effective ways to teach grammar; the theoretical principles that underlie the learning process and how grammar instruction fits into the current South African English First Additional Language curriculum. These elements are discussed in this chapter.

# 3.2 Some definitions of grammar

The following section will supply some definitions of the term *grammar*, as gleaned from literature in the field of language learning and teaching:

Cook (2001) distinguishes between different types of grammar, i.e. prescriptive grammar; traditional grammar; structural grammar and linguistic or grammatical competence. He defines *prescriptive grammar* as "the rules found in schoolbooks" and states that it "prescribes what people ought to do" (Cook, 2001:21). Cook continues to define *traditional grammar* as "analysing sentences ... labeling the parts with their

names and giving rules that explain in words how they are combined." He considers this type of grammar to be "unscientific". The third type of grammar identified by Cook is *structural grammar*, which is based on the concept of phrase structure, which shows which words in a sentence go together. Fourthly, Cook identifies *linguistic or grammatical* competence, which refers to the knowledge that the speaker possesses in the mind.

Similar to Cook (2001), Larsen-Freeman (2009) distinguishes between different uses for the term grammar and expresses the opinion that grammar is possibly the most ambiguous term in the language teaching field. According to Larsen-Freeman (2009:518), the term has been used to refer to "an internal system that generates and interprets novel utterances (mental grammar); a set of prescriptions and proscriptions about language forms and their use for a particular language (prescriptive grammar); a description of language behaviour by proficient users of a language (descriptive grammar); the focus of a given linguistic theory (linguistic grammar); a work that treats the major structures of a language (reference grammar); the structures and rules compiled for instructional and assessment purposes; (pedagogical grammar) and the structure and rules compiled for instructional purposes for teachers, which is usually a more comprehensive and detailed version of pedagogical grammar (teacher's grammar)."

Each of the above definitions is multi-dimensional, which further magnifies the ambiguity of the term *grammar* (Larsen-Freeman, 2009). It is therefore important to be clear on what is meant when one refers to the term grammar. Larsen-Freeman (2009) proposes a definition for a pedagogical grammar that could encompass both traditional and modern principles and that can be applicable to a variety of languages. Her definition of grammar includes the dimensions of *form*, *meaning* and *use* and she supplies an example from English grammar to illustrate these three dimensions: In English grammar, "the passive voice has the grammatical *meaning* of communicating something about/to which something happens/ed. Learners need to know this, and they need to

know how to *form* the passive construction...they also need to know when to *use* the passive" (Larsen-Freeman, 2009:521).

The above-mentioned definitions emphasise that the term *grammar* could be used in different ways, depending on the context in which the term is employed. In this study, the term grammar refers to the structures and rules which are compiled for instruction and assessment, i.e. what is called *pedagogical grammar* by Larsen-Freeman (2009).

### 3.3 Grammar: to teach or not to teach?

In the field of second language learning and teaching, there has been a long-standing debate on how grammar should be taught and, indeed, whether it should be taught at all (Nassaji & Fotos, 2004). Some of these opinions will be discussed briefly below.

There are researchers who claim that second language learners benefit from formal grammar instruction and that learners need grammar as a resource in order to communicate effectively in the target language (Cook, 2001; Swan, 2002; Roach, 2003; Noonan, 2004). Teaching grammar for communicative purposes implies that grammatical rules should not be taught in isolation, but rather in conjunction with other language elements, e.g. vocabulary and culture, to enhance communicative competence (James, 1990). Knowledge of grammatical structures makes it easier for people to communicate common meaning through understandable sentences. Therefore, if learners do not know how to build and use these structures, they may find communication in the target language to be challenging (Swan, 2002).

Teaching grammar to second language learners could also be socially important, as language often conveys a very powerful social message. Even though communication is possible in the absence of grammar, this form of communication would most likely be "crude and mainly concrete", putting the second language speaker at a social disadvantage (James, 1990). Another argument that stresses the social importance of teaching second language grammar is that "serious deviation from native-speaker".

norms can hinder integration and excite prejudice ... Students may therefore want or need a higher level of grammatical correctness than is required for mere comprehensibility" (Swan, 2002:152). This argument one could assume is applicable to South African learners of English Additional Language. As mentioned in Chapter 1 of this study, English is the language of higher education and commerce in South Africa. Therefore, the ability to use English grammar efficiently and correctly may be a very important occupational and social skill, e.g. when applying for employment, doing job interviews or studying at a tertiary institution.

Yet another argument in favour of the teaching of grammar is put forth by Celce-Murcia & Hilles (1988), who mention the need for many English Second Language learners to "pass a standardized national or international exam" (Celce-Murcia & Hilles, 1988:4) of which a major component could be grammar. This is currently the case in the South African educational scenario, as learners have to write the National Senior Certificate (NSC) examinations at the end of Grade 12. In Paper 1 of the examination for English First Additional Language, the section on language and editing skills (Section C) amounts to 35 out of a total of 80 marks, i.e. 48,75% of the total mark allocation for the paper. Section C of this paper usually contains a question which tests whether the learner can apply grammatical rules. This question typically tests grammatical concepts such as active and passive voice, direct and indirect speech, verb tenses, parts of speech, punctuation and negative voice (Addendum A). Statistics obtained from the Western Cape Education Department, as illustrated in chapter 1 of this study (Table 1.2), reveal that Section C is the section of the paper where learners score the lowest marks, compared to the Comprehension and Summary sections of the paper, tying in with the argument put forth by Celce-Murcia and Hilles (1988), that grammar instruction may assist learners in enhancing their academic performance.

The above-mentioned opinions on the question of whether grammar should be taught to second-language learners suggest that there is a place for the teaching of grammatical rules in the second language classroom, which this researcher would support from more than twenty years' experience of English Additional Language teaching in the Senior Phase (Grades 6 - 8) and FET Phase (Grades 10-12).

In the section that follows, various approaches to the teaching of grammar will be described.

### 3.4 Approaches to the teaching of grammar

Traditionally, the teaching of grammar centred around the explicit explanation of grammatical rules, with little emphasis on communication (Blyth, 1997; Larsen-Freeman, 2009). Although there has been a shift towards a more learner-centred, communicative approach to the teaching of grammar, language teachers may still differ in their interpretation of how grammar should be taught (National Capital Language Resource Centre (NCLRC), 2004).

Some teachers may interpret grammar as a fixed set of word forms and rules of usage and may teach grammar explicitly by explaining the forms and rules and then using drills for learners to remember the rules. When teaching grammar in this way the grammatical rules are systematically organised and learned consciously (Higgens, 1986).

Closely related to this interpretation of how grammar should be taught, is the approach whereby grammar instruction is presented in three stages, known as the PPP (present, practice, produce) approach. The first step of this three-stage approach would be an explanation of the specific grammatical item, often by pointing out the differences between the learner's L1 and L2. The second, or practice stage, entails practising of the grammar structure by the learners, through the use of oral drills and written

exercises. The last stage involves frequent communicative use of the grammar to encourage automatic and accurate use (Larsen-Freeman, 2009: 523).

Another way to teach grammar explicitly would be to present learners with a text in which the grammatical structure appears. This presentation stage is followed by one in which the focus is temporarily on the rules that govern the grammatical items, i.e. the rules are isolated and explained. Thirdly, the learners are expected to do a series of exercises to practice using the grammatical structure. Finally, the learners are tested to supply feedback on how well they have mastered the material they had been presented with in the first three stages (Ur. 1988).

An approach to the teaching of grammar that differs from the more traditional approaches described above entails encouraging learners to recognise grammatical patterns while listening to or reading examples of the language in which some meaning is expressed, instead of asking them to produce specific forms or structures in isolation (VanPatten, 1996). This approach, known as *Input Processing*, refers to a process "whereby learners are guided to pay attention to a feature in the target language input that is likely to cause a problem" (Larsen-Freeman, 2009:524). According to this approach, *input* could be defined as instances where learners are exposed to the target language, either in written or spoken form. *Meaning-bearing input* would thus refer to instances when learners are exposed to large amounts of language samples of the target language that are used to communicate information (VanPatten, 1996).

Related to the concept of Input Processing is an approach in which the learners' "attention is drawn to salient linguistic features" (Chapelle, 2003:4), also known as *Attention to Language Form.* When using this approach, certain features of the input could be made more prominent through *input enhancement* that may be either visual (e.g. colour coding, underlining, boldfacing or enlargement of the font in written instructional text) or it may be applied to speech, e.g. phonological manipulations such as oral repetitions or reduction of speech rate. (Larsen-Freeman, 2009; Chapelle, 2003;

Morisson, 2005). In Table 3.1 below, three general types of input enhancement that may transform the language read or heard by the learner are listed:

Table 3.1: General types of Input Enhancement (Adapted from Chapelle, 2003:40)

Input Enhancement	Description
Salience	Marking a grammatical form through stress:
	phonologically or otherwise;
	Repeating a form or lexical phrase
Modification	Making the input understandable to the learner
	through any means that gets at the meaning,
	e.g. images; L1 translation; L2 dictionary
	definitions; simplification
Elaboration	Increasing the potential for understanding the
	input through addition of plausible,
	grammatical L2 elaborations to the original text

This Focus on Form can transpire in two different settings: firstly, when the teacher overtly draws the learners' attention to linguistic elements arising incidentally in lessons or, secondly, when the teacher focuses the learners' attention to linguistic code elements when problems with comprehension or production are perceived (Morrison, 2005). When presenting learners in this way with comprehensible input, educators may have to adapt written texts appropriately, to suit the linguistic level of the learners (Morrison, 2005). An interpretation of the Focus on Form approach could be that grammar should not be the stated focus of an activity, but should rather be addressed for the purpose of effective communication (Morisson, 2005; Malik, 2008).

*Noticing*, a concept formulated by Schmidt (1990), propagates the idea that features of a language can only be learned if they have been noticed. If learners could be guided to

notice the form and meaning of language structures in the input presented to them, they may internalize the grammatical rule. Many SLA researchers agree that *noticing* plays an important role in the learning of a second language (Nassaji & Fotos, 2004) and may also help learners to recognise their errors and, subsequently, learn from them (Noonan, 2004).

When considering the above-mentioned approaches to grammar teaching, it becomes evident that these researchers agree that grammar instruction in one form or another should take place in the second-language classroom, whether it is form-based, meaning-based or a combination of these approaches, as described below.

A meaning-based approach may enable learners to perform spontaneously, but it does not guarantee that their utterances will be linguistically accurate. On the other hand, a form-based approach may result in grammatically accurate utterances in rehearsed or prepared situations and may not enable learners to produce spontaneous speech. Integrative grammar teaching, which combines form-based and meaning-based approaches, could be an alternative to exclusively employing one of the abovementioned approaches (Sysoyev, 1999).

One method of integrative grammar teaching, is the *EEE method*, which consists of three stages, namely *exploration*, *explanation* and *expression*. *Exploration* refers to "inductive learning", i.e. learners discovering grammatical patterns spontaneously; *explanation* refers to the learners or educator summarizing what has previously been explored, i.e. getting to know the rules and *expression* refers to the stage when learners start to practise the production of meaningful utterances, using the grammatical patterns learned during the previous two stages (Sysoyev, 1999).

Another, yet similar point of view is that the teaching of grammar in the second language should focus on improving general language awareness and be communicative and task-based, yet be tailored to suit the needs of the learners. This would imply delivering grammar instruction which is not based exclusively on meaning.

but also takes into account that some students may benefit from the explicit teaching of grammatical rules and that "every teaching method works at least for someone, somewhere" (Cook, 2001:41).

Currently, there is considerable support for the concept of communicative grammar teaching, where the goal of grammar instruction is to teach learners to use grammatical structures dynamically, accurately, meaningfully and appropriately (Nassaji & Fotos, 2004; Larsen-Freeman, 2009). In addition to noticing or understanding grammatical structures, learners should be able to transfer what they can do in communicative practice to real communication outside of the classroom. This implies that grammar teaching should help develop capacity within students, so that they could "move beyond ... memorized formulas and static rules ...", i.e. they should be able to use these rules to engage in meaningful communication in the target language (Larsen-Freeman, 2009:527).

Another interpretation of communicative grammar teaching is that grammar should be taught communicatively, but that cognitive principles should be adhered to when grammar is taught. This implies that learners should not be "fed the ... grammar rules", but that they should be allowed to discover these rules themselves. When following this approach, grammar is taught through the setting of problem-solving tasks that should preferably be authentic (James, 1990). The implication of this interpretation is that the communicative approach should not be regarded as an alternative to grammar instruction, but that grammar should rather be taught communicatively, with the purpose of enhancing communication in the target language.

The approaches to the teaching of grammar described above all entail one or the other form of grammar teaching. Conversely, there is also support for non-interventionist approaches to the teaching and learning of grammar, where the premise is that learners should acquire language through a natural process, i.e. they will be able to absorb grammatical rules while using the language for communication. A non-interventionist approach would in principle eschew any form of formal grammar instruction, claiming

that it would have little impact on the natural acquisition of a second language (Krashen, 1981).

This kind of approach to grammar teaching would therefore be based in the belief that teaching learners the rules of grammar would not translate into these rules being used unconsciously in fluent communication. The implication is that, in the presence of sufficient, understandable input, the learner will automatically acquire the grammar needed to communicate effectively in the target language, in the same way as they did for their first language (Krashen, 1981; Ellis 1994).

In criticism of the above-mentioned and other non-interventionist approaches, Larsen-Freeman (2009) points out that studies of immersion programmes indicated that, when language is used only as a medium of communication, with no explicit teaching of grammatical form, it did not automatically lead to acquisition of target language grammar.

After having done a review of the literature, and after consideration of the approaches to the teaching of grammar as described above, this researcher has come to the conclusion that explicit instruction of grammar to second language learners should take place, even in the FET phase (Grades 10-12), because proficiency in English is currently a very important academic, occupational and social asset in South Africa. Sound knowledge of grammatical structures may be beneficial to English second language learners' ability to communicate meaningfully in their additional language. For the learning material to be developed as part of this study, a communicative approach to grammar teaching that incorporates explicit instruction of grammatical rules will be followed.

In the next section, the role of grammar in the NCS FAL and the CAPS FAL will be discussed.

### 3.5 The Role of Grammar in the NCS FAL and the CAPS FAL

Both the NCS FAL (2003) and the CAPS FAL (2010) clearly state that language structures and conventions should be taught in the context of the skills of listening and speaking, reading and viewing and writing and presenting and that "learners also need to know the basics of language: grammar, vocabulary, spelling and punctuation" (Department of Basic Education, 2010:14). It is also indicated in both curriculum policy documents that the above-mentioned language skills (listening and speaking; reading and viewing and writing and presenting) cannot be effectively executed in the absence of a sound knowledge of language structures. Addendum C supplies a reference list of the language structures and conventions which, according to the CAPS FAL (2010), should be revised or taught in the FET phase, in conjunction with other language skills (speaking and listening, reading and viewing, writing and presenting). Instruction of the listed language structures and conventions should have as its purpose the enhancement of the learners' communicative proficiency (Department of Basic Education, 2010).

In addressing the question of whether direct grammar teaching should take place in the classroom, it is stated unambiguously that "there is also a place for direct / explicit teaching of the basics" (Department of Basic Education, 2010:14), although it is cautioned that the teaching of grammar "has little value if taught as decontexualised rules" (Department of Basic Education, 2010:14). These views are also expressed in the NCS FAL. Thus, both the NCS FAL and the CAPS FAL make provision for the direct teaching of grammar, with focus on meaning as well as on form; yet in a way that is inclusive of the other skills (reading, speaking and writing) that learners need in order to communicate effectively.

An approach to language teaching (including the teaching of grammar) that is specifically mentioned in the NCS FAL and CAPS FAL is the text-based approach, which entails the presentation of information by means of a text, within a particular context; and could also include the production of meaningful texts in the language

learning process. This would in essence imply that new grammatical and other language concepts should not be taught in isolation, but that it should be based on authentic texts, which should form "the main source of content and context for the communicative, integrated learning and teaching of languages." (Department of Basic Education, 2010:21).

Secondly, the NCS FAL and CAPS FAL mention the communicative approach to the teaching of grammar, which suggests that grammatical structures should be taught as a means to enhance communication in the target language. This would also imply that learners should have ample opportunity to use the learnt structures in authentic situations. If learners are not able to interact with first language speakers of the target language in their everyday lives, simulated situations should be created in the classroom (Department of Basic Education, 2010).

After consulting literature pertaining to second language grammar teaching, as well as guidelines provided in the NCS FAL and CAPS FAL, this researcher has come to the conclusion that there is still a place for the teaching of grammar in the English FAL classroom. However, research suggests that grammatical rules should ideally be taught as part of a broader communicative outcome and not in isolation.

In the next chapter, the topic of using CALL material for teaching and learning, with specific focus on the teaching of English grammar to second language learners is discussed.

# **Chapter 4**

Literature Review: Computer-Assisted Language Learning

### 4.1 Introduction

In order to reach a conclusion as to what kind of Computer-Assisted Language Learning (CALL) material would be suitable for the purpose of grammar instruction to Afrikaans-speaking learners of English First Additional Language and taking into account the technological shortages that may be experienced in some schools, literature on Computer-Assisted Language Learning has been consulted.

In this chapter, the researcher supplies a definition for the use of the term CALL, as gleaned from relevant literature. Additionally, two researchers' historical overviews of the development of CALL are supplied. The link between CALL and some theories of learning, with specific focus on applying constructivist principles to the development of CALL material is discussed, as well as various CALL options available to educators of English First Additional Language.

### 4.2 A definition of CALL

Various definitions of the term CALL are supplied by several researchers. Levy (1997:1) defines CALL as "the search for and study of applications of the computer in language teaching and learning", whereas Hubbard (2009) states that the term CALL refers broadly "to any endeavor involving the computer in some significant way in language teaching and learning." Beatty (2010:7) defines CALL as "any process in which a learner uses a computer and, as a result, improves his or her language." In order to clarify the use of the term in this study, a definition, as supplied by Levy and Stockwell (2006), is given below.

Levy and Stockwell (2006:6) define CALL material as "the wide range of CALL artefacts or products that language teachers and researchers create using technological resources." This definition encompasses the use of a variety of technological learning and teaching support materials and applications in the language classroom. It has been selected by this researcher from myriad definitions, because, according to this definition, the term CALL is not restricted to the use of a specific technological application, but can be used in reference to various technological appliances used for language learning and teaching.

Taking the above definition into account, it is accepted by the researcher that the term CALL could be applied to a variety of language learning materials, where the computer is used to induce or enhance learning.

In the next section of this chapter, a brief overview of the development of CALL is given.

#### 4.3 CALL: A Historical Overview

In this section, a short historical overview of the development of CALL is presented to illustrate how the use of technology in language learning and teaching has developed over the past four decades.

### 4.3.1 Description by Warschauer and Healy (1998)

Warschauer & Healy (1998) divide the development of CALL into three distinct stages, which correspond closely to theoretical approaches to learning and teaching a language.

The first stage as proposed by Warschauer & Healy (1998), Behaviouristic CALL, was implemented in the 1960s and 1970s and adhered to the behaviourist teaching model. According to Warschauer & Healy (1998), Behaviouristic CALL was originally designed

and implemented in mainframe computer systems and language learning material consisted mainly of drills, grammatical explanations and text for translation.

The second stage in the development of CALL, termed Communicative CALL by Warschauer & Healy (1998), was implemented during the 1970s and early 1980s. This stage corresponded to cognitive approaches to language teaching. According to Warschauer & Healy (1998), this stage was characterised by increasing focus on implicit grammar teaching and on the communicative use of grammatical forms, instead of on the forms themselves. CALL material developed during this time period, included text reconstructive programmes and simulations, which placed a stronger emphasis on collaborative learning.

The third stage of CALL development, Integrative CALL, became popular when educators started to place more emphasis on the use of language in what Warschauer & Healy (1998) term "authentic social contexts." During this stage, teacher approaches have become more task-based and various language skills and technologies are integrated into the teaching process. Learners also learn to use a range of technological tools as part of an ongoing language learning process.

A few years later, Warschauer (2004) reiterates the above-mentioned stages of CALL, but changes the label of the first stage to "Structural" instead of "Behaviouristic". As in the above-mentioned description given by Warschauer & Healy (1998), Warschauer links the changes in the nature of CALL to the prevalent learning theories at particular historical times. He concedes, however, that "the stages have not occurred in a rigid sequence, with one following the other...since any of these may be combined for different purposes".

Bax (2003) offers an alternative view to the development of CALL over the years, which is briefly discussed in the section that follows.

### 4.3.2 Description by Bax (2003)

Bax (2003) offers a reassessment of the history of CALL, arguing that the above-mentioned categorisation of CALL by Warschauer & Healy (1998) shows several inconsistencies. Bax (2003) also disputes the historic validity of Warschauer & Healy's (1998) phases of CALL development and proposes an alternative version of CALL history, in which he refers to "approaches" rather than phases. Central to Bax's reassessment of the stages proposed by Warschauer & Healy (1998), is the notion that several stages or attitudes towards the use of CALL could be in use simultaneously and that his description is therefore not bound to strict historical periods or theoretical frameworks.

The first approach proposed by Bax (2003), termed "Restricted CALL", shows a similarity to the Behaviouristic CALL phase described by Warschauer & Healy (1998). However, Bax prefers the term "restricted", as this is not bound to a specific theory of learning, but rather to other factors in use at the time, i.e. software and activity types, the role of the teacher and feedback provided to the learners.

Secondly, Bax (2003) finds it problematic that Warschauer & Healy's (1998) second phase, Communicative CALL, is confined to a specific historical period, i.e. the 1980s, as, according to Bax, CLT is employed in many language classrooms up to the present. Furthermore, according to Bax, Warchauer & Healy's (1998) definition of Communicative CALL is not entirely based on communicative classroom practices. Bax therefore proposes an alternative approach, i.e. "Open CALL" to replace Warschauer & Healy's (1998) Communicative CALL phase. According to him, this approach is "open" in terms of feedback, software and the role of the teacher. In this approach, the computer would not be necessarily integrated into the syllabus, but would take on the role of an optional element. Bax (2003) holds that since 1995 onwards, computers have been used more communicatively than before, yet some factors, e.g. teachers' attitudes and the availability of software remain as "restricted" as before.

Thirdly, Bax (2003) proposes the approach of "Integrated CALL", as opposed to Warschauer & Healy's (1998) phase of "Integrative CALL". According to Bax (2003), the intended stage of CALL utilisation in the classroom should be "Integrated", meaning that the use of computers for language and other learning should become normalised. This state will be reached when computers are considered as being "secondary to learning itself, when the needs of learners will be carefully analysed, and then the computer used to serve those needs…(t)echnology will be in its proper place" (Bax, 2003).

It may be challenging to ascribe a specific phase or approach to the current use of CALL in South African schools, as this is likely to depend on contextual factors like socio-economic conditions, educator attitudes and aptitudes and general accessibility of hard- and software for the purpose of implementing CALL material as part of the language learning experience. It would therefore be safe to assume that all three descriptions of the use of CALL put forward by Warschauer & Healy (1998) and Bax (2003) can be found in South African schools and that it will still take some time to reach that stage where the use of any technology is integrated into classroom teaching as Bax (2003) proposes. Possible ways to overcome the disparity between schools and ways to utilise CALL material even in classrooms with limited access to technology, will be discussed in Chapter 5 of this study.

### 4.4 The influence of Learning Theories on CALL material design

The development of CALL and CALL material could be closely linked to the psychological theories of learning that have been popular in the last four decades of the twentieth century (Warschauer & Healy, 1998; Warschauer, 2004) or as stated by Alessi & Trollip (2001:41): "The underlying basis of instructional multimedia is the theory of learning." This statement implies that designers of educational software should keep the principles of learning in mind and assess whether such software reflects these principles and is compatible with these principles.

In the following section, the influence of learning theories on the development of CALL material is briefly discussed.

Behavioural psychology and behaviourist learning theory influenced the development of, for example, programmed textbooks; mastery learning programmes; programmes of individually prescribed instruction (IPI), Integrated Learning Systems and the formulation of Instructional System Design (ISD) that was designed primarily for teaching adult skills and knowledge, mainly in industry and the military (Alessi & Trollip 2001:18).

According to Beatty (2010:93), behaviourist principles in CALL design may generally include the following aspects:

- The purpose of the programme or task is clearly stated;
- reinforcement is offered through text, images, audio, animations and/or video
- a marks system is provided for each task;
- the learner is supplied with grades or some other statement to indicate progress at the end of each task.

According to the principles of Behavioural psychology and Behaviourist Learning Theory, optimal learning takes place when the learner's task is broken down in a series of smaller tasks. Each task would require suitable responses, e.g. giving the correct answers to questions (Beatty, 2010). In CALL material design, the implication would thus be that the learner should be guided through these smaller tasks by the programme, i.e. through what is known as Programmed Instruction (Heift & Schulze, 2007; Beatty, 2010). This would involve an overemphasis on repetitive drills and rote memorisation, where the focus is more on learner achievement than on learner satisfaction, self-esteem, creativity and social values (Alessi & Trollip, 2001; Heift & Schulze, 2007).

When behaviourist principles were overtaken in popularity by cognitive psychology during the 1970s, multimedia material was increasingly designed along the principles of cognitive theory (Alessi & Trollip, 2001). The principles of Cognitive Learning Theory

take into account that it takes knowledge to build knowledge. According to proponents of Cognitive Learning Theory, multimedia programmes should adhere to these principles, as students learn through a variety of support systems that are interconnected (Pusack & Otto, 1997; Collentine, 1998). Further support for the potential for the employment of cognitive principles is found in the cognitive model of situated learning environments or contextualised learning experiences, as this model prepares learners to apply what they have learned in appropriate contexts (Pusack & Otto, 1997).

Additionally, support for the application of cognitive principles in designing multimedia material could also based on the assertion that multimedia material designed along these principles provides a mixture of learner and program control, which allows for individual learner needs and differences. In this regard, Alessi & Trollip (2001:31) observe that "the cognitive approach has put increasing emphasis on active learning and of learners' activities being designed and selected to enhance transfer of learning."

Employing mind-centred cognitive models, e.g. schemata, when developing CALL material is important in the sense that it allows for using the learner's background knowledge in the process of learning new knowledge (Beatty, 2010). An example of this is when authentic texts or other multimedia material is used to teach a new concept to learners. On the other hand, using experience-centred cognitive models, e.g. the socio-cognitive theory of situated cognition, would make provision for the principle that learners build new knowledge structures as a result of their social interaction with others. An example of this could be contact with native or other speakers of the target language through Computer-Mediated Communication (CMC) (Collentine, 1998).

In the early to mid-1990s, there was a move towards the employing the principles of Constructivist Learning Theory as an explanation for how learning takes place, also in the fields of instructional design and multimedia (Alessi & Trollip, 2001).

The main idea of Constructivism is that learners should construct their own knowledge actively, with teachers taking on the role of facilitators, or even becoming the learners' partners in learning. Designers of educational materials should, if ascribing to constructivist values, create "educational environments that facilitate the construction of knowledge" (Alessi & Trollip, 2001:32). Learning material designed along constructivist principles should therefore acknowledge the learner as an agent in the construction of their own learning and knowledge (Levy & Stockwell, 2006).

There is a "complementary relationship" between technology and Constructivism, in the sense that the focus of both is on the creation of learning environments (Nanjappa & Grant, 2003). Furthermore, the computer as an instructional tool could provide "a richer and more exciting learning environment" (Nanjappa & Grant, 2003) and, when focusing on the learner, technology can encourage new understandings and capabilities. In this way, the computer becomes a tool that supports both cognitive and metacognitive processes.

Dalgarno (2002) and Levy & Stockwell (2006: 122, 123) offer further support for the relationship between computer-assisted learning (CAL) and Constructivist Learning Theory by suggesting three interpretations of Constructivism for CAL. In this regard, they mention classroom situations where

- learners are encouraged to use hypermedia and simulations to explore the virtual environment actively;
- learners are allowed to construct their own knowledge actively by means of guided hypermedia, cognitive tools and tutorial systems;
- learners interact socially with others, also by means of computer-supported collaborative learning tools.

Another important feature of multimedia learning material that uses Constructivism as its theoretical foundation would be the extent to which it provides opportunities for learners to work collaboratively, i.e. working towards a joint goal, or cooperatively, i.e. helping each other with similar goals (Alessi & Trollip, 2001, Levy and Stockwell, 2006).

Constructivist Learning Theory emphasises the centrality of the learner constructing knowledge in the learning process, using technology to assist task completion, as well as the important role of the educator in creating "authentic activities that involve investigation, discussion, collaboration and negotiation" (Levy & Stockwell, 2006:123). Therefore, collaborative tasks should form part of the CALL material, should the educator wish to use Constructivist Learning Theory as the cornerstone of the teaching and learning process.

Although designers of CALL material might take the dominant theoretical framework as put forth in the relevant curriculum into account when designing learning material for classroom use, there has been a movement away from rigid adherence to one particular learning theory or approach. As mentioned in Chapter 2 of this study, some researchers in the field of second language instruction agree that language educators should not be bound to one learning theory or approach (Brown, 2000; Cook, 2001; Beatty, 2010), but should rather follow a variety of theoretical guidelines and approaches. This also holds true for the development of language learning material in electronic format. This eclectic approach to second language learning is relatively new and, contrary to views held in the past, affords the language educator more flexibility in terms of different theoretical interpretations and approaches. In support for the use of more than a single approach when designing learning materials, Alessi & Trollip (2001:13), mention both the objectivist idea that "there is a real world out there ... and ... people must learn to function appropriately in that world to survive and be successful" and the constructivist idea that "learning is a constructive process whereby each learner observes and interprets reality and creates an understanding of it", suggesting a combination of these two approaches when designing learning material. Expanding on this idea, Alessi & Trollip (2001:13) state: "...education should include direct instruction methods, experiential methods, exploration methods, and others".

In addition to its adherence to learning theories, it is also important to ascertain whether the use of CALL would actually be able to play a role in the enhancement of the process of learning. The following section of this study explores the question whether the use of CALL material would have an impact on learning.

## 4.5 The effectiveness of technology for learning

The potential of technology as a means to improve learning in general is a much-debated topic, with some researchers claiming that the use of technology has not yet been proven inconclusively to enhance learning (Burston, 2006; Mustafa, 2001). On the other hand, the notion that the use of technology could be beneficial to the learning process receives just as much support from various other researchers and education specialists (Alessi & Trollip, 2001; Dexter, 2002; Pusack & Otto, 1997). Support for the use of technology as a means to improve learning is discussed in the section that follows.

It could be argued that the use of multimedia material in the classroom can play an important role in learner motivation and would give both the educator and the learner control over the lesson materials selected, the order in which they are accessed, as well as the pace of progress through the selected materials (Pusack & Otto, 1997).

More support for the use of multimedia to enhance learning is supplied by Alessi & Trollip (2001:6), who hold that "different teaching media have different advantages"; therefore the use of a particular medium may be more suitable to a specific task. Furthermore, they state that using the computer in the teaching and learning process may be beneficial, especially in particular circumstances, e.g. where "the material is hard to teach by other methods" or "where extensive individual practice is needed".

Reasons why educational technology could be beneficial to learning are also supplied by Dexter (2002), who states that technology could assist educators to supply learners with "scaffolds" which could help the learners to use already acquired knowledge for further learning. Secondly, educational technology can provide learners with opportunities for collaboration and communication with others. A third reason why

technology may add value to the learning process is that it could be used by educators to provide feedback, revision or opportunities for reflection to learners. (Dexter 2002).

Based on the above-mentioned opinions, the assumption is made that technology could be beneficial to enhance the process of learning. However, technology should be approached similarly to any other learning technique or tool and educators should not assume that it would automatically be able to solve learning barriers in the classroom (Brett & González-Lloret, 2009).

In the section that follows, support for the use of technology in language learning is given.

## 4.6 Justifying technology for the language learning curriculum

Because language learning is a complex, multi-faceted, dynamic process, the question may arise whether the use of technology could actually improve language learning and how this may have been proven through research. Although it may be challenging to attribute the effects of learning to technology or any other instructional factor (Chapelle, 2009), some researchers come out strongly in favour of the use of technology to enhance language learning (Levy, 2006; Bush, 1997; Warschauer, 2003; Brett & González-Lloret 2009). Arguments that are supportive of the use of technology to teach language will be discussed below.

An argument in favour of the use of technology as part of the language learning curriculum is supplied by Levy (2006), who states that technology has played an important role in the development of languages and how they are taught and learnt. He is of the opinion that technological developments have been pivotal in creating a more sophisticated understanding of the nature of language, communication and language learning and that the use of technology therefore deserves to form part of language teaching and learning.

The use of technology in language learning and teaching is an effective means for delivering instruction and has "unique pedagogical value" (Bush, 1997:301). Language learning, including the teaching and learning of a second language, can be enhanced by the use of CALL material, as it offers the language educator a wide array of multimedia resources like text, images, audio, video and animations that can be used to present lessons or be employed for autonomous use by learners (Bush, 1997).

Furthermore, technology could be used by teachers to equip learners more efficiently for life in the Information Age, as it may have the capacity to supply learners with training in the use of basic technological skills that they may need in everyday life (Bush, 1997; Brett & González-Lloret 2009).

Another benefit of using technology in second language education is its potential to be used as a medium to access information and facilitate communication and to connect learners with remote audiences (Bush,1997; Warschauer, 2003; Brett & González-Lloret 2009). An example of this is the facilitation of Computer-Mediated Communication (CMC) as part of the language learning experience. CMC could include e-mail, chats, blogs or other forms of electronic communication.

In addition to the above, the argument has been raised by researchers that technology is effective in the learning process, as instantaneous feedback can be offered to learners, which can accelerate learning (Bush, 1997; Brett & González-Lloret, 2009).

Taking into account the arguments and opinions mentioned above, it seems that technology could be utilized as an important tool in second language learning.

For the purpose of this study, in order to make recommendations to educators on the use of CALL material for language learning, specifically with regard to grammar instruction, research was done to determine some of the CALL options available to second language educators. Taking into account the diverse circumstances of schools, educators and learners in South Africa, all the options would certainly not be practically

applicable to all educators. As part of this study, recommendations are made about the type and content of CALL material that could be developed for use in South African schools, with specific focus on schools that may not be technologically advantaged, bearing in mind that the choice of appropriate multimedia material should, to a large extent, depend on the following factors:

- the infrastructure of the school, for example the availability of computer laboratories for the exclusive use of language instruction, or the availability of classroom computers, data projectors, screens or interactive whiteboards;
- the possibility of learners accessing computers or the Internet after formal instruction time;
- the technological sophistication of the educator and / or learners and
- the costs involved in setting up any (or all) of the above-mentioned factors.

Although the assumption is made that technology has the potential to improve the quality of the learning environment and add value to it, it should ideally not completely replace human interaction (Dexter, 2002; Davies, 2009). In the following section, some factors that educators should consider when utilizing technology in the classroom are discussed.

# 4.7 Using CALL material: factors that should be considered by educators

With the increasing use of technology in the teaching and learning process, the role and responsibilities of the educator have changed. Educators who wish to utilize technology in the classroom, may for example find that they have to update information and technology regularly to make learning authentic and relevant (Nanjappa & Grant, 2003). Increasingly, teachers, including language teachers, are required to familiarize themselves with CALL options within the classroom and to acquire "practical skills and a thorough understanding of CALL theory" (Fotos & Brown, 2003:3).

If teachers are not comfortable with new technologies and cannot make adequate use of them, they will be unable to guide their learners to utilize the technology optimally

Bancheri (2006). Although computers or computer-related resources cannot compensate for poor teaching, it can be greatly supportive to educators and could add value to their work by supporting their teaching and learning activities, including teaching preparation, actual teaching and assessment (Bialobrzeska & Cohen, 2005).

Before introducing technology into the learning process, there are certain practicalities that educators should observe. Richards & Renandya (2002:361) suggest that educators should consider the following suggestions before adopting a new technology in the classroom:

- the new technology should facilitate the attainment of course goals or outcomes;
- the new technology should be cost-effective;
- educators should be ready to work with the new technology;
- the technology should serve the need of both educator and students;
- the technology should help the educator to make use of class time more efficiently.

The effective use of CALL materials depends largely on adopting a balance in terms of approaches, resources and tools to meet the needs of particular learners in a particular learning context (Levy, 2006). To attain this balance, three interdependent categories of decisions that take into consideration the learners' goals and the resources that are available could be addressed. The first group of decisions occurs as a result of the teacher's beliefs about the nature of language and language learning and which aspects of language will be isolated by the educator. Secondly, the educator must reflect on the pedagogical approach and the methodology to be employed. The third group of decisions concern the choice of technologies that will support the learning tasks. Taking the aforementioned considerations for the use of CALL material into account, it becomes clear that an educator needs to know how to best organize technological resources, in order to combine them in the best possible way with face-to-face teacher-student and student-student contact in the classroom (Levy, 2006).

Expanding on the notion that certain elements should be carefully considered by educators when opting to develop or utilize CALL material as part of the teaching and learning process, the following factors, as illustrated in figure 4.1 below, are mentioned by Levy & Stockwell (2006:6):

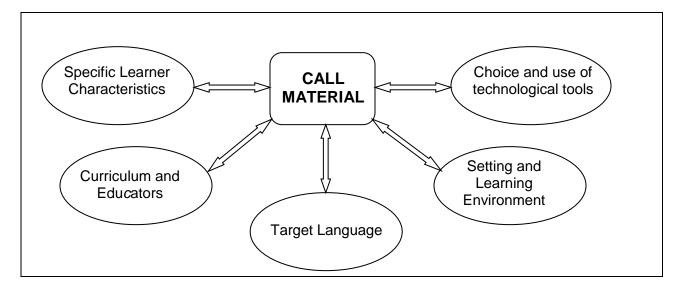


Figure 4.1 Factors to take into account when developing CALL material (Levy & Stockwell, 2006:6)

According to Levy & Stockwell (2006), these factors include:

- Specific learner characteristics, e.g. the age, grade or language proficiency of the learners will have an influence on the type of learning material developed, as well as on the level of complexity, the choice of language and other design choices.
- The choice and use of technological tools will also play a role in the conceptualization of CALL material, as different kinds of tools may require diverse design approaches.
- Furthermore, setting and learning environment are important in the development of CALL material, as it could also determine the type of learning material that is

developed. For example, where learner groups are small and each learner has access to a computer terminal, the educator may design learning material or plan lessons involving the use of Computer-Mediated Communication, as described in section 4.8.1 of the current study. Where these factors are lacking, educators may have to find alternative ways to utilize CALL material.

- The target language may also play an important role in the development of CALL material, as the specific target language may have unique features that the educator would have to take into consideration. This may include the learners' exposure to the target language in a natural setting; the symbols of the written language or other cultural and traditional features of the native speakers of the target language.
- Finally, Levy & Stockwell (2006) identify the curriculum and educators as important factors to consider when developing CALL material, in that the curriculum will most likely determine the ideological and theoretical considerations that educators need to take into account when designing and / or utilizing learning material.

Additional to the above, developers of CALL material should pay attention to factors such as effective screen layout and use of colour; the degree of freedom given to the learner to manipulate the material and to navigate the material effectively, as well as ways to minimize any anxiety that learners may experience in using the material (Mustafa, 2001).

# 4.8 CALL Options Available to the English First Additional Language Educator

In order to come to a conclusion as to which CALL options could be considered by EFAL educators in South African schools with limited resources in terms of computers and Internet connectivity, research was done on CALL options available to educators in

general. A description of some CALL options, as gleaned from relevant literature is given in the next section of this chapter.

# 4.8.1 Computer-Mediated Communication (CMC)

Computer-Mediated Communication (CMC) can be defined as communication between human beings made possible by the use of computers, using the computer as a link between the communicators (Levy and Stockwell, 2006).

Levy & Stockwell (2006) make a distinction between synchronous and asynchronous CMC. Synchronous CMC allows for an "active exchange of information virtually in real time where participants can read or listen to messages and respond immediately" (Levy & Stockwell, 2006:84). Chatrooms and MOOs are named as examples of synchronous CMC, as is using the direct messaging or chat function of social networking cites like Facebook, MySpace, Google Plus and Twitter.

Asynchronous CMC, on the other hand, makes provision for participants to log onto the computer at their convenience, in order to complete online and collaborative tasks. This includes the utilization of mailing lists, bulletin board systems (BBS), e-mail, blogs and wikis (Levy & Stockwell, 2006). When using social networking sites to post messages to another person, this kind of CMC is asynchronous. It is possible to use various forms of asynchronous CMC for language learning and teaching (Healy, 1999; Brett & González-Lloret; 2009). Examples of this would be to set up an e-mail exchange with native speakers of the target language or to encourage learners to create blogs to practice and exhibit their creative or functional writing skills.

As stated in a media release by the Western Cape Education Department on 18 August 2009, the South African Department of Education, in collaboration with the University of Stellenbosch, makes use of synchronous CMC to support final year (matric) learners via an interactive telematics programme, where educators teach subject matter in real time via satellite television. The lessons are broadcast to pre-selected schools, where the learners can ask immediate questions, using computers or cellular phones.

In some learning areas, notably the Art disciplines (Dramatic Arts, Visual Arts, Musical Studies, Dance Studies and Design) and other subjects that receive special funding through the Focus Schools Project of the Western Cape Education Department, synchronous CMC is used with increasing regularity. In these subjects, support is often given to learners at underperforming schools via webcam classes transmitted from well-performing schools. The teachers at the better-performing schools are then able to share their knowledge and experience with these learners. The learners are able to interact with the distance teacher, as well as with the learners in the other classroom. No evidence could be found by this researcher of any similar programmes aimed exclusively at languages in South African schools.

Both synchronous and asynchronous CMC hold huge possibilities for the communicative teaching of a second language, as it has the potential to offer learners authentic, real-time contact with other speakers of the language. However, implementing most types of CMC successfully in the learning process would most likely require that learners have access to more than one computer in the classroom, which may not be attainable in some schools. To address this possible shortcoming, the use of technology in one-computer learning environments is explored in the section that follows.

## 4.8.2 Using Technology in One-Computer Learning Environments

In the course of conducting this research project, it has become evident to the researcher that the use of most forms of CMC in the second language classroom, in some South African schools, may not always be practical or even possible.

Although greater demands are placed on educators in South African schools to use ICT in the curriculum delivery of different subjects and in spite of the fact that there has been an increasing focus on the accessibility of computers in South African schools in recent years (Gudmundsdottir, 2010), many language educators may still experience factors that may hamper efforts at introducing CALL activities, e.g.

- an absence of, or insufficient number of classroom computers,
- no or limited access to computer laboratories,
- no connection to the Internet, outdated hard- and software,
- · disproportionally large class groups and
- concerns about security in areas with a high crime rate.

An objective of this study is to investigate ways in which shortcomings like those listed above could be overcome, with specific emphasis on one-computer scenarios. Some of these suggestions will be discussed below.

Even though the one-computer classroom is not typically the most advantageous situation to ensure that all learners receive maximum benefit from the use of technology in the classroom, "a lot can be done with one computer" (Egbert, 2009:41). However, the computer should be accessible to all the learners and should be attached to a high quality projector or should have a large monitor attached to it (Egbert, 2009).

Furthermore, educators can use a single classroom computer as learning and teaching support material, e.g. to demonstrate concepts, writing or editing skills; to evaluate

written material critically; by having live access to a selected Internet site to enhance discussion, to illustrate a point or to retrieve authentic data (Burkhart, 1999). In addition to using the computer as described above as a "multi-media chalk board or flip chart", it can also be used by learners as a tool for individual input as part of a larger group or class project; as a learning centre or station; as a cooperative learning tool or to allow learners to use the computer to do individual work for practice or assessment (Burkhart, 1999).

In a course developed by the Pinellas School District and the Florida Centre for Instructional Technology, entitled *Multimedia in the Classroom*, the following recommendations are made regarding the one-computer classroom:

- The computer could be used as a class presentation tool, if connected to a
  projection unit. In this way the educator can demonstrate, provide and use
  technology-enhanced teaching techniques. Learners could also use the
  computer to compile projects and then showcase it to the class.
- The single computer could be used as a research or learning centre, where
  learners can access multimedia encyclopaedias, the Internet and application
  software. Learners could work individually or in groups, using the computer for
  research, data collection, publishing and media production.
- The computer could be used as a development station, where several smaller groups have access to the single class computer on a rotational schedule. When using the computer in this way, the educator should ensure that the learners who are not using the computer at a specific time are engaged in another facet of the activity, e.g. brainstorming, writing storyboards or using other technology like a digital camera, scanner or camcorder, if available.

It may also be possible for educators to make use of the Internet in classrooms with only one computer, as the educator could download resources from the Internet to make hard copies for the classroom. In this way, even in the absence of an Internet connection in the classroom, Internet sources could be downloaded on a mass storage disk (e.g. a memory stick) at a remote site and be brought into the classroom.

Advantages of this technique are that Web pages can be accessed relatively fast from the hard drive and learners are limited only to the pages that the educator has saved on disk. They would therefore not be able to access sites deemed unsuitable or irrelevant by the educator.

In addition to using a single classroom computer in the above-mentioned ways, there are also other tools that the educator could use in technologically disadvantaged classrooms. Some of these tools are discussed by Brett & González-Lloret (2009), who mention video, DVD, satellite television and handheld devices, e.g. cell phones, MP3 players and iPods in this regard, arguing that these kinds of technological tools may soon become indispensable in learning and teaching. Furthermore, Brett & González-Lloret (2009:365) state that "current trends display a tendency for all media equipment to merge with a PC to form a single media centre." Thus, the employment of these tools offers "a range of possibilities presenting rich input that can be manipulated at will" (Brett & González-Lloret 2009:365) and creates exciting possibilities for learning and teaching with technology in the one-computer classroom, as educators can create authentic materials or acquire televised material for display in the classroom, even if there are only one computer, a data projector and a screen available in the classroom.

Another tool that could be used in the one-computer scenario is the interactive whiteboard (IWB), used together with a data projector. The interactive whiteboard is described by Bax (2006) as "technology which has the potential to be normalised in language teaching" because learning material created for the interactive whiteboard could be readily integrated with the already existing syllabus. According to Bax (2006), educators could compile their own learning material for the IWB, making it possible for them to address the unique needs of their learners. The crucial difference between using an IWB to project images, text and sound instead of using only a data projector and a screen, is that the IWB has the capacity to act like a computer monitor, while also allowing users to make changes directly on the board. This allows for a certain degree of learner interactivity, even in the absence of computers that learners could use

individually. Although IWBs are still relatively expensive, its price might decrease in time, as in the case of some other technology (Bax, 2006).

A relatively inexpensive way to introduce technology similar to the IWB is to make use of Mimio® tools and software, which transform a regular white board into an interactive whiteboard. The Mimio® interactive system works by means of a compact bar that is placed on the existing whiteboard. The classroom computer is then connected to a data projector and computer files can be accessed from the board. As part of the Mimio® system, the learners can also make use of individual, handheld machines, which they can use to indicate the answers to tests or quizzes displayed on the board, resulting in increased learner interactivity in the lesson.

Although interactive whiteboards and the Mimio® interactive system are more expensive to acquire for classroom use than traditional learning and teaching support materials, it would still be more cost-effective than supplying each learner in the classroom with a computer, should the educator wish to introduce CALL material into the teaching and learning process.

When taking the above-mentioned opinions into consideration, it seems that it is entirely possible for an educator to use interactive CALL material in the single-computer classroom scenario. In the next chapter, the research methodology used in the compilation of this study is discussed. A series of lessons that incorporate interactive CALL material will also be presented to confirm the assumption made above.

# **Chapter 5**

# Research Methodology

#### 5.1 Introduction

In this chapter, the research methodology employed in the compilation of this study is discussed. The results of research findings that emerged from a review of relevant literature and a survey were used to determine the type of CALL material to be developed to teach grammar to learners of English First Additional Language in schools that are not well-resourced in terms of computers and Internet connectivity. The CALL material is presented as part of language learning lessons that focus on the teaching of Active and Passive Voice to Grade 11 English FAL learners.

#### 5.2 Data Collection

In order to determine educators' computer skills, the availability of technologies for language learning at their schools and their attitudes towards the teaching of grammar, the following method of data collection has been employed:

#### 5.2.1 The Questionnaire

In this study, a questionnaire (Addendum B i) has been used as a method of data collection. This method has been chosen by the researcher, because it is a relatively straightforward way to compare data, as the uniform question presentation makes the data simpler to compare (Dörnyei, 2003). Questionnaires are also versatile, in the sense that "they can be used successfully with a variety of people in a variety of situations targeting a variety of topics" (Dörnyei, 2003:10). The purpose of the questionnaire was to give the researcher insight into:

- the respondents' formal computer literacy training, as well as their opinions on the level of support supplied by the Department of Basic Education in terms of training needed to compile and / or use multimedia learning material;
- the availability of computers and other technologies for English FAL teaching and learning at the schools that formed part of the sample group. This section of the questionnaire also contains questions to assess the respondents' opinion on the effectiveness of the use of multimedia to teach grammar and whether they would prefer to use more multimedia in the language learning classroom;
- the respondents' opinions on the use of multimedia for the specific instruction of grammar; the use of CMC, e.g. e-mail, chat rooms, social networking sites and blogs in the second language classroom; the extent to which learners are allowed to be involved in choosing materials, topics, activities and forms of teaching and the educators' views on whether and how grammar should be taught.

The questionnaires were completed anonymously and the respondents were not required to indicate their age and gender, as the researcher has not deemed this information essential in gaining insight into the points outlined above.

# 5.2.2 Sample Group

The sample group for the current study are educators of English First Additional Language at 9 schools situated in Afrikaans-speaking, lower-income, rural communities in the Western Cape and Northern Cape. Questionnaires were distributed to 50 educators of English First Additional Language at the above-mentioned schools. Of the 50 questionnaires handed out to educators, 42 were returned.

# 5.2.3 Measuring Instrument

To ensure accuracy in collecting the data for the current study, a multi-item scale has been used in the questionnaire. Multi-item scales refer to "a cluster of several differently worded items that focus on the same target" (Dörnyei, 2003:33). The item scores for similar questions are added, which results in a total scale score or summative score. An example of a multi-item scale is the Likert Scale, as proposed by Rensis Likert in the 1930s. Usually, Likert scales consist of a series of statements and respondents are asked to indicate the extent to which they agree or disagree with the statements, by marking one of the responses ranging from "strongly agree" to "strongly disagree" (Dörnyei, 2003).

The Likert-type rating scale, which was used as a measuring instrument in the questionnaire for the current study has been compiled by the researcher in the following ways:

- in some of the questions, respondents had to indicate a choice between several options by crossing (X) the relevant boxes. The responses range as follows: not at all; hardly; sometimes; quite a lot; very often;
- in some instances, the respondents could choose more than one of the abovementioned options from a list. For some questions, the option "not at all", as indicated above, has been replaced by "never".
- in another type of multi-item scale used in the questionnaire, the respondents had to choose from four options, ranging from "strongly agree" to "disagree"; "agree" and, finally, "strongly disagree". In these questions, the middle response ("neither agree nor disagree") has been omitted, to compel respondents to make a choice, without leaving them with a neutral option.

in some of the questions, the respondents had to indicate an item / items in a list,
 choosing the option most applicable to them.

### 5.3 Results of the questionnaire

The first section of the questionnaire, Question 1, was asked to determine the technological skill level and the formal computer literacy training of the respondents. The first sub-question in this section, Question 1.1, seeks to determine the computer proficiency of the respondents (see table 5.1).

Table 5.1 Information and computer literacy skill level (Question 1.1)

Descriptor	Number of
	responses
I am able to use the computer to develop learning	18
material to augment existing learning support material	
(e.g. textbooks) and for curriculum support.	
I am able to integrate technology into teaching and	5
learning activities.	
I am able to use various technologies, including the	16
computer , to support administration, teaching and	
learning,	
I have no ICT or computer skills.	3

Most of the respondents (18 out of 42, or 42,8%) indicated that they are able to use the computer to develop learning materials to augment existing learning and teaching support materials, whereas only 3 out of the 42 respondents (7,1%) stated that they have no ICT or computer skills. Some educators designated more than one field. These findings seem to suggest that most of the educators who took part in the survey have some level of computer or ICT skills and should at least be able to use multimedia

material in the language learning classroom, should they have access to the necessary hard- and software.

The purpose of Question 1.2 is to establish whether the respondents have attended any computer literacy training offered by the Department of Basic Education (see table 5.2) below:

Table 5.2 Formal computer literacy training of respondents (Question 1.2)

Training Course	Number of
	responses
Intel Teach to the Future	5
Microsoft Partners in Learning	2
E-Educator	7
International Computer Driver's Licence (ICDL)	1
Other (Please Specify)	3
None of the above	25

The courses indicated in the questionnaire have all been offered by the Department of Basic Education to educators in their employ. Participation in these courses are voluntary, yet 25 of the 42 respondents, i.e. 59,5%, indicated that they have not to date participated in any of these courses. The responses to question 1.2 seem to contradict the responses to question 1.1, where most educators stated that they are able to develop learning materials for use in the language learning classroom. Possible reasons for these contradictory responses could be that the educators may have embarked on computer courses not subsidized by the education department, or that they might have taught themselves to use computers.

Question 1.3 tried to ascertain the extent to which the respondents agreed or disagreed with the statement that the Department of Basic Education has given sufficient support

to educators in terms of training needed to compile and / or use multimedia learning material in the classroom (see table 5.3).

Table 5.3 Respondents' opinion on sufficiency of computer literacy support given by the Department of Education (Question 1.3)

Indicator	Number of
	responses
Strongly disagree	11
Disagree	23
Agree	6
Strongly agree	2

Although most of the respondents (59,5%) indicated in their responses to question 1.2 that they have not made use of the computer training courses that are subsidized by the Department of Basic Education, 26,1% of the respondents stated in their responses to question 1.3 that they strongly disagree with the statement that the Education Department supplies sufficient support to educators of English First Additional Language in terms of training needed to compile and / or use multimedia learning material. 54,7% of the respondents disagree with the statement. Based on these responses, the assumption is made that the training courses offered by the Education Department do not necessarily cater for the unique needs of educators of English First Additional Language and that there may be a need for computer training courses that would address these specific needs.

Question 2 deals with the availability of computers and other technologies for English First Additional Language instruction and learning at the respondents' schools; with the respondents' attitudes towards effect that the use of multimedia material would have on the acquisition of second language grammar and whether the respondents would prefer to use more multimedia material in the language learning classroom.

Table 5.4 Technology available for the teaching of English First Additional Language at the respondents' schools (Question 2.1)

Technology	Number of	
	responses	
Language Laboratory	0	
Classroom Computer(s)	5	
Data Projector	22	
Connection to the Internet	29	
Television	28	
Digital Video Disk (DVD) Player	18	
None of the Above	6	

Most respondents indicated the availability of an Internet connection, data projectors and televisions at their schools for the teaching of English First Additional Language. 18 of the 42 respondents (42,8%) stated that a DVD player is available at their schools. Only 5 respondents (11,9%) showed that they have access to classroom computers, whereas 6 respondents (14,2%) indicated that they do not have access to any of the technologies as listed above. No educators stated that a language laboratory is available at their schools. These results indicate that most of the educators that completed the questionnaires do not have access to the hardware needed to optimally employ CALL as part of their daily teaching. There is a possibility, however, that these educators could make use of the "one-computer" options, as described in Chapter 4 of this thesis. This assumption is strengthened by the fact that 69% of respondents have access to an Internet connection; 66,6% to a television; 52,3% to a data projector and 42,8% to a DVD player. However, there seems to be a discrepancy between the number of respondents who have access to a classroom computer (5 respondents), compared to the significantly greater number of respondents who stated that they have access to other technology, i.e. the Internet, television, data projector and DVD players. This discrepancy could possibly be explained with the assumption that the educators

may have access to these technologies at school or that the school may have some of these technologies available for general use, but not necessarily for the respondents' exclusive use. They may, for example, be able to make use of a data projector occasionally, but may not have one available in their classroom all the time. A minority of the respondents (14,2%) have no access to any of the technologies listed in question 2.1.

In Question 2.2, the respondents were required to indicate the extent to which they agree or disagree with the statement that using multimedia would improve learners' acquisition of second language grammar.

Table 5.5 Respondents' opinion on whether the use of multimedia material would improve learners' acquisition of second language grammar (Question 2.2.1)

Indicator	Number of	
	responses	
Strongly disagree	1	
Disagree	0	
Agree	21	
Strongly agree	20	

Almost all the respondents (97,6%) support the opinion that the use of multimedia would improve learners' acquisition of second language grammar. 21 out of 42 respondents (50%) stated that they agree with the statement, whereas 20 (47,6%) strongly agree. Only 1 out of 42 respondents (2,38%) showed that they strongly disagree with the statement. Based on these responses, the researcher makes the assumption that, even in the possible absence of the appropriate hardware, the educators that participated in this survey would most possibly be receptive towards the use of multimedia to teach second language grammar. This assumption is further strengthened by the responses to question 2.2.2 (Table 5.6), which tested whether the

respondents would prefer to use more multimedia material in the language learning classroom.

Table 5.6 Using more multimedia material in the language learning classroom (Question 2.2.2)

Indicator	Number of
	responses
Strongly disagree	1
Disagree	0
Agree	20
Strongly agree	21

In response to the statement made in question 2.2.2, 21 out of 42 respondents (50%) strongly agree with the statement. 20 out of 42 (47,6%) indicated that they agree, whereas only 1 out of 42 respondents (2,38%) strongly disagreed with the statement. The similarity of the responses to Questions 2.2.1 and 2.2.2 express a link between the participants' willingness to use more multimedia material in the language learning classroom and their opinion that using multimedia material would improve their learners' ability to learn their second language.

The sub-questions that form part of Question 3 were asked to determine the respondents' use of learning and teaching support material and technologies to teach grammar; the willingness of the educators to allow learners to exercise some form of autonomy over the process of teaching and learning and the respondents' opinion on whether and in what way grammar should be taught in the English Additional Language classroom.

In Question 3.1, the respondents were asked how often they use particular learning and teaching support materials (LTSM) to teach grammar in the subject field of English First Additional Language (Table 5.7).

Table 5.7 The use of learning and teaching support material in English FAL grammar instruction (Question 3.1)

	Number of Responses				
Learning and Teaching	never	hardly	sometimes	quite a	very
Support Materials				lot	often
Multimedia material (CD,	7	5	25	3	2
Video, Audio, TV, Radio)					
The Internet	19	8	12	3	1
Textbooks	0	0	10	17	15
Magazines and	0	1	21	12	8
newspapers					
Chalkboard	0	0	2	23	17
Prescribed Literature	0	0	9	14	19

The responses to question 3.1 indicate that most of the respondents use the chalkboard and textbooks as well as the prescribed literature as learning and teaching support materials in the English First Additional Language classroom. 25 out of 42 respondents (59,5%) indicated that they sometimes use multimedia material (CD, Video, Audio, TV and Radio) to teach grammar, whereas 21 respondents (50%) stated that they sometimes use magazines and newspapers for this purpose. 19 out of 42 (45,2%) respondents said that they never use the Internet as learning and teaching support material. This could possibly be because these educators may not know how to use the Internet as a learning and teaching support material, or because they do not know that they could use the Internet for this purpose. It could also imply that these respondents do not have access to the Internet in their classrooms.

In Question 3.2, the respondents were asked to indicate how often they use specific forms of Computer-Mediated-Communication for the teaching of English First Additional Language (Table 5.8).

**Table 5.8 The use of Computer-Mediated Communication (Question 3.2)** 

	Number of Responses				
Computer-Mediated	never	hardly	sometimes	quite a	very
Communication				lot	often
E-mail	21	7	9	3	2
Blogs	35	6	0	0	1
Social Networks	29	6	5	2	0
(MXit; Facebook;					
Twitter, etc)					
Other chat rooms	40	2	0	0	0

Most of the respondents indicated that they never use e-mail, blogs, social networks and other chat rooms when teaching English First Additional Language. This response may be an affirmation of the lack of accessibility to the relevant technologies in the respondents' schools, as indicated by the responses to question 2.1 above (see table 5.8).

In Question 3.3, the respondents were asked how often they allow learners to be involved in choosing materials, topics, activities and forms of teaching. The respondents answered this question in the following manner (Table 5.9):

Table 5.9 Allowing learners to choose materials, topics, activities and forms of teaching (Question 3.3)

Indicator	Number of responses
Not at all	3
Hardly	6
Sometimes	29
Quite a lot	3
Very often	1

The responses to question 3.3 reveal that 29 out of 42 (69%) of the respondents allow their learners to a certain extent to be involved in choosing materials, topics and forms of teaching. As a follow-up, it would have been interesting to know in which particular aspects of teaching these respondents invite students to make choices.

In Question 3.4.1, the respondents were asked to indicate the extent to which they agree or disagree that second language learners benefit from formal grammar instruction.

Table 5.10 Respondents' opinions on whether second language learners would benefit from formal grammar instruction (Question 3.4.1)

Indicator	Number of responses
Strongly disagree	2
Disagree	1
Agree	24
Strongly agree	15

15 out of 42 respondents (35,7%) agree strongly with this statement. 24 out of 42 of the respondents (57,1%) agree with the statement that second language learners may benefit from receiving formal grammar instruction. The responses to this question suggest that the most respondents, namely 92,8% are in favour of formal grammar instruction. When considered in conjunction with the responses to questions 2.2.1 (Table 5.5) and 2.2.2 (Table 5.6), the assumption is made by the researcher that the respondents would be receptive to the use of multimedia material to teach grammar in the second language learning classroom and that they are generally in favour of formal grammar instruction.

In Question 3.4.2, the respondents were asked to indicate to what extent they agree with the statement that Second Language learners do not have to know grammatical rules in order to communicate effectively in the target language, to which the responses are listed in table 5.11 below:

Table 5.11 Respondents' opinions on whether Second Language learners have to know grammatical rules in order to communicate effectively in the target language (Question 3.4.2)

Indicator	Number of
	responses
Strongly disagree	11
Disagree	24
Agree	5
Strongly agree	2

11 out of 42 respondents (26,1%) strongly disagreed with the statement that second language learners do not have to know grammatical rules in order to communicate effectively in the target language, while 24 out of 42 (57,1%) indicated that they disagree with the statement. These responses imply to the researcher that the majority of the respondents view knowledge of grammatical rules as an important feature in effective communication in the learners' second language.

In question 3.4.3, the respondents were required to state to what extent they agreed or disagreed with the statement that grammar should be taught by explaining the forms and rules and then using drills for learners to remember the rules.

Table 5.12 The respondents' opinion on whether grammar should be taught by explaining the forms and rules and by using drills for retention (Question 3.4.3)

Indicator	Number of responses
Strongly disagree	1
Disagree	6
Agree	16
Strongly agree	19

Of 42 respondents just less than half strongly agreed with the statement that the teaching of grammar should involve the explanation of forms and rules and that drills should be employed to aid learners to retain grammatical rules. If one adds the 16 out of 42 respondents who agreed with this statement, then 83% believe that grammar should be taught explicitly. Only 1 out of 42 respondents indicated a strong disagreement with this statement and 6 out of 42 respondents stated disagreement, which would mean that only 16,6% are not in favour of explicit grammar teaching. However, as these were not open-ended questions, it cannot be determined what kind of teaching they prefer and whether it could mean implicit grammar transfer, e.g. through communicative tasks.

The findings of the survey, as well as the information presented in the literature review presented in chapters 2 to 4 have been used by the researcher to compile a lesson plan which incorporates CALL material to teach a grammatical item, i.e. Active and Passive Voice, to English First Additional Language learners.

# 5.4 Example of a series of lessons using CALL material to teach Active and Passive Voice

According to the CAPS FAL (2010), conversion from Active to Passive Voice as used in the simple present tense, present continuous tense and present perfect tense, should be introduced in earlier grades, while the use of Passive Voice in the past and future

tenses should be taught in the FET phase (Grades 10 - 12) (Department of Basic Education, 2010:45) (see Addendum C).

The time frame for the series of lessons developed as part of this study is 180 minutes. This period of time could possibly constitute four school periods of 45 minutes each. Grade 11 English First Additional Language learners are the target group for the lessons. Although the CALL material for the lesson is designed for interactive whiteboard, it can also be utilized by means of a computer, data projector and screen in instances where an interactive whiteboard is unavailable. For the purpose of this study, the material for use on the interactive whiteboard has been created with SMART® Notebook Software.

The following language skills are incorporated into the lessons: reading and viewing; speaking and listening; writing and producing; language structures and conventions. The content of the lessons is based on the theme "Stepping Out: You make a mess – you clean it up" (*Focus on English, Grades 11 and 12*, 2006:95–109).

Firstly, the language skill of *reading and viewing* is addressed. A pre-reading activity, in which the learners view a short video clip about the effects of littering on the environment, is introduced. The educator then facilitates an informal discussion about the problem of littering in the communities where the learners live. The main purpose of the pre-reading stage is to tap into the learners' prior knowledge and to aid them in understanding the text when they start reading it.

The learners are then required to read a passage from the textbook (*Focus on English*, *Grades 11 and* 12, 2006:96 – see Addendum D). The text is a newspaper article entitled *Newspaper takes action*. After having read the text closely, the learners are required to answer questions provided in the textbook (*Focus on English, Grades 11 and 12*, 2006:98 – see Addendum E) to test their comprehension of the passage. The learners work on these questions in pairs and time is allowed for discussion of the questions where necessary. After a prearranged time, the answers to the questions are

discussed by the learners. The educator facilitates this class discussion, but allows the learners the opportunity to discuss and debate their answers.

The second language skill addressed is *language structures and conventions*:

The learners are shown 10 adapted sentences from the reading passage, as shown in Figure 5.1.

- 1) Last week, the Sunday Times Metro shamed litterbugs.
- The spokesperson for the Johannesburg Council congratulated Sunday Times Metro on the report.
- 3) Many people do not pick up their litter.
- 4) City authorities were sprucing up the city.
- 5) The community employs two cleaners.
- The article has given the community some leverage.
- 7) The litterbug picked up the can.
- He had thrown down the can.
- 9) Fordsburg residents were battling garbage louts.
- 10) A resident of Fordsburg described the litterbugs as unruly.

Figure 5.1 Interactive language activity: Sentences indicated on Interactive Whiteboard

These sentences are shown to them on the interactive whiteboard, or if there is no interactive whiteboard available in the classroom, the sentences could be shown on the screen by means of a data projector. The educator asks the learners to write the sentences into their exercise books. They are asked to identify the verb, the tense of the verb, the subject and the direct object in each sentence presented in active voice. The learners perform this activity in pairs, and are asked to write their answers in their exercise books. When they have completed this activity, a volunteer is asked to drag the text to the correct box directly on the interactive whiteboard, as indicated in figure

5.2. The same procedure is followed with the other sentences, with different learners acting as volunteers. If there is no interactive whiteboard available, the volunteers are asked to indicate their answers using the computer keyboard or mouse, so that their answers are projected on the screen.



Figure 5.2 Interactive language activity: Identification of verb, subject and object

Correct answers are marked with a green tick as indicated in figure 5.3 below.



Figure 5.3 Interactive language activity: Indication of correct answers

Incorrect answers are indicated with a red cross as shown in figure 5.4.



Figure 5.4 Interactive language activity: Indication of incorrect answers

In the activity as illustrated above, the learners would have an opportunity to interact with the learning material, as they indicate the answers directly on the interactive whiteboard or, in the absence of an interactive whiteboard, by using the computer keyboard or mouse, after having discussed their answers in pairs. Additionally, performance of this activity would require the learners to draw on prior knowledge acquired in their home language lessons, as the identification of subject and object is already introduced in the home language curriculum in the intermediate phase (Grades 4 – 6). Although the identification of subject and object is not mentioned in the CAPS English FAL (2010) as a language convention that has to be taught or revised in the FET phase, the educator may explain these concepts to the learners, also referring to the terminology in the learners' home language, to enhance comprehension, if necessary. The learners may need to know this terminology when the educator explains sentence conversion from Active to Passive Voice.

When the learners have identified the verbs, the subject and the object in each of the ten sentences as indicated in Figure 5.1, the educator explains to them that the sentences are to be changed, in order for the emphasis to be on the action that is performed, rather than on the performer of the action. The changes to be made to the first sentence with regards to subject and object are shown to the learners by means of the interactive whiteboard or on the screen. The changes made to the verbs in the different tenses are then explained to the learners. The concept of regular and irregular verbs is briefly revised and the learners are asked to supply the past participles of the verbs that appear in the sentences that they have written down. Working in pairs, the learners convert the sentences from active to passive voice, writing the answers in their exercise books. When the learners are ready, volunteers are asked to share their answers with the group, by changing the sentences on the interactive whiteboard from active to passive voice as indicated in figure 5.5 below:

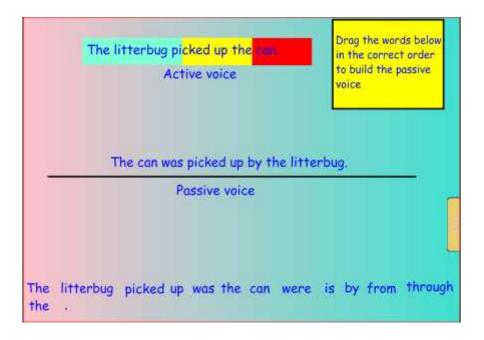


Figure 5.5 Interactive language activity: Sentence conversion from Active to Passive Voice

After indicating their answer, the correct answer could be made visible by dragging it onto the frame, as illustrated in figure 4.6 below:

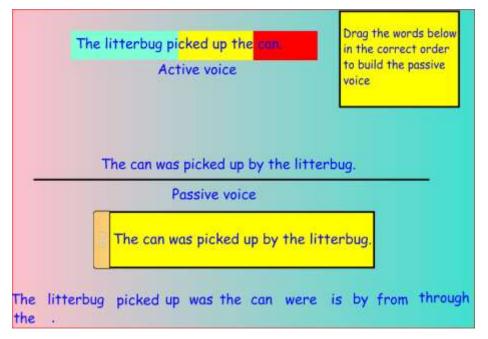


Figure 5.6 Interactive language activity: Sentence conversion from Active to Passive Voice. Indication of correct answer.

The third language skill addressed by the series of lessons is the skill of *writing and presenting*. The learners are shown images of areas that have been defaced by litterbugs. In addition to the images, pairs of nouns and verbs describing the scenes are shown to the learners on the IWB or screen. They are asked to complete a guided telephone conversation in dialogue form to describe the scenes shown in the visual, using the active voice (see Addendum G). To complete this activity, the learners work in pairs. Thereafter, the learners are asked to complete a short news report (see Addendum H) on the scene depicted in the visual, using the same sentences as in the dialogue, but this time rewriting the sentences into the passive voice.

Finally, the language skills of *speaking and listening* are addressed. After completion of the writing tasks, volunteers are asked to perform a role-play in which they act as television newsreaders, using the reports that they have compiled. During the oral presentation, one of the learners is asked to film short video clips of at least two news

reports. These video clips are shown to the learners on the IWB or the screen and they are asked to listen closely to the sentences produced and to edit any grammatical errors made, especially with regard to the use of the passive voice. These errors are subsequently discussed and corrected.

At the end of the four-period cycle, the learners are asked to reflect on the lessons by ticking the appropriate boxes in a checklist, as indicated in figure 5.7 below. This reflection affords the learners the opportunity to assess their responses to the lessons and to their understanding of the grammatical item. This is not only a self-assessment activity, but it also gives the educator insight into the learners' understanding of the text and of the grammatical features taught by means of the lessons.

Think about what you have learnt and then answer the questions below by checking the appropriate box.						
	Yes Sometimes No					
I could answer the questions set on the newspaper report.						
2 I could identify the subject, the verb and the object in the sentences shown on the whiteboard.						
3 I could change the sentences from active to passive voice.						
4 I could build sentences in the active voice, using the nouns and verbs supplied.						
5 I could use the passive voice to complete the news report.						

Figure 5.7 Self-assessment checklist for learners

In the following section, the lesson plan described above, including the CALL material, is evaluated in terms of its adherence to a theory of learning and to the principles of

communicative language teaching. Furthermore, the CALL material included in the lessons is evaluated in terms of its usability in limited technology classroom settings and whether or not it could be integrated with other teaching and learning support materials, e.g. textbooks. The degree to which the multimedia is integrated into the lessons is also reviewed.

### 5.5 Evaluation of the lesson plan

### 5.5.1 Theoretical Approach

The above-mentioned lesson plan, of which the CALL material forms an integral part, contains elements of constructivism, but is designed along an eclectic theoretical approach to teaching and learning, as defined in Chapter 2 of this study.

In the constructivist classroom, the educator takes on the role of facilitator and the learners are allowed to construct their own knowledge actively, building on knowledge that they have acquired beforehand (Alessi and Trollip, 2001; Levy and Stockwell, 2006; Fosnot, 2005; Cooper, 2007; Can, 2009). In the course of this lesson, the educator acts as facilitator, while the learners participate actively, thereby constructing their own knowledge. The lesson described above is also based on knowledge that they may have gained in the course of their home language curriculum, as well as on knowledge that they should have acquired in earlier grades, as stated in the CAPS FAL (2010).

The CALL activities, as well as the more traditional activities, are based on situations that learners may encounter in the world outside of the classroom. In this regard, the learners are required to produce a written telephone conversation in dialogue form and to produce news reports on the selected theme, which they then have to read to the class. An important feature of the lesson plan is also that learners are encouraged to work collaboratively, thereby helping each other with goals that are mutually important. This concept of collaborative learning is central to constructivist learning theory (Alessi

and Trollip, 2001), therefore, also in this regard, the lesson plan tries to adhere to constructivist principles.

Additionally, learners are given the opportunity to reflect on what they have learnt and the significance of the learning experience. The reflection is done by means of a short checklist that is completed by the learners. Reflection is encouraged by proponents of constructivist learning theory, as it is a way for the learner to make sense of the process of learning (Fosnot and Perry, 2005).

Furthermore, the lesson plan designed as part of this study largely adheres to the principles of Communicative Language Teaching, specifically in the ways described below.

Although the grammatical rules used when rewriting sentences from active to passive voice are taught in the course of the lessons as described in section 4.9 above, emphasis is placed on the use of these rules to enhance communication. The focus on communication, instead of emphasising the grammatical rules in isolation, is an important feature of Communicative Language Teaching (Richards, 2006; Brown, 2000).

The starting point for the activities included in the lessons is a video clip that deals with the problem of environmental pollution. Thereafter, the learners are asked to read a newspaper report that states how the city council of Johannesburg has dealt with the problem of littering. These authentic stimuli are eventually employed in teaching the learners the grammatical rules used when converting sentences from active to passive voice. After learning the relevant grammatical rules, the learners are required to complete worksheets to produce written responses, in the form of a telephone conversation and a news report. In this way, the learners use the learnt language structures in unrehearsed contexts. This is a further objective of Communicative Language Teaching (Rodgers, 2001; Malik, 2008).

The learners are also given an opportunity to reflect on possible errors, as one of the principles of CLT is that the learning process involves trial and error. Seen in this way, recognising and correcting errors are regarded as an important way to learn new concepts (Rodgers, 2001; Beatty, 2010).

### 5.5.2 Integration of the CALL material

Various forms of multimedia are used in the course of the above-mentioned lessons. Firstly, a video clip is shown to the learners, to introduce the lesson and to facilitate discussion of the theme, which in this instance is environmental pollution. Secondly, the learners are asked to use the interactive whiteboard to identify and indicate certain grammatical units, i.e. verb, subject and object; and sentence transition from active to passive voice. In the absence of an interactive whiteboard, the learners could use the classroom computer to indicate these items. Thirdly, the interactive whiteboard or screen is used to show learners a visual to which they are asked to respond. The expected written and verbal responses to the visual require the learners to use the learned grammatical rules in specific contexts, where the learners have to complete a telephone conversation and a news report in which they use the rules to produce sentences in the passive. In this way, the rules are used for communicative purposes, albeit in simulated situations in the classroom. Finally, learners are asked to make a video clip of some oral responses, which is subsequently shown to the class. The learners respond to the video clip by listening and identifying possible grammatical errors, with specific emphasis on the passive voice.

In the above-mentioned scenario, the multimedia material has been used together with more traditional material, i.e. a prescribed second language textbook and printed worksheets. The multimedia material is integrated into the lesson as a whole and not used as a separate feature. In this way, the technology becomes a tool that helps the educator to teach a specific grammatical item to the learners, yet it does not take over the entire learning and teaching process. Bax (2006) describes this kind of

technological integration into the existing syllabus as an important step towards the normalisation of technology in education.

# 5.5.3 Use of the developed CALL material in technologically limited classrooms

Review of literature on the topic of CALL material has highlighted certain limitations that educators may experience when attempting to integrate computer technology into the language learning process. These limitations may include insufficient access to classroom computers, computer laboratories and Internet connection (Alessi and Trollip, 2001; Gudmundsdottir, 2010).

Although the multimedia material to be used as part of the lesson plan described above has been developed for the interactive whiteboard, the material can be adapted to be used with a computer, data projector and screen. When the cost of supplying the learners with individual classroom computers are measured against the cost of an interactive whiteboard, data projector and screen, the interactive whiteboard may prove to be the more inexpensive way for educators to introduce multimedia material that allows learner interactivity. As mentioned elsewhere in this study, using Mimio ® technology or a similar product, may be an even less expensive way to use interactive whiteboard technology.

### **Chapter 6**

### Conclusion and Suggestions for Further Research

#### 6.1 Introduction

In this chapter, the research findings will be summarized and recommendations will be given regarding the use of multimedia material for the teaching of second language grammar in classrooms where there may be limited access to computers, Internet connectivity and other relevant hardware. Some suggestions for further research will also be supplied.

### 6.2 Summary of research findings

Although English is widely spoken in South Africa, many learners of English Additional Language, especially those living in lower-income communities, do not perform well in formal language and writing examinations, for example in the NSC examinations for English First Additional Language. The researcher has made the assumption that this unsatisfactory performance of learners may, in part, be a result of learners' inability to use grammatical forms for a wide range of purposes. This assumption seems to be verified when viewed against results supplied by the Western Cape Education Department, as shown in Table 1.2.

Furthermore, the researcher recognizes that the use of multimedia material may play a role in assisting educators to teach grammar to second language learners. As learners live in a technological world and may even be "digital natives", i.e. they grew up with technology like "computer games, email, the Internet, cell phones and instant messaging" (Prensky, 2001:1), there is a chance that they may respond academically well to technology in the classroom. Furthermore, multimedia material may also help teachers to augment textbooks that do not supply adequate activities for the teaching of

grammar. However, these educators and learners may be severely hampered by a lack of hardware needed to make use optimally of multimedia material in the language-learning classroom. This deficiency in technological resources may also play a huge role in exacerbating what is known as the digital divide, a phenomenon that, in education, can be described as an ever-widening gap between those who have access to the appropriate technologies for teaching and learning and those who do not (Gudmundsdottir, 2010).

After consulting literature in the field of learning theory, the researcher has come to the conclusion that it is probably most prudent for educators to use multiple theories of teaching and learning when planning or developing learning material. However, as the current South African National Curriculum Statement for Languages, as well as the amendments to the curriculum as proposed in the Curriculum and Assessment Policy Statement for First Additional Language (CAPS FAL) released in September 2010, both adhere to the learning theory of Constructivism, the researcher has come to the conclusion that any learning material developed for use in the South African context, should largely correspond to the principles of constructivist learning theory, while incorporating other learning theories when necessary.

The question of how grammar should be taught and if it should be taught at all has been considered by many researchers of second language learning. Consideration of literature in the field of teaching second language grammar has led this researcher to come to the conclusion that grammar should, indeed, be taught to second language learners. Research further suggests that following a communicative approach to the teaching of grammar would be beneficial to learners in that it would help them to apply grammatical rules for communicative purposes (Cook, 2001; Swan, 2002; Roach, 2003; Noonan, 2004), i.e. they would be able to apply the rules communicatively in real-world situations, as a communicative approach may enable the learners to discern how the learned grammatical rules fit into the broader communicative scenario. When developing or selecting learning material for the teaching of grammar, educators should ensure that sufficient provision is made for learners to use learned grammatical forms

for the purpose of communicating efficiently in the target language. Using multimedia to teach grammar opens up exciting possibilities for communicative language teaching, as various forms of multimedia, e.g. video, animation and sound could be employed by the educator when presenting lessons to the learners. Video would, for example, make it possible for learners to observe home language speakers using specific grammatical forms in authentic conversations.

Literature in the field of Computer-Assisted Language Learning has been reviewed, in order for the researcher to come to a conclusion as to what kind of CALL material would be suitable for the purpose of grammar instruction, with specific reference to schools where educators and learners may experience a lack of the hardware needed to introduce some CALL material into the language learning classroom. Some definitions of CALL have been researched and the researcher has come to the conclusion that the term CALL could be applied to various language learning materials, where not only the computer is used to induce or enhance learning, but also other technology like interactive whiteboards, cell phones, etc.

Research in the field of CALL strongly suggests that CALL could play a role in enhancing language teaching and learning (Brett & Conzález-Lloret, 2009; Levy, 2005; Warschauer, 2003; Bush, 1997), although there is as yet very little research evidence to prove conclusively that using the computer would be more beneficial to the teaching and learning of an additional language than more traditional methods (Chapelle, 2009) In short, computers and technology are not intended to be a replacement of the educator, even though researchers in the field have found that the use of CALL may be beneficial to the teaching and learning process in some instances, as discussed in chapter 4 of this study.

Another aspect of CALL researched for the purpose of this study is the way in which the compilation of CALL material is influenced by various theories of learning. Specific attention has been given to research investigating the relationship between CALL

material and Constructivist Learning Theory and how computers can be used to enhance the principles of Constructivism.

Furthermore, literature that reports on the role of the educator in technology-enhanced scenarios was reviewed and the conclusion is that the use of technology in the classroom is closely bound to various issues of learning and teaching, i.e. to the learner, the educator, the curriculum and the desired outcomes (Levy and Stockwell, 2006). Technology that is pedagogically flexible and accessible would be of aid to language educators. It is also important that educators are comfortable with the use of new technologies and that they should be able to evaluate and use these technologies with confidence.

Ways in which technology could be used to teach grammar have been reviewed from relevant literature and research has also been done on the factors that should be taken into account when developing CALL materials. These factors are discussed in detail in chapter 4 of this study.

Various CALL options available to the English First Additional Language educator have been researched by reviewing relevant literature. Specific attention has been given to the use of Computer-Mediated Communication, as well as to the use of technology in one-computer environments. The readings show that it is possible for educators to employ multimedia material in one-computer classrooms and that it may even be possible for educators to use Computer-Mediated Communication in these environments.

Literature in the field of second language and general research has been reviewed by the researcher, in order to ascertain the most suitable type of research that could be done for the purpose of this study. This review of literature in the field of research methodology has led the researcher to embark on quantitative research that was done in the form of a questionnaire that was completed by 42 educators of English First Additional Language.

Firstly, the purpose of the survey was to ascertain the computer literacy of the respondents, as well as the extent to which the respondents have made use of the computer literacy courses offered by the South African Department of Basic Education (DBE). Although the DBE has committed itself to advance the use of technologies in state schools, the results of the survey suggest that many schools remain underresourced in terms of technology. In schools where educators and learners have access to computers and other relevant technologies, these technologies may not be accessible for the teaching and learning of English First Additional Language. The DBE has sponsored various computer training courses for educators, yet very few of the respondents in this study indicated completion of these courses. Most of the respondents indicated that, in their opinion, the DBE does not offer sufficient support to educators of English First Additional Language in terms of training needed to compile and / or use multimedia teaching and learning support material. The majority of respondents stated that they are able to use the computer at different levels of proficiency, including the ability to develop learning materials to using the computer to support them with administrative tasks and teaching. Although the findings of the survey are only applicable to the sample group and have not been proven by the researcher to be indicative of the aptitude level of a larger group of educators, it may suggest that at least some educators are ready to use computers to teach English First Additional Language in general and specifically language knowledge in the form of grammar.

Secondly, the questionnaire (Addendum B i) was used to ascertain the availability of computers and other technologies at the respondents' schools. In this regard, most respondents indicated that they have access to an Internet connection at school. Technologies like data projectors, televisions and DVD players are also available to most respondents. Although very few of the educators who took part in the survey indicated the availability of a classroom computer, it seems to the researcher as though the one-computer scenario, as discussed in chapter 4 of this study, could be a viable option to introduce multimedia material into these classrooms, as most of the educators

expressed a desire to use more multimedia material in the language learning classroom.

In the third instance, the survey was employed to ascertain the respondents' attitude towards the teaching of grammar to second language learners and the use of CALL material to teach grammar in the subject field of English First Additional Language. The results of the survey indicate that very few respondents regularly make use of the Internet to teach grammar, although many of them sometimes use multimedia material for this purpose. The majority of the educators indicated the chalkboard, textbooks, prescribed literature, magazines and newspapers as the learning and teaching support materials that were most often used by them to teach grammar. This could be interpreted as a result of the lack of formal training in the use of multimedia material for the teaching of grammar, or the perceived lack of departmental support, as these educators have access to at least some technologies that could be utilized to introduce CALL material into their grammar lessons. There could, however, be other variables that may play a role in the LTSM preference of the respondents, which have not been addressed by this particular survey. Very few of the respondents indicated that they make use of Computer-Mediated Communication (CMC) to teach grammar, although a significant number have access to an Internet connection at school. This could possibly be ascribed to the lack of classroom computers. The majority of the respondents agreed or strongly agreed with the statement that multimedia material would help their learners to learn and use grammar more effectively. The researcher interprets this to be another indication of the respondents' readiness to introduce some form of multimedia material into their language lessons. Most of them are in favour of formal grammar instruction and believe that learners need to know grammatical rules in order to communicate effectively in the target language.

Based on the information gleaned from the literature review and the results of the research survey, the researcher has come to the conclusion that CALL material could be used to teach grammar, even in classrooms that have limited technological resources. If an educator could find access to one classroom computer and an

interactive whiteboard or a data projector and a screen, a whole range of possibilities for teaching and learning with the use of CALL could be opened up. A suggestion would therefore be that language educators should receive more training in the compilation of multimedia material, especially for use in the one-computer environment, as it may be possible that many educators are not aware of the CALL options available to them. Educators may also need more information or training courses regarding the use of handheld-devices such as cellular phones, i-Pods and MP3 players in the teaching and learning of grammar, as learners often have more access to these kinds of technologies than to personal computers.

#### 6.3 Issues for further research

A possible issue for further research could be to test the effectiveness of multimedia material as developed for the current study, or similar material, in conveying grammatical concepts to learners. In this scenario, a control group could be taught the same grammatical item by means of conventional instruction. The results achieved by means of the conventional instruction could then be compared to that of a group of learners who were taught the same grammatical feature by means of CALL material. In this way, the statement by Chapelle (2009), i.e. that successful learning cannot be undoubtedly ascribed to the use of CALL, could be tested in the South African context.

One could also consider evaluating the reaction of educators to multimedia material as developed for this study, or similar material, after having used it for a specific time. The focus of this kind of study would be on the usefulness of the material in the language learning classroom, from an educator's perspective. In this kind of study, it would also be possible to evaluate how easy or challenging educators, who have never before used CALL material in their lessons, would find it to adapt to Computer-Assisted Language Learning.

Furthermore, future research could possibly also investigate how various forms of computer-mediated communication (CMC) could be utilized by educators in classrooms with limited access to computers and other technological tools, to promote the teaching and learning of L2 structures. In particular, the use of cost-effective or free platforms, e.g. Moodle, which is an open-source web-application that educators could access to make use of chat and discussion forums, could be explored as part of such a study.

In conclusion, the researcher is convinced that the digital divide in South African schools could be bridged to a certain extent through the compilation and use of CALL material as developed for the purpose of this study, so that educators, and learners in technologically limited classrooms could enjoy the technological and educational benefits that are available to those educators and learners who work and learn in technologically advantaged classroom environments.

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### Addendum A

## NSC English First Additional Language Paper 1, November 2009, Section C, Question 5

English First Additional Language/P1

11 NSC DoE/November 2009

### QUESTION 5: LANGUAGE AND EDITING SKILLS

Read the following passage (TEXT F), which has some deliberate errors, and answer the set questions.

#### TEXT F

1.	African elephants were historically found south of the Sahara Desert. They're at home in both swamp and desert. The most serious threat to their survival is that elephants share needs similiar to man: food, land and water. So, as the human population grow, elephants are pushed into smaller spaces. Here their own increase in population soon leads into overcrowding and habitat destruction.	5
2.	Waterholes are social venues for elephants. They prefer to drink fresh, clean water. High-ranking elephants drink before lower-ranking ones. Water is drawn threw the trunk which can hold up to 10 litres at a time. Adult elephants drink as much as 200 litres of water at a time.	10
3.	Splashing about in muddy water is like a beauty treatment for elephants. They churn up the water until it becomes thick mud. They then slap this mud onto their skins to protect them from insects and the harsh African sun. Next they powder themselves with dust to complete their beauty routine.	
4.	Elephants flap their huge ears like fans to keep cool. They are quiet at home in water and are excellent swimmers. They sometimes submerge themselves completely, with only the tips of their trunks showing, in a bid to cool off.	15
5.	Elephants can easy live as long as 70 years. The oldest cow in the heard is regarded as having the greatest wisdom and experience, and so is always the leader.	20
	[Adapted from an article in Sawubona, March 2009]	

5.1 Combine the following two sentences into a single sentence, using the word which:

African elephants were historically found south of the Sahara Desert.

They're at home in both swamp and desert. (2)

5.2 Choose the correct answer. Write only the letter (A – D) next to the question number (5.2) in the ANSWER BOOK.

The apostrophe used in the word 'They're' (line 1) indicates ...

- A the plural form.
- B omission.
- C possession.
- D a quotation.

(1)

English	First Addition	nal Language/P1	12 NSC	DoE/November 200	19
5.3	The wor	rd 'survival' (line 2) o	comes from the verb 'to	o survive."	
	Give the	correct form of the	word 'survive' in each	of the following sentences:	
	5.3.1	The elephant cal	f is the only (survive)	of the fire on the game farm.	(1)
	5.3.2	That group of ele	phants (survive) only	if they are given treatment.	(1)
5.4	Identify	and correct the erro	or in each of the follow	ving sentences:	
	5.4.1	Elephants share (line 3).	needs similiar to r	man: food, land and water	(1)
	5.4.2	So, as the hum smaller spaces (I		elephants are pushed into	(1)
	5.4.3		ncrease in population struction (lines 4 – 6).	soon leads into overcrowding	(1)
	5.4.4	Water is drawn th	hrew the trunk (line 8 -	- 9).	(1)
	5.4.5	They are quiet (lines 15 -16).	at home in water a	nd are excellent swimmers	(1)
	5.4.6	Elephants can ea	asy live as long as 70	years (line 18).	(1)
	5.4.7		in the heard is regar erience (lines 18 - 19)	rded as having the greatest	(1)
5.5	Rewrite	the following senter	nce in the future tense	:	
	Waterho	oles are social venue	es for elephants.		(1)
5.6	Rewrite	the following senter	nce in the past tense:		
	Elephar	nts churn up the wat	er into thick mud and	then slap it onto their skins.	(2)
5.7	Give an	antonym (word opp	osite in meaning) for	harsh' (line 13).	(1)
5.8	Rewrite	the following senter	nce as a question:		
	The old	est cow is always th	e leader.		(1)
5.9	Rewrite	the following senter	nce in reported speech	1:	
	Piet said	d, "I find elephants f	ascinating creatures."		(2)

English F	First Additional Language/P1	13 NSC	DoE/November 200	9
5.10	Rewrite the following senter	nce, inserting all the mis	ssing punctuation marks:	
	I know that elephants have	amazing memories said	f themba	(2)
5.11	Choose the correct word fro	om those given in bracke	ets:	
	An elephant has (been/bein	g) seen in the stream.		(1) <b>[22]</b>
			TOTAL SECTION C:	40
			GRAND TOTAL:	80

### Addendum B (i)

### Questionnaire

## QUESTIONNAIRE ON THE USE OF MULTIMEDIA TO TEACH GRAMMAR (ENGLISH FIRST ADDITIONAL LANGUAGE)

This questionnaire forms part of a Master's Degree Thesis on the use of Computer-Assisted Language Learning material in the teaching of Grammar to learners of English as First Additional Language. Your confidentiality, and that of your school, will be respected; no information identifying respondents schools will be disclosed. Thank you for your cooperation.

Please answer the following questions by making an 'X' in the appropriate box:

- 1 Educator Proficiency and Computer Literacy Training:
- 1.1 Please indicate your ICT (Information and Computer Literacy) skill level at the hand of the following descriptors:

(Please indicate ONLY ONE field)

(1.15455 maisats 51121 5112 msia)	
DESCRIPTOR	
I am able to use the computer to develop learning material to augment existing learning support material (e.g. textbooks) and for curriculum support.	
I am able to integrate technology into teaching and learning activities.	
I am able to use various technologies, including the computer, to support administration, teaching and learning.	
I have no ICT or computer skills.	

### 1.2 Please indicate your formal computer literacy training:

Which of the following computer courses have you completed successfully?

COURSE				
Intel ® Teach To the Future				
Microsoft Partners in Learning				
E-Educator				
ICDL				
Other (Please specify):				
None of the above				

## 1.3 Please indicate the extent to which you agree or disagree with the following statement:

Educators of English First Additional Language receive sufficient support from the Department of Education in terms of training needed to compile and/or use multimedia learning material.

strongly disagree	disagree	agree	strongly agree

## 2 Availability of Computers and other technologies for English First Additional Language instruction and learning

2.1 Which of the following technologies are available at your school for the teaching of English First Additional Language?

Language Laboratory	
Classroom Computer	
Data Projector	
Connection to the Internet	
Television	
Digital Video Device (DVD)	
None of the above	

## 2.1 Please indicate the extent to which you agree or disagree with the following statements:

2.2.1 Using multimedia would serve to improve learners' acquisition of second language grammar.

language granimar.						
strongly	disagree	agree	strongly			
disagree			agree			

2.2.2 I would prefer to use more multimedia material in the language learning classroom.

strongly	disagree	agree	strongly
disagree			agree

### 3 Grammar Instruction

3.1 How often do you use the following learning and teaching support materials (LTSM) to teach **GRAMMAR** in the subject field of English First Additional Language?

	never	hardly	sometimes	quite a lot	very often
Multimedia material (CD, Video, Audio, TV, Radio)					
The Internet					
Textbooks					
Magazines and					
newspapers					
Chalkboard					
Prescribed Literature					

3.2 How often do you use the following forms of Computer-Mediated-Communication for the teaching of English First Additional Language?

	never	hardly	sometimes	quite a lot	very often
E-mail					
Blogs					
Social Networks (MXit;					
Facebook;Twitter)					
Other chat rooms					

3.3 How often do you allow learners to be involved in choosing materials, topics, activities and forms of teaching?

not at all	hardly	sometimes	quite a lot	very often

- 3.4 Please indicate the extent to which you agree or disagree with the following statements:
- 3.4.1 Second language learners benefit from formal grammar instruction,

strongly disagree	disagree	agree	strongly agree

3.4.2 Second language learners do not have to know grammatical rules in order to communicate effectively in the target language.

			9 9
strongly	disagree	agree	strongly
disagree			agree

3.4.3 Grammar should be taught by explaining the forms and rules and then using drills for learners to remember the rules.

deling drille fer feathers to refrictibel the raise.				
strongly	disagree	agree	strongly	
disagree			agree	

Thank you very much for completing this questionnaire!

## Addendum B (ii)

### Cover letter sent to schools for completion of questionnaire

5 Milner Street Somerset Park Worcester 6850 9 September 2010

#### THE PRINCIPAL / HEAD OF DEPARTMENT: ENGLISH

Dear Sir / Madam

### QUESTIONNAIRE: ENGLISH FIRST ADDITIONAL LANGUAGE

I am currently conducting a survey on the use of computer assisted language learning (CALL) material in the instruction of grammar in the subject field English First Additional Language. The survey is done as part of a Master's Degree thesis (MPhil HyLL) at the University of Stellenbosch.

I would appreciate it if you would ask the educators of English First Additional Language (Grade 8-12) to complete the short questionnaire that accompanies this letter, for collection on Tuesday, 14 September 2010.

If you would like to know the results of the survey after completion, you are welcome to contact me at the following numbers:

084 487 5336 (cell) 023 347 7978 (home)

I thank you in advance for your assistance.

Yours faithfully

Deidre Forbes Deputy Principal Worcester Secondary School

### Addendum C

## Reference List: Language Structures and Conventions. CAPS FAL

### 3.4 Language structures and conventions - reference list

The following language structures and conventions will be taught in the context of reading and writing, and also as part of a systematic grammar programme. Some of the structures and conventions will have been introduced in earlier grades but may still need to be revised. Other grammatical structures are introduced in the FET Phase.

Nouns	Countable (e.g. chair/chairs) and uncountable (e.g. furniture) nouns  Number (singular and plural), e.g. chair/chairs  Nouns with no change in number in the singular form, e.g. scissors, trousers	Revision Revision
	Common (e.g. woman) and proper nouns (e.g. Thandi)	Revision
	Abstract nouns, e.g. love, fear, respect, honesty	Revision
	Possessive forms of nouns, e.g. Lesego's desk, learners' desks children's toys	Revision
	Collective nouns and classifiers, e.g. a swarm of bees, a bar of soap	Revision
Determiners	Indefinite article: a book, an apple	Revision
	Definite article: the book, the furniture, the apples	Revision
	Demonstratives: this, that, those, these (e.g. That book is mine.)	FET
	Quantity 1: all, some, most, no, none (e.g. Most learners understood the lesson.)	FET
	Quantity 2: both, either, neither (e.g. Both learners stood up.)	FET
	Quantity 3: much, little, many, few, more, less, fewer (e.g. The school has many learners.)	FET
	Quantity 4: some, any, another, other, each, every (e.g. Each learner received a book.)	FET
Pronouns	Personal pronouns as subject: I, you, he, she, it, we, they (e.g. She is reading the book.)	Revision
	Personal pronouns as direct or indirect object: me, you, him, her, it, us, them (e.g. She gave it to me.)	Revision
	Reflexive pronouns: myself, yourself, himself, herself, ourselves, yourselves, themselves (e.g. He washed himself with soap.)	FET
	Relative pronouns: which, who, that, whose, where (e.g. The man who is standing by the window is my teacher.)	FET
	Interrogative pronouns: who, what, which, whose, whom (e.g. Whose book is this?)	FET
Adjectives	Position of adjectives, e.g. The <u>old</u> man (before a noun); The boy was <u>mischlevous</u> (after a verb)	Revision
	Adjectives ending in -ing, e.g. amazing, boring, exciting (e.g. The lesson was boring.)	FET
	Adjectives ending in -ed, e.g. amazed, bored, excited (e.g. The student was <u>bored</u> .)  Comparison of adjectives, e.g. happy, happier, happiest; intelligent, more	FET
	intelligent, most intelligent (e.g. It was the happiest day of my life/She is the most intelligent student in the class.)	Revision
Adverbs	Adverbs of manner, e.g. quietly, carefully, politely, softly, quickly	Revision
	Adverbs of time, e.g. yesterday, tomorrow, last year, last week, the other day	Revision
	Adverbs of frequency, e.g. always, usually, often, sometimes, never	Revision
	Adverbs of probability, e.g. certainly, definitely, maybe, perhaps, possibly	FET
	Adverbs of duration, e.g. still, yet, any more	FET
	Adverbs of degree, e.g. completely, strongly, totally, quite, rather	FET
	Adverbial phrases, e.g. in the garden, on the table	Revision

Prepositions	Place and direction,, e.g. above, below, in, under, at, on, behind, between, beside Adjective + preposition, e.g. afraid of, ashamed of, bored with, impatient with, rude to	Revision FET
	Noun + preposition, e.g. invitation to, approach to, reason for, respect for, comment on	FET
Verbs	Transitive and intransitive verbs, e.g. He bought a pen./The girl laughed.  Verbs with two objects (direct and indirect), e.g. He gave me the book.	Revision FET
Verb tenses	Simple present tense, e.g. I <u>play</u> tennis every week/Snakes <u>are</u> reptiles.  Present progressive (or continuous) tense, e.g. She <u>is watching</u> television at the moment.	Revision Revision
8	Present perfect tense, e.g. I <u>have lived</u> in Durhan all my life.  Present perfect progressive (or continuous) tense, e.g. He <u>has been studying</u> hard the whole week.	Revision Revision
	Simple past tense, e.g. He woke up early and got out of bed.  Past progressive (or continuous) tense, e.g. The family were sleeping, when the fire broke out.	Revision Revision
	Past perfect, e.g. He went home because he <u>had forgotten</u> his keys.  Past perfect progressive (or continuous), e.g. I <u>had been waiting</u> for two hours by the time he finally arrived.  Expressing future time:	FET FET
	Will/shall + infinitive, e.g. Mrs Molefe will teach the Grade 10 class/I am sure you will enjoy the movie.	Revision
	Going to + infinitive, e.g. They are going to visit her grandparents./I think it is going to rain tomorrow.	Revision
	Simple present tense used to talk about the future, e.g. Tomorrow is a holiday.	FET
	Future progressive (or continuous), e.g. I will be working the whole of next week.	FET
	Future perfect, e.g. By next week I will have finished the job.  Future perfect progressive (or continuous), e.g. Next year I will have been teaching at this school for twenty years.	FET FET
Concord	Subject-verb concord, e.g. He has just arrived./They have just arrived; I was going./They were going.	Revision
Modals	To express ability/inability, e.g. I <u>can</u> speak German/I <u>can't</u> speak French/He is <u>able to</u> return to work/He is <u>not able to</u> return to work.	Revision
	To express permission, e.g. May I use the bathroom? Could I leave early? Can I ask a question? Yes, of course you can.  To express instructions/requests, e.g. Would you open the window, please./Could	Revision
	you let me in.  To express possibility/impossibility, e.g. This can cause difficulty./You can't be	FET
	serious./You could be right./He couldn't know.	LEI
	To express probability/improbability, e.g. We <u>should</u> arrive in Jo'burg at 10 p.m./We <u>ought to</u> arrive in Jo'burg at 10 p.m./There <u>shouldn't</u> be any problem. There <u>ought not</u> to be any problem.	FET
No. of Control	To express certainty, e.g. They must have forgotten.	FET
Conditional sentences	First conditional to express a real possibility, e.g. If it rains, we will cancel the trip.  Second conditional to express something that is unlikely or improbable, e.g. If I won the lottery. I would buy my mother a house with ten bedrooms.  Third conditional to express something that is hypothetical, e.g. If I had worked	FET FET
n i	harder at school, I would have passed matric.	FET
Passive voice	Simple present tense, e.g. The gate is locked at 6 o'clock every night.  Present progressive (continuous) tense, e.g. The room is being cleaned at the moment.	Revision Revision
	Present perfect tense, e.g. A new supermarket <u>has been opened</u> this year.  Simple past tense, e.g. The library <u>was closed</u> for the holidays.  Past progressive (or continuous), e.g. They had to wait because the car was still being cleaned.	Revision FET FET
Reported	Past perfect, e.g. He <u>had been poisoned</u> by his girlfriend.  Future time, e.g. Next year the class will be taught by Mr Dube./ Next year a new library is going to be built.  Reported questions, e.g. She asked me why I was so late./ He asked me what kind	FET FET

### Addendum D

Newspaper report from Focus on English, Grades 11 and 12, 2006:

# Newspaper takes action

Staff Reporter

Last week, the Sunday Times Metro shamed litterbugs who were turning Johannesburg into a garbage heap, by publishing photographs of them littering. The newspaper also revealed that city officials had not fined anyone for littering in 10 years.

Readers applauded the newspaper's stand, and officials thanked the newspaper for highlighting the problem. They are now making moves to deal with the litter:

Pikitup – the anti-litter agency for Johannesburg – has got 2 000 people out on the street, promising to make the city one of the cleanest in the world within a year. Pikitup said the newspaper article had helped highlight the litter problem and given their campaign a big boost; City Parks officials, church groups, civil servants and community workers have turned up to clean the Braamfontein Spruit Trail; and City residents have told the newspaper how they pay people to keep their streets clean.

The spokesperson for the Johannesburg council congratulated Sunday Times Metro on the report, saying it would help in the fight against litter and save the city money on cleaning up. He said the council was looking at enforcing fines to persuade the "uncaring minority"



Litter is a common problem in cities not to pollute.

Another member of the Johannesburg council's mayoral executive said, "The story was useful and informative. A good example is this guy I attended a rally with this week. He threw a can down, and then said, 'Shame on me. What if a newspaper takes a photograph of me doing this?' He then picked up the can he had thrown down."

Joseph Shamir, head of the Pikitup campaign, also thanked the newspaper saying, "Your article has given us some **leverage**."

Shamir's 2000 workers are sweeping through the CBD (Central Business District), Hillbrow, Berea, and many other Johannesburg suburbs that have been neglected in the past, as

part of a long-term anti-litter plan. "Operations will be rolled out with military precision, which will leave the city sparkling clean and mark a turning point in the cleanliness of Johannesburg," he said. "Within the space of a year, we aim to transform Johannesburg into one of the cleanest cities in the world."

Meanwhile, City Parks started a drive to clean the Braamfontein Spruit Trail in Milpark. The operation saw officials from Government and community organisations dirty their hands in an attempt to get the park clean.

A spokesperson for City Parks, Jenny Moodley, said the trail had the potential to become a tourist attraction but for the garbage streaming down from Hillbrow. But while the city authorities were sprucing up the city, Fordsburg residents were still battling garbage louts – mainly students.

The community has employed two cleaners to keep their streets clean. One of the cleaners was punched by a litterbug two weeks ago when he asked him to clean up his mess. A resident of Fordsburg described the litterbugs as unruly. "The bins are there but they don't pick up their litter and throw it inside." He said the residents' attempts to get the authorities to intervene had been fruitless.

### Addendum E

Questions on newspaper report from Focus on English, Grades 11 and 12, 2006:

## Making sense

Write down your answers to the following questions:

- In what way had officials contributed to the dirty condition of the city?
- What was the effect of the photographs published by the Sunday Times Metro? Quote from the passage to support your answer.
- Suggest what the employees of Pikitup actually do while they are "sweeping through" the suburbs?
- Explain the phrase "uncaring minority" in your own words.
- Read the five readers' comments that were published. What attitude do these letter writers have in common?
- 6 Think about the behaviour of the "garbage louts" in Fordsburg.
  - a) Why do people behave this way?
  - b) What can be done to change their behaviour?
- Do you think that residents should hire their own cleaners? Give a reason for your answer.
- Why does the spokesperson for City Parks think it is important to clean up the Braamfontein Spruit Trail?
- The Emmarentia resident said that he or she preferred a "soft approach". Explain the expression "soft approach" in your own words.

## Addendum F

## Worksheet: Telephone conversation

Household rubbish not collect

plastic bags throw away

2 rubbish dump

4 dog tear5 dogs eat

<u>Activity 1:</u> Please complete the following telephone conversation by using the nouns and verbs supplied below. Please note that for each sentence, you have to supply a subject. The underlined sentence is supplied as an example:

	6 bottles and cans leave
	7 rusted tin cut
	8 ambulance call
	9 municipality notify
	10 earth kill
Į	10 Cartii Kiii
A:	Hallo! How was your day at the beach yesterday?
B:	We had the most horrible day. You wouldn't believe how dirty everything was. <u>Apparently, the municipality did not collect the household rubbish for weeks.</u>
A:	Really?
В:	Yes, let me tell you about it. On our way to the beach, we saw that litterbugs had dumped rubbish on the side of the road.
A:	That's terrible!
B:	That's not all, you haven't heard the worst of it.

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A: I can't believe that people could be so uncaring!
B: Yes, it's unbelievable. I have to go now; I'll speak to you later again.
A: Goodbye!

## Addendum G

Worksheet: News report

Activity 2: Use the sentences that you have produced to complete Activity 1 to complete the following news report about the illegal dumping of household rubbish.			
Good evening vie	ewers, I am	, br	inging you the 7 o'clock news.
In our first story t	onight, people were stum	ned at the sight that me	et them on their way to the
beach yesterday.	It seems that the househo	old rubbish for some an	reas had not been collected for
several days. Rub	obish		