An evaluation of problem-solving strategies taught in Grade 9 English First Additional Language Classrooms in selected schools in Capricorn district, Limpopo, South Africa.

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MINI-DISSERTATION

Submitted in accordance with the requirements for the degree of

MASTER OF ARTS

in

ENGLISH LANGUAGE STUDIES

FACULTY OF HUMANITIES

(School of Languages and Communication studies)

UNIVERSITY OF LIMPOPO

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2019

Contents

DECLARATION

I, MOTLATJO NTATAMALA, declare that the study titled 'An evaluation of problem-solving strategies taught in the Grade 9 English First Additional Language Classrooms in selected schools in the Capricorn district, Limpopo, South Africa' is my own work submitted to the University of Limpopo for the degree of MASTER OF ARTS. All the sources used or cited have been duly acknowledged by means of complete references and that this work has not been submitted to any other institution for examination purposes.

NTATAMALA, Student Number ▮▮▮▮▮▮▮

	_____12/12/2018_____
Signature	Date

DEDICATION

This dissertation is dedicated to my parents, Francina and Matome Ntatamala, my siblings, my late younger brother Moyahabo (may his soul rest in perfect peace), my younger sister Mohlatlego and my son Ngoako, for supporting me throughout my research, for giving me the courage and motivation to finish this research. I appreciate my high school teachers, Mr Moroka, Mrs Phosa, Ms Mphela and the principal, Mr Setwaba, for keeping me in their prayers.

ACKNOWLEDGEMENTS

ABSTRACT

The aim of the study was to evaluate the extent to which problem-solving strategies are taught in the Grade 9 English First Additional Language classrooms in selected schools in Capricorn district, Limpopo, South Africa. The research was a case study in design. A qualitative approach was used. The data collection instruments included an observation checklist, interview questions for the teachers and the data was collected through both observing the teachers in the classroom and interviewing them as well as from the language activities done in learners' workbooks. Portfolios, files and journals of Grade 9 learners were thoroughly studied to ascertain whether problem-solving skills were applied, if at all. Three grade 9 English First Additional Language (EFAL) classes in three high schools were observed and six educators from the grade 9 EFAL classes were interviewed.

The themes extracted from the data were for the purpose of determining whether EFAL educators from three secondary schools in Limpopo teach problem-solving as a learning strategy, to determine the extent to which the educators are aware of and recognise problem-solving strategies in the teaching of English in the Grade 9 classroom and to establish the kind of problem-solving activities, if any, educators use in their lessons.

The relevant literature was reviewed to gain insight into problem-solving strategies in EFAL classrooms. The literature review was divided into Problem-Solving and Reading Comprehension as a Cognitive Process and Task-Based Language Teaching (TBLT) and Zone of Proximal Development (ZPD). Educators in this study experience challenges in teaching problem-solving strategies as well teaching learners to master problem-solving strategies. Learners encounter challenges in applying such strategies in their learning, reading and writing as evident in the tasks and activities set for them. The educators experienced these challenges because they did not know how to use those strategies. It appears the strategy was not part of their teacher training nor did they get the chance later in their careers to receive training in the new curriculum changes and learning strategies such as problem-solving.

From my observations, all the learners had problem-solving skills, but they just did not have the confidence to apply those skills because they lacked the confidence in class. Some had problems using English as the language of learning. However, there were learners who possessed problem-solving skills, who knew how and when to apply those skills. Those learners were confident enough to stand in front of the whole class and give a presentation on the given activities that were done in pairs and in groups. For instance, when I checked their workbooks, comprehension texts were covered, and pre-activities based on the novel that they were reading in class were also covered as well as the group activities. I made copies of the selected activities that they did on problem solving from their workbooks as well as their textbooks, which I have attached as appendices at the end of the report. However, group work and peer teaching which enhance mastery of problem-solving skills were the least used.

The Department of Education should arrange a teacher's training workshop specifically on problem-solving, in order to improve the educators' problem-solving teaching strategies, since most educators, especially those who obtained their teaching qualification with a 3-year diploma, find it difficult to relinquish their old teaching methods and adapt to newer strategies such as problem-solving.

Key words: problem-solving strategies, teaching, learning, educational training.

LIST OF ABBREVIATIONS

EFAL – English First Additional Language

EFALL – English First Additional Language Learner

HOTS- High Order Thinking Skills

PCK- Pedagogical Content Knowledge

SBA – School- Based Assessment

TBLT- Task Based Language Teaching

ZPD – Zone of Proximal Development

CHAPTER 1 - Introduction

1.1 Background and Motivation

Since 1994, the Department of Education has introduced several curriculum changes and reforms as part of broad-based interventions to improve the country's education (Chisholm 2005:80; Department of Education 2011a:5). With curriculum change, there is a need for accompanying training and support measures to update teachers on the rationale, methodologies and value-systems embedded in the new curriculum.

Currently, learners are encouraged to take responsibility for their own learning, specifically urging autonomous learning and learner-centeredness in the teaching process. Educational and management processes should therefore consider the learners first, recognise and build on their knowledge and experiences, and respond to their needs (Education White Paper 1, DoE, 1995: 21). This thinking is progressive in the context of shifting understandings about learning processes. However, such practices are highly complex, and there is a need for research to explore how best to advance such practices in classroom contexts.

One of such needs is to be able to think critically, that is, use 'higher order thinking' skills. Higher-order thinking, also termed higher order thinking skills (HOTS), is a notion of education amendment based on learning taxonomies (such as Bloom's taxonomy). This implies that some types of learning require cognitive processing than others require, but also have more overall benefits. It is thus important for learners to develop these skills which include "critical, logical, reflective, metacognitive and creative thinking" (King, Goodson & Rehani, 1998), ensuring that these are activated when individuals come across unfamiliar problems, doubts, questions, or problems which need to be solved. These skills also provide learners with the opportunity to engage with the target language through negotiation and argumentation.

Todd and Barr (2016) point out that when people talk about problem-solving, many immediately think about mathematics. However, problem-solving skills are not only a mathematical skill, but also a skill used in every subject and in all aspects of life. Teaching problem solving is a general skill that is invaluable to learners' learning,

confidence and independence. While some parents and educators understand the importance of problem solving, only a few stop and think about its value and how to teach it. Problem-solving is often a word, like 'listening' that parents expect and ask their children to do, but often do not give them concrete steps on how to do it. Problem solving is not just common sense. Learners need to be taught how to identify problems, generate ideas for solving the problem, and then learn to courageously try and solve the problem. When these skills are taught concretely, modelled, and reinforced, children begin to independently tackle problems (Todd & Barr 2016).

Problem-solving, as one of the higher-order thinking skills, allows learners to have a critical eye and therefore think beyond every problem they come across. Problem-solving includes effectively conveying thought or feeling as well as cognitive components. To solve problems, learners must be willing to do so, as well as believe that they can. Motivation and aspects of attitude, such as effort, confidence, anxiety, persistence and knowledge about themselves, are crucial to the problem-solving process (Jonassen & Tessmer, 1996). It is against this background that problem-solving as part of cognition is examined in EFAL classrooms in Limpopo.

1.2. RESEARCH PROBLEM

Research (and in particular the NEEDU REPORT 2012 which also investigated a number of Limpopo schools) shows that educators in many South African schools do not teach learners problem-solving strategies that increase the effectiveness of the learning and teaching in the classroom, and specifically reading comprehension – the foundation of all learning, which in turn has an impact on the other language skills. Moreover, teachers often lack the necessary competencies to teach higher order thinking in tandem with problem- solving.

However, the larger problem restricting performance is insufficient awareness of and training in the higher order thinking skills (of which problem-solving is one) of teachers, HODs, principals, and subject advisors. The NEEDU Report (2012: 30) states that both Pedagogic Content Knowledge (PCK) and teacher competence depend on a thorough understanding of the principles that underpin any school subject. The report further points out (2012:30) that:

if a teacher does not construct tasks to elicit higher order comprehension and problem-solving processes in her learners in class (teacher competence), it must be because she does not understand how they function in developing cognitive capacity, which in turn is certain to arise if she does not herself undertake complex problem-solving activities or apply the perspectives of inference, interpretation and evaluation (disciplinary knowledge) to her own appreciation of her effective teaching.

According to the NEEDU report (2012: 30), South African teachers generally have poor subject knowledge in language skills and mathematics, a weakness that is perpetuated as teachers are promoted up the line despite not having the necessary competence. This is possibly the underlying problem in the South African school system. Indeed, recently, Basic Education director-general, Mathanzima Mweli, declared, "creative thinking, problem solving, innovation and collaboration are skills that education systems in the whole world are looking at".

Problem-solving is a skill necessary to all grades and areas of education, because it plays an important role for educational success and for success in real life (Bahar & Maker, 2015). Engaging in problem-solving activities facilitates the acquisition of helpful skills like being flexible and creative, thinking and being productive. All these skills are essential in real life. The development of these problem-solving skills must be a steady and ongoing process, which continues until higher education, and therefore learners should be involved in problem-solving skills from the start of their primary education (Reys, Lindquist, Lambdin & Smith 2014).

Problem-solving skills are important in the career environment which is highly competitive and demanding. It is only by improving the problem-solving skills of the learners that once they become part of the general public they are capable of improving their lives. Current research emphasises the role of contemporary education as having not only to focus on knowledge transfer, but also on how to use that knowledge (Chen & Cheng, 2009). The teaching of English should not only be about 'knowing' English and its conventions, but about 'using' English.

Educators do not teach problem-solving strategies sufficiently to enable learners to apply such strategies to their diverse subjects or specifically in this study, the use of English. Many learners still depend on their educators' views and opinions during the lesson because they do not view every situation they come across critically; and they also cannot solve any problem they come across because they lack problem-solving skills which should be developed by the educators as part of their teaching methodology. This study seeks to identify and establish whether teachers instill this essential skill in selected Limpopo schools for effective content and language learning.

1.3. LITERATURE REVIEW

For much of the 20th century, educators have devoted their attention to trying to explain and teach problem-solving skills. In the early 1900s, problem-solving was viewed as a mechanical, systematic and often abstract (decontextualized) set of skills, for instance, those used to solve riddles and mathematical equations. According to Garofalo and Lester (1985), such problems often have "correct answers that are based on logical solutions with a single correct answer (convergent reasoning)." Under the influence of cognitive learning theories, "problem-solving shifted to represent a complex mental activity consisting of a variety of cognitive skills and actions." Problem-solving includes higher order thinking skills such as visualization, association, abstraction, comprehension, manipulation, reasoning, analysis, synthesis, generalization — each needing to be 'managed' and 'coordinated' (Garofalo & Lester, 1985); and each finding expression through language. These activities provide a springboard for language practice.

1.3.1 Curriculum Theory

Many curriculum theories for basic as well as secondary education advocate a principal method within the proposed school programme. This method usually consists of some form of problem-solving technique as the basis for most teaching-learning activities. Problem-solving is a competency that many students are not exposed to because the educators do not teach it sufficiently. Problem-solving helps learners to be independent, not only helping them to remember what they have been taught but also understanding and applying what the educator is teaching.

Chapter four of the Revised National Curriculum Statement (RNCS) (2002:31) contains information related to senior phase learners (which includes the grade 9 learners of this study). Learning Outcome 1 receives special attention. It stresses, "the design process and its associated skills of investigating, designing, making, evaluating and communicating, form the backbone of the learning area and should be used to structure the delivery of all the three learning outcomes in an integrated way." It also mentions "learners should be exposed to problems, needs or opportunities as a starting point, and that they should engage in a systematic process that allows the development of reasoning that solves problems or satisfies needs." The information relates well to what the Curriculum and Assessment Policy Statement (CAPS) describes. It is crucial that learners be taught the associated knowledge and skills needed to design and create a solution as they progress through a task (Department of Basic Education, 2011:9). This does not apply to the content subjects only but also to effective language learning.

Deficits in literacy skills, general or content specific, may affect the endeavour to solve a given problem, since direct reading errors (i.e., problems in creating a text base) increase the risk that the mental representation contradicts the text. Moreover, the mental representation created in the reading process does not only serve as background to solving the problem, but already starts the process of disentangling and elucidating the problem at hand (Kintsch, 1998). Prior knowledge is also activated during the reading process, including more specific types of prior knowledge that may be particularly appropriate for solving the problem, and so the comprehension of the problem need not consist of only a pure text base in the mental representation but also a situation model (in language comprehension and memory retrieval: integrated mental representation of a specific situation) can be created. It could even be that the problem in principle has been unscrambled through the reading process (or at least believed to be solved). In such a case, the problem is deciphered using mainly unconscious cognitive processes, that is, the problem is solved through pure comprehension of the problem/situation (Kintsch, 1998). After reading comprehension the steps to the solution or the solution itself is in turn expressed in writing. Problem-solving is therefore essential as through it learners learn to 'use' English (or apply it) through active engagement, not only learn 'about' English.

1.3.2 Learning theory

Problem-solving strategies exhibited by humans are diverse and vary along a number of dimensions. Just as there are cognitive obstacles to problem-solving, there are also general strategies that help the process succeed, regardless of the specific content of a problem (Thagard, 2005). Problem-solving strategies are the steps that one uses to identify the problem(s) that are in the way of achieving one's goal. There are several problem-solving strategies, some of which are discussed briefly hereunder.

Algorithm is a prescribed problem-solving strategy that always leads to the correct solution in problems with a single correct solution (Bassok, 2003). The second one is called heuristic, which is a problem-solving strategy that does not always lead to the correct solution. The third strategy is means-ends, which is a problem-solving strategy that involves repeated comparisons between the existing state and the goal state. The last helpful strategy is analogical thinking – "using knowledge or experiences with similar features or structures to help solve the problem at hand" (Bassok, 2003). Teachers can assist in this process by suggesting reasonable, helpful analogies for students to consider.

Students can apply other problem-solving strategies such as asking questions about the text, looking for what is inferred but not stated, summarising, retelling the story "in their own words" without the text, adding new knowledge to existing knowledge, making judgments or forming opinions while reading and reflecting on the text.

1.3.2.1. Zone of Proximal Development (ZPD) - How Vygotsky's zone of proximal development applies to problem-solving

Vygotsky (1978) describes the Zone of Proximal Development as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance with peer collaboration with more capable peers" (Vygotsky, 1978). In other words, a student is able to perform certain tasks better under adult guidance or with peer collaboration than what could be achieved alone

(hence its inclusion here – higher order thinking needs to be taught and 'scaffolding' would assist learning thereof). The ZPD bridges the gap between what is known (Zone of Current Development) and what can be known. Vygotsky claimed that learning occurred in the zone of what can be known.

Bruner (1985) relates the term 'scaffolding' to Vygotsky's concept of ZPD. Bruner uses scaffolding as a metaphor for describing the form and quality of the intervention by a 'learned' person in the learning of another person:

> If the child is enabled to advance by being under the tutelage of an adult or a more competent peer, then the tutor or the aiding peer serves the learner as a vicarious form of consciousness until the learner is able to master his own action through his own consciousness and control. When the child achieves that conscious control over a new function or conceptual system, it is then that he is able to use it as a tool.

Up to that point the tutor in effect performs the critical function of 'scaffolding' the learning task to make it possible for the child, in Vygotsky's words, to internalize external knowledge and convert it into a tool for conscious control' (Bruner, 1985: 24-25).

Bourke (2012) provided several arguments supporting the role of problem solving in language learning. Firstly, problem-solving exploits the learners' natural tendency to work things out. Studies in child language acquisition demonstrate that in language learning one cannot proceed very far without attempting to form hypotheses. Secondly, problem-solving promotes what is known in the educational literature as significant learning, i.e. learning which is both self-discovered and meaningful. It enables learners to discover knowledge, internalize it, and subsequently reproduce it. Lastly, problem-solving is an enjoyable activity when success is ultimately achieved. It is a well-established fact that learners learn spontaneously when they are interested and actively engaged in the learning process (Bourke, 2012).

1.3.2.2. Theory of Learning: Task-Based Language Teaching (TBLT)

A task is a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form (Nunan, 1989:10).

Task-based language teaching is a learner-centred approach to second language teaching. It is an offshoot of the communicative approach, where activities focus on having students use authentic target language in order to complete meaningful tasks: situations they might encounter in the real world and other project-based assignments. In task-based teaching, the centre of the learning process moves to the learners themselves and allows them to discover that language is a tool to deal with and (re)solve real-world problems. The process of task-based learning itself teaches important skills. Learners learn how to ask questions, how to negotiate meanings and how to interact and work within groups. Group work enables them to observe different approaches to problem-solving as well as learn how others think and make decisions (Willis, 1996).

Problem-solving is one of the essential skills the students need in order to be successful in the real world, regardless of which language(s) they use there. Engaging in problem-solving activities may be a way to improve the English reading and writing skills South African learners require for the employment market.

1.4. ROLE OF THEORY IN THE STUDY: COGNITIVE THEORY

1.4.1 Problem-Solving strategies

The theory consists of problem-solving, reading comprehension and the cognitive process. Comprehension in reading refers to how well students understand the text. "Strategies for improving comprehension include using background knowledge and experience, making connections to personal experiences, other books, and the world, making pictures in your head (visualising), predicting and confirming ideas and events and identifying the most important information based on the purpose for reading (Pape, 2004).

Reading is principally a problem-solving task. Comprehending what is read, like problem-solving, requires effort, planning, self-monitoring, strategy selection, and reflection. As students move through school reading materials, they become more complex, thus more challenging. "Students who approach reading as a problem-solving activity take an active and strategic approach to reading and are meta-

cognitively aware of how well they understand what they read" (Pape, 2004).This justifies the need to teach problem-solving - which is the focus of this study.

The mental depiction conjured up in the reading process (as explained by Kintsch, 1998) which begins the solving process and thus not only serves as background to solving the problem, is termed prior knowledge. Prior knowledge is therefore activated in the reading process. This includes more specific types of prior knowledge suitable for solving the problem, that is, the comprehension of the problem needs not only consist of a pure text base in the mental representation (formed from what is in the reading passage) but also a situation model can be created. As mentioned beforehand, it could even be the case that the problem in principle has already been solved through the reading process using mainly unconscious cognitive processes through pure comprehension (Kintsch, 1998) of the problem/situation.

Davis (1984:207) gives an empirical example of this type of solution by comprehension, where an existing mental representation of a similar problem was activated, and the person "had done this unconsciously, but had been able to reconstruct some of the process by determined introspection afterwards." Thus, this is not only a theoretical possibility, and it has also been shown that these types of unconscious comprehension processes can be used to explain behaviour in situations such as action planning (Mannes and Kintsch, 1991) and decision making (Kitajima and Polson, 1995).

Mayer and Wittrock (2006) distinguished among four main cognitive processes in problem-solving, namely, representing, planning, executing and self-regulating. Representing is a process in which the problem solver constructs a cognitive representation of the problem; the planning process is when the problem solver devises a plan for solving the problem; executing, is the process during which the problem solver carries out the plan; and self-regulating, is the process during which the problem solver evaluates the effectiveness of cognitive processing during problem-solving and adjusts accordingly. During 'representing', the problem solver seeks to understand the problem, including the given state, goal state, and allowable

operators, and the problem solver may build a situation model - that is, a concrete representation of the situation described in the problem. The current study is based on this theoretical approach.

1.4.2. Problem-Solving Activities

Language learning activities involving problem-solving are designed to help learners develop responsibility for their own learning, starting from a low level of responsibility and then taking on a systematic and gradual approach. They can be easily integrated into regular lessons since each activity serves a clear linguistic purpose as well as promoting more general learner development. The activities are also designed to develop a comprehensive range of skills and attitudes, including "developing learner strategies, monitoring learning processes, establishing self-evaluation, promoting motivation and developing co-operation" (Scharle & Szabo, 2000).

Ideally, classroom problem-solving activities ought to engage the learner's senses and be fun to do, for example, using pictures or objects to build vocabulary, which is a short activity, but could be spread over two lessons (Scharle & Szabo, 2000). The activities and lessons learnt leave an impression on each child, increasing the likelihood that they can take the lesson forward into their everyday lives (Chavarrio & Gonzalez, 2018).

The educators teach several problem-solving activities in their English classrooms. The problem-solving activities are arranged in three sections according to the stages of developing responsible learners' attitudes: raising awareness, changing attitudes, and transferring roles. For example, there are activities that tend to allow more room for learner initiative, activities that fall under the term 'changing attitudes'. However, problem-solving activities aim to motivate learners, to help learners discover their learning strategies, as well as to helping them to be more self-monitoring. Vocabulary building, reading comprehension, writing a report, and describing are types of problem-solving (Scharle & Szabo, 2000:11). Such activities can be included in Task-based Language Teaching (TBLT) programme.

1.5. PURPOSE OF THE STUDY

1.5.1 Aim

The aim of this study was to evaluate the teaching of problem-solving strategies for improved English reading and writing in the Grade 9 English first additional language classrooms in Limpopo.

1.5.2 Objectives

- To determine whether EFAL educators from three secondary schools in Limpopo teach problem-solving as a learning strategy.
- To determine the extent to which the educators are aware of and recognise problem-solving strategies in the teaching of English in the Grade 9 classroom.
- To establish the kind of problem-solving activities, if any, educators use in their lessons.

1.6. RESEARCH METHODOLOGY

A qualitative approach was applied in this study. Qualitative research is particularly suitable for gaining an in-depth understanding of underlying reasons and motivations. It provides insights into the setting of a problem, hence this study was qualitative and descriptive.

1.6.1 Research design

The case study design was used in the current study. Yin (1984:23) defines case study research method "as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used." Expressed more simply: case study research refers to an in-depth, detailed study of an individual or a small group of individuals. Such studies are typically qualitative and consist of a narrative description of behaviour or experience. Case study research does not attempt to determine cause and effect, nor to learn generalisable truths or make predictions. Rather, case study research stresses the exploration and description of a phenomenon. The main features of such research are that it is "narrowly focused, provides a high level of detail, and is able to combine both objective and subjective data to achieve an in-depth understanding". In this

study, the case study involves an investigation into if and how EFAL educators in 3 schools in Limpopo teach problem-solving skills.

1.6.2 Population

Grade 9 EFAL educators in Limpopo were the target group. Therefore, this produced diverse ideas since the schools located in rural or semi-rural and urban areas in the Bochum circuit of the Capricorn district, Limpopo province. These educators teach in schools in the Bochum circuit of the Capricorn district

1.6.2.1 Sampling

Purposive sampling was used. Sarantakos (2013:177) notes that the purposive sampling technique grants the researchers the freedom to choose the subjects who they think are relevant to the project. A number of 6 grade 9 EFAL educators from 3 different schools in the Capricorn district was selected as participants, 2 teachers from each school were selected for the current study. The study focused on 3 problem-solving activities from the three schools which are attached at the end of the study as part of the appendices, one from each school. Moreover, three lessons were observed, one from each school.

1.6.3 Data collection

Data was collected by means of three instruments: observation, document analysis, and teacher interviews.

1.6.3.1 Observation

The researcher observed 3 EFAL lessons, one from each school to identify whether educators apply problem-solving strategies and also to establish the orientation of problem-solving activities the educators exposed their learners. A checklist was used (see Appendix A).

1.6.3.2 Document analysis

Supplementary methods of data collection such as learners' workbooks were used to find evidence of problem-solving tasks. The checklist used for observation was also

used to identify problem-solving activities. The data was collected from the language tasks as set out in learners' workbooks. (Portfolios, files, and journals of Grade 9 learners were thoroughly studied to ascertain whether problem- solving skills were applied, if at all.)

1.6.3.3 Teacher interviews

Teacher interviews formed part of the body of data analysed in this study. The semi-structured interview was deemed the most convenient. According to Davidson and Wehipeihana (2010), "a semi-structured interview is a qualitative method of inquiry that combines a pre-determined set of open questions (questions that prompt discussion) with the opportunity for the interviewer to explore particular themes or responses further" (Appendix B). An interview was designed for purposes of collecting data from Grade 9 EFAL educators. The Grade 9 EFAL educators were interviewed in order to determine the extent to which educators are aware of the importance of problem-solving skills for English as a subject as well as for their general learning in the classroom in order to develop independent thinkers.

1.6.4 Data analysis

Thematic content analysis in qualitative research was used in the study (Guest, 2012:11). It was used to record and list patterns (or "themes") within the data collected from the participants and the workbooks. Before data was analysed, the researcher organized data into categories based on themes and concepts. Then the researcher engaged in the process of coding data where the meaning was assigned to the data. The researcher analysed the data by making replicable and valid inferences by interpreting and coding textual material containing evidence of the teaching of problem-solving strategies. The data collected was descriptively analysed. These were used to compare the results from three categories of data from the three different schools.

In categorising the responses, a code was assigned to each question and a meaning explaining the possible conclusions drawn from the responses given. The researcher transformed the analysis into an interpretable piece of writing by using verbatim

extracts from the data that relate to the themes in addressing the aim and the objectives of the study (Braun & Clarke, 2006).

1.6.5 Quality Criteria

The researcher took care to ensure that quality criteria are applied so that the results are reliable, credible, transferable, dependable and confirmable.

1.6.5.1 Credibility

According to Lincoln & Guba, (2000), credibility (vs. internal validity) refers to the internal consistency, where the core issue is "how we ensure rigour in the research process and how we communicate to others that we have done so" (Gasson, 2004:95). The researcher ensured that credibility is achieved by keeping a record of the information provided by the respondents in a note book during the interviews. In addition, the interviews were recorded to enable the researcher to re-listen and verify this data gathered from the interviews.

1.6.5.2 Transferability

The parallel criterion transferability (vs. external validity or generalisability) refers to the extent to which the reader is able to generalize the findings of a study to her own context and addresses the core issue of "how far a researcher may make claims for a general application of theory" (Gasson, 2004:98). The researcher made detailed descriptions and explained findings resonating with existing literature from different settings. Transferability enabled the researcher to determine the degree to which findings could be applied to the larger EFAL teaching population.

1.6.5.3 Dependability

The parallel criterion dependability (vs. reliability) deals with the core issue that "the way in which a study is conducted should be consistent across time, researchers, and analysis techniques" (Gasson, 2004:94). To ensure dependability, the researcher provided a detailed account on how data was collected, including the research design executed during the study, ensuring that data is correctly recorded (Shenton, 2004).

1.6.5.4 Confirmability

Confirmability (vs. objectivity) is based on the acknowledgment that research is never objective. It addresses the core issue that "findings should represent, as far as is (humanly) possible, the situation being researched rather than the beliefs, pet theories, or biases of the researcher" (Gasson, 2004:93). According to Shenton (2004), confirmability entails the research process and results are free from prejudice. The researcher ensured that the results of the study are not based upon her own biases or personal motives and perspectives.

1.7. SIGNIFICANCE OF THE STUDY

Today there is a strong movement in education to incorporate problem-solving as a key component of the curriculum. The need for learners to become successful problem solvers is currently a dominant theme in many national standards (AAAS, 1993; NCSS, 1997; NCTE, 1996; NCTM, 1989, 1991). The study also benfited the educators by making them aware of the importance of producing independent and confident problem solvers.

1.8. ETHICAL CONSIDERATIONS

Ethics concern the decency of human behaviour (Edwards & Mauthner, 2002:14). It applies to doing well and avoiding harm (Orb, Eisenhaurer, & Wayenden, 2001:93). In line with accepted ethics protocol, the researcher ensured the following:

1.8.1 Consent

Firstly, a letter requesting permission to conduct a study was forwarded to the three schools that took part in the study. The letter informed teachers about their right to privacy, anonymity and protection from reprisal. The researcher gave the respondents the assurance that all records and recordings are kept secret, and were not shared under any circumstances with anyone outside the scope of this study.

1.8.2 Right to self-determination

According to Burns and Grove (2001:196), the right to self-determination is the ethical principle of respect for a person. The respondents were reminded and informed about their rights to review the first agreement (process-informed consent).

The researcher briefed the respondents about the objectives and purpose of the research during the interviews.

1.8.3 The right to privacy

According to De Vos et al. (2002:67), privacy refers to agreements between people that limit the access of others to private information. In this study, privacy was maintained by not attaching a respondent's name to the information. The researcher maintained privacy in all personal matters arising from information derived from the respondents. This was in the form of feelings, beliefs or attitudes, and opinions. Data was protected from unauthorized access and no names linked to the data.

1.8.4 The right to withdraw from the study

The respondents were informed that they could withdraw being part of the study at any time if they wished. The rights were explained to participants before the interview was conducted. This right is part of the informed consent.

1.8.5 Right to confidentiality

De Vos (2005:65) recommends that people who are recorded should be given the assurance of their consent and confidentiality. The respondents were guaranteed to access any part of the recorded information. The respondents were informed about how their responses were used for this specific study.

1.8.6 The right to anonymity

The researcher ensured that respondents were not treated as objects but rather as individual human beings. Data was analyzed in a way that does not compromise the schools' image. The schools were ensured that they were not negatively exposed by mentioning their names. The researcher made sure to maintain trust and confidentiality when analysing data.

1.9. CONCLUSION

This chapter outlined the background, statement of the problem, literature review, the role of theory in the study, the purpose of the study research objectives, research methodology, quality criteria, the significance of the study and ethical considerations. In Chapter 2, the researcher focuses on the review of literature where the

importance and role of the problem-solving strategies and skills are discussed and outlined clearly, and conclusions are presented and discussed.

CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION

Chapter 2 presents a review of literature pertinent to the theoretical basis of this study of an evaluation of problem-solving strategies taught in the English Grade 9 English First Additional Language Classrooms in selected schools in the Capricorn district, Limpopo, South Africa; that is, to observe whether the educators employ problem-solving strategies in their lessons and whether such strategies are effective in improving learners learning progress in general. Problem-solving strategies play an important role in the learning environment and using problem-solving strategies trains learners to improve higher thinking order skills. Problem-solving involves using existing knowledge and skills to address an unanswered question or troubling situation (Ormond, 2006:111). Hence, it is important for learners to have problem-solving skills and be able to apply them into their listening, speaking, reading and writing tasks in a bid to solve the problems they encounter in their learning subjects independently.

2.2. DEFINITION OF PROBLEM-SOLVING STRATEGIES

According to Daft and Marcic (2014:15), a problem indicates a gap between actual and desired performance, while Boddy and Paton (2011:197) define a problem as a gap between an existing state of affairs and a desired state of affairs. A problem requires a solution, and Treffinger, Selby and Isaksen (2008:390) define problems more broadly as questions for inquiry. However, Daft and Marcic (2014:15) view problem-solving as a process of taking corrective action to meet objectives and achieve desired results. The understanding of a problem is an important part of the solving of a problem (Reeff, Zabal & Blech, 2006:48). In addition, Hardin (2002:227) views problem-solving as a process of trial and error, with the aim of using various

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methods to find solutions.   Learners need to be taught how to think of and use various methods in order to solve a problem.

2.3. THEORETICAL FRAMEWORK

2.3.1. Curriculum Theory

This study interrogates curriculum theory as one of the theories underpinning the motivation for teaching higher order thinking skills (in particular problem-solving) as it becomes clear from the literature in the field that such skills are essential for success at school and later in life.

Curriculum theory primarily has two roles: a normative (norms or rules guiding it) and a critical role ("to analyse the assumptions, strengths, and weaknesses of existing curricula, and the ways that the concept curriculum is used") (Young, 2014). Young (2014) points out that some researchers see the two roles as distinct whereas they should complement each other – theory needs to offer concrete alternatives to implement.   Theory should contribute to practical activity. Theory should affirm educators' teaching and this entails revision of the curriculum.

Many curriculum theories for basic as well as secondary education advocate a principal method within the proposed school programme. This method usually consists of some form of problem-solving techniques as the basis for most, if not all, teaching-learning activities. Problem-solving is a competency that many students are not exposed to because educators do not teach it sufficiently. Problem-solving helps learners to be independent and to improve their thinking processes in order to be critical thinkers. It not only helps them to remember what they have been taught but also to understand and apply what is taught by the educator, by giving their own thoughts and views.

Chapter four of the Revised National Curriculum Statement (RNCS) (2002:31) contains information related to the senior phase learners. Learning Outcome 1 receives special attention. It stresses that "the design process and its associated skills of investigating, designing, making, evaluating and communicating, form the backbone of the learning area [and] should be used to structure the delivery of all the three learning outcomes in an integrated way." It also states "learners should be exposed to problems, needs or opportunities as a starting point, and that they should

engage in a systematic process that allows the development of solutions to problems or satisfy needs." This information corroborates what the Curriculum and Assessment Policy Statement (CAPS) currently privileges that the learners must be taught the associated knowledge and the skills needed to design and create a solution as they progress through a task (Department of Basic Education, 2011:9). This does not apply to the content subjects only but to all effective language learning.

Deficits in literacy skills, general or content specific, may affect the endeavour to solve a given problem, since direct reading errors (i.e., problems in creating a text base) increase the risk that the mental representation contradicts the text. Moreover, the mental representation created in the reading process does not only serve as background to solving the problem, but already starts the solving process (Kintsch, 1998). Prior knowledge is also activated during the reading process, including more specific types of prior knowledge that may be particularly appropriate for solving the problem, and so the comprehension of the problem need not consist of only a pure text base in the mental representation but also a situation model (in language comprehension and memory retrieval: integrated mental representation of a specific situation) can be created. It could even be that the problem in principle has been solved through the reading process. In such a case, the problem is solved using unconscious cognitive processes mainly, that is, the problem is solved through pure comprehension of the problem/situation (Kintsch, 1998). After reading comprehension the steps to the solution are in turn expressed in writing. Problem-solving is therefore essential as through it learners learn to 'use' English through active engagement, not only learn 'about' English.

In the real world, students encounter problems that are complex, not well defined, and lack a clear solution and approach. They need to be able to identify and apply different strategies to solve these problems. This is what the educators should teach their grade 9 learners. As Mills and Kim (2017) indicated, problem-solving skills do not necessarily develop naturally; they need to be explicitly taught in a way that can be transferred across multiple settings and contexts.

2.3.2 Learning Theory in Education:

2.3.2.1. Zone of Proximal Development - how Vygotsky's ZPD applies to problem-solving

Vygotsky (1978) describes the Zone of Proximal Development as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance with peer collaboration with more capable peers" (Vygotsky, 1978). In other words, a student is able to perform certain tasks better under adult guidance or with peer collaboration than what could be achieved alone (hence its inclusion here – higher order thinking needs to be taught and 'scaffolding' would assist learning thereof). The Zone of Proximal Development bridges the gap between what is known (Zone of Current Development) and what can be known (the proximal zone). Vygotsky claimed that learning occurred in the zone of what can be known.

The term 'scaffolding' was originally used by Bruner (1985, 24-25) who, in turn, relates the term 'scaffolding' to Vygotsky's concept ZPD. Bruner uses scaffolding as a metaphor for describing the form and quality of the intervention by a 'learned' person in the learning of another person:

> If the child is enabled to advance by being under the tutelage of an adult or a more competent peer, then the tutor or the aiding peer serves the learner as a vicarious form of consciousness until such time as the learner is able to master his own action through his own consciousness and control. When the child achieves that conscious control over a new function or conceptual system, it is then that he is able to use it as a tool.

Up to that point the tutor in effect performs the critical function of 'scaffolding' the learning task to make it possible for the child, in Vygotsky's words, to internalize external knowledge and convert it into a tool for conscious control.

Bourke (2012) provided several arguments supporting the role of problem solving in language learning. Firstly, problem-solving exploits the learners' natural tendency to work things out. Studies in child language acquisition demonstrate that in language learning one cannot proceed very far without attempting to form hypotheses.

Secondly, problem-solving promotes what is known in the educational literature as significant learning, i.e. learning which is both self-discovered and meaningful. It enables learners to discover knowledge, internalize it, and subsequently reproduce it. Lastly, problem-solving is an enjoyable activity when success is achieved. It is a well-established fact that learners learn exponentially when they are interested and actively engaged in the learning process (Bourke, 2012).

2.3.2.2. THEORY OF LEARNING: TBLT (Task-Based Language Teaching)

A task is a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form (Nunan, 1989:10).

Task-based language teaching is a student-centered approach to second language instruction. It is an offshoot of the communicative approach, wherein activities focus on having students use authentic target language in order to complete meaningful tasks, i.e. situations they might encounter in the real world and other project-based assignments. In task-based teaching, the centre of the learning process moves to the students themselves and allows them to come to the realization that language is *a tool to tackle and (re)solve real-world problems* (my emphasis). The process of task-based learning itself teaches important skills. Students learn how to ask questions, how to negotiate meaning and how to interact in and work within groups. Within this group work, they are able to observe different approaches to problem solving as well as to learn how others think and make decisions (Willis, 1996). Problem solving is one of the skills the students will need in order to succeed in the real world, regardless of which language(s) they use there (Marsh,2011).

2.3.2.2.1. Closed and open tasks

From the aspect of teaching methodology and the practice of learners, tasks can also be divided into closed tasks and open tasks. "Closed tasks are highly structured and have very specific goals. Open tasks are more loosely structured, with a less specific goal" (Willis, 1996: 28). In terms of reading, working in pairs to compare the difference of topic between two paragraphs is considered a closed task, because the instruction and the information are much tightened. In contrast, for the open task, one typical example is to express one's own opinion about the topic of the chosen text, for this is quite up to the participants' own way of task-completion and much

personal perspective is added, and there is no definite outcome for the task (Mao, 2012).

Besides these closed and open tasks, there are also some tasks that stand midway between the two, such as problem-solving tasks or ranking tasks which have specific goals (Mao, 2012). But they could be approached from different ways. No matter what task is engaged in the learning process, the ultimate goal is to create an effective learning environment in the classroom to meet three essential conditions: the provision of exposure to the target language, the provision of opportunities for learners to use the target language for real communication and the provision of motivation for learners to engage in the learning process. Willis' classification is more specific, Prabhu's more abstract, and the classification of closed and open tasks is the most general (Mao, 2012). In Willis' classification, the first three tasks of listing, ordering, sorting, and comparing belong to closed tasks, while problem solving, sharing personal experiences and creative tasks belong to open tasks. Prabhu's view is that information-gap activities belong to closed ones; opinion-gap activities belong to open ones, and reasoning-gap activities lie between the closed and the open ones. To classify tasks based on the characteristics, content and the ways of doing TBLT facilitates teachers adopting different teaching modes according to different learners, different reading tasks and different reading stages, and such selections promote reading teaching and learning efficiency in English.

2.3.3. Cognitive processes

"Cognition is the process of acquiring and understanding knowledge through our thoughts, experiences, and senses. Learning involves acquiring knowledge through experience, study, or being taught" (Diamond, 2015). These two concepts are linked: learning requires cognition and cognition involves learning. Whenever you see or hear something new, you go through a series of cognitive processes, which are the processes that result in learning.

Learning strategies are the purposeful actions and thoughts learners engage in for understanding, storing, and remembering new information and skills (Weinstein & Mayer, 1986). Some learning strategies are observable, as in note taking or writing a plan for problem solution. Many learning strategies, however, are non-observable because they are purely mental processes. Examples of non-observable strategies

are monitoring comprehension or activating prior knowledge. Since learning strategies can be used with any learning task, including mathematics and language tasks, they have considerable potential for enhancing the academic achievement of linguistic minority students. Research in both first and second language contexts indicates that effective learners use appropriate learning strategies when they work on academic tasks, whereas less effective learners apply strategies infrequently or inappropriately (O'malley, J.M., Chamot, A.U. & Küpper, L., 1989).

The relationship between reading comprehension and problem solving is complex (Österholm, 2006). The reading process cannot only affect the problem-solving process but can also act as an integral part of the solving process. According to Kintsch (1998,), a skilled reader usually does not need to actively think very much to create a mental representation when reading. The use of syntactic and semantic rules together with the activation of more specific prior knowledge happens quite automatically, on a more unconscious level. In general, different cognitive processes can be more or less conscious. One of these processes is perception – it allows us to connect with the surrounding world. Perception can refer to highly automatic and unconscious processes, for example when you see a dog and directly recognize it as a dog; you are aware of the result of the process (that you see a dog) but no active and conscious thought processes were needed for this recognition. Problem-solving, on the other hand, deals with active thinking, a more resource demanding process, for example when trying to remember the name of a person you meet and recognise. Thus, when reading a text without any difficulties in understanding what you read, the process has more in common with perception than with problem-solving because the process of understanding is unconscious. This is representative for Kintsch's (1998) concept of comprehension, which "is located somewhere along that continuum between perception and problem-solving" (Kintsch, 1992:144).

2.3.3.1 Problem-Solving Strategies

Thorndike's (1898) original learning experiments involved cats learning to solve the problem of getting out of a puzzle box and this essentially demonstrates the significance of this undertaking. As most introductory psychology texts describe, Thorndike concluded that his cats managed to get out of the puzzle box by trial and error. According to Thorndike's understanding, there was really nothing happening

that qualifies this as problem solving. He felt that what was happening was the gradual strengthening of successful responses. Thorndike's research is often cited as the beginning of the analysis of learning that occupied American psychology for much of this century. It could also be cited as the beginning of the neglect of problem-solving as a topic worthy of analysis.

For much of the 20th century, educators have devoted their attention to trying to explain and teach problem-solving skills. In the early 1900s, problem-solving was viewed as a mechanical, systematic, and often abstract (decontextualized) set of skills, for instance, those used to solve riddles or mathematical equations. According to Garofalo and Lester (1985), such problems often have "correct answers that are based on logical solutions with a single correct answer (convergent reasoning)". Under the influence of cognitive learning theories, "problem-solving shifted to represent a complex mental activity consisting of a variety of cognitive skills and actions" (Garofalo & Lester, 1985). Problem-solving includes higher order thinking skills such as visualization, association, abstraction, comprehension, manipulation, reasoning, analysis, synthesis, generalization - each needing to be 'managed' and 'coordinated' (Garofalo & Lester, 1985); and each finding expression through language: hence a springboard for language practice.

Conceptualisation of the problem-solving skill can broadly be described as a process that involves five steps. During the teaching of problem-solving, the teacher should focus on the following steps that have to be executed by the learners (Tull, 2012:1-2):

Step 1: Recognise the problem only, without focusing on the consequences or implications of the problem.

Step 2: Define and analyse the problem. A broad search and gathering of relevant information are essential to identify a problem. A clear description of the problem in terms of its cause and possible effect is also needed.

Step 3: Generate possible solutions. In this step, it is important to create as many solutions as possible without initially evaluating the solutions' feasibility. The function of this phase is to generate possible solutions from different angles and perspectives.

Step 4: Choose the best possible solution. The evaluation of solutions in terms of their feasibility, advantages and disadvantages assist in choosing the best alternative.

Step 5: Implement the chosen solution. If the solution does not address the problem adequately, the previous steps are repeated to address areas of concern that need improvement.

In this study, the broad concept of problem-solving was divided into problem recognition (step 1), and problem-solving (steps 2-5). These two skills are deemed higher order cognitive abilities, since they expect higher levels of thinking than the mere understanding or application of knowledge (Proctor, 2010:51). Queensland Department of Education (2002:1) argues that higher cognitive abilities (HOCAs) are concerned with thinking skills, and aim to provide insight into the theoretical learning content of any specific curriculum and the discovery of new meanings. The author is also of the opinion that learners only demonstrate HOCAs if they are able to design, plan, discover, verify, hypothesise, experiment with, evaluate, compare, organise and investigate new ideas. Consequently, the development of learners' HOCAs must be focused on the enhancement of their abilities to evaluate, interpret and think in a self-regulated and independent way (Wilson, 2000).

In this regard, improving learners' ability to solve problems enables them to gain control of this critical entrepreneurial competency, also in as much as it also enables them to show higher levels of thinking when trying to solve problems (Lewis & Smith, 1993:131-137).

Crebert, Patrick, Cragnolini, Smith, Worsfold and Webb (2011:9) further recommend that teachers who aim at enhancing problem-solving skills need to inform learners on the clear identification, definition and discussion of the problem, before eventually focusing on a possible solution. The problem has to be carefully evaluated without bias and complications such as uncertainty, ambiguity and doubt. In a co-operative learning setting, the different opinions in a group are especially important when enhancing learners' problem-solving abilities, since the variety of possible solutions promotes their evaluative and creative senses (Crebert et al., 2011:9). Teachers therefore need to promote the creation of as many ideas as possible during the

problem-solving process before focusing on the feasibility of the solutions (Tull, 2012:1-2).

Problem-solving strategies exhibited by humans are diverse and vary along a number of dimensions. Just as there are cognitive obstacles to problem-solving, there are also general strategies that help the process be successful, regardless of the specific content of a problem (Thagard, 2005). Problem-solving strategies are the steps that one would use to identify the problem(s) that are in the way of achieving one's goal. A number of these problem-solving strategies is outlined hereunder.

Algorithm is a prescribed problem-solving strategy that always leads to the correct solution in problems with a single correct solution (Bassok, 2003). The second one is called heuristic, which is a problem-solving strategy that does not always lead to the correct solution. The third strategy is means-ends, which is a problem-solving strategy that involves repeated comparisons between the existing state and the goal state. The last helpful strategy is analogical thinking – "using knowledge or experiences with similar features or structures to help solve the problem at hand" (Bassok, 2003). Teachers can assist in this process by suggesting reasonable, helpful analogies for students to consider.

Students can apply other problem-solving strategies such as asking questions about the text, looking for what is inferred but not stated, summarising, retelling the story "in their own words" without the text, adding new knowledge to existing knowledge, making judgments or forming opinions while reading and reflecting on the text.

2.3.3.2. Problem-Solving Activities
Language learning activities involving problem-solving are designed to help learners develop responsibility for their own learning, starting from a low level of responsibility and then taking on a systematic and gradual approach (Scharle & Szabo, 2000; Bilash, 2011). They can be easily integrated into regular lessons, since each activity serves a clear linguistic purpose as well as promoting more general learner development. The activities are also designed to develop a comprehensive range of skills and attitudes, including "developing learner strategies, monitoring learning

processes, establishing self-evaluation, promoting motivation and developing co-operation" (Scharle & Szabo, 2000).

Classroom problem-solving activities need not be dull and routine. Ideally, the problem-solving activities you give your students will engage their senses and be fun to do, for example, using pictures or objects to build vocabulary, which is a fairly short activity, but can sometimes be spread over two lessons (Scharle & Szabo, 2000). The activities and lessons learnt will leave an impression on each child, increasing the likelihood that they will take the lesson forward into their everyday lives.

There are several problem-solving activities the educators teach in their English classroom. The problem-solving activities are arranged in three sections according to the stages of developing responsible learners' attitudes: raising awareness, changing attitudes, and transferring roles. For example, there are activities that tend to allow more room for learner initiative, activities that fall under the term 'changing attitudes'. However, problem-solving activities aim to motivate the learners, to help the learners to discover their learning strategies, as well as to help them to be more self-monitoring. Vocabulary building, reading comprehension, writing a report, and describing are types of problem-solving (Scharle & Szabo, 2000:11).

According to Finkle and Torp (1995:1), "problem-based learning is a curriculum development and instructional system that simultaneously develops both problem-solving strategies and disciplinary knowledge bases and skills by placing students in the active role of problem solvers confronted with an ill-structured problem that mirrors real-world problems."

Problem-solving was introduced to education as early as ancient times. Socrates, in particular, was famous for applying it. Later it was almost totally abandoned and revived only in the 1960s. Recently it has been widely studied and popularized especially for teaching mathematics and science at school and at university. Surprisingly for us, problem-solving has not been very widely applied towards either teacher training or teaching foreign languages (Doghonadze & Gorgiladze, 2008).

2.3.3.3. Problem-solving and reading comprehension

Reading is fundamental to language learning and so comprehending what is read is essential to solving a problem whether a mathematical one or an argument which needs to be expressed. Perhaps some observed student behaviour when solving problems also can be explained by assuming that the student relies mostly on the types of comprehension processes mentioned by Crebert et al. (2011). When trying to solve the problem, Lithner (2000:165), for example, reports that "focusing on what is familiar and remembered at a superficial level is dominant over reasoning based on mathematical properties of the components involved." To generate the answer to the posed question in a given problem can be construed as a natural goal of the situation, and in order to reach that goal one needs to regulate one's behaviour, that is, self-regulating processes are active.

The given question (which involves solving a problem) can thus play a very important role in the creation of the mental representation in the reading process since it can influence what kind of prior knowledge is activated. The self-regulation seems to start already in the reading process. It has also been shown that these self-regulating processes (which usually are considered as metacognitive processes) can operate at an unconscious level (Fitzsimons & Bargh, 2004). Therefore, it could be of particular interest to examine how variations of questions in problem texts can influence the comprehension and solution of a problem. In language learning, this would entail learning to select the wording of the question as well as expressing the solution in appropriate utterances or writing.

Dole, Duffy, Roehler and Pearson (1991:242), in their literature review, synthesised the findings of 14 years of research that focused on reading comprehension and how these are taught. Through their meta-analysis of 20 significant and oft-cited studies, these researchers sought to construct a shared understanding of what is meant by the word 'comprehension' and to describe instructional strategies that had been shown to be effective in helping students to read text. They examined comprehension instruction from a cognitive perspective, i.e., from a view which "assumes an active reader who constructs meaning through the integration of existing and new knowledge and the flexible use of strategies to foster, monitor, regulate, and maintain comprehension" (1991: 243).

This stance limited the studies they reviewed to those that assumed an active approach to the development of teaching, instructional support, and strategies. Dole et al., (1991) developed a recommended set of instructional strategies based on their review and analysis of papers from 1976 to 1990: determining important and unimportant information; summarizing information; drawing inferences; generating questions; and monitoring comprehension. Determining importance requires that one uses prior knowledge (e.g., knowledge of author's intentions and goals, knowledge about the structure of the text) to access and evaluate the content of the text and to differentiate important from unimportant information. Summarizing information refers to the process of sifting through large units of text, differentiating important from unimportant ideas, and then synthesizing those ideas to create a new, coherent text. The eventual outcome of these processes is either an utterance or a written text.

Lastly, Newell and Simon (1972) were able to propose a comprehensive theory of problem-solving that continues to be at the heart of contemporary theorising on this aspect. Since the 1970s researchers of problem-solving have tended to use the approaches of Newell and Simon, or have used a more descriptive approach in the Gestalt tradition. One key aspect of research on problem-solving has been the use of verbal protocols. Using that approach, subjects are asked to state aloud what they were thinking while solving a problem. These "think aloud protocols" become the data for formulating models of problem-solving. The researchers use the protocols, and whatever actions the subjects took, to build a model of the problem-solving strategies that the subjects used. The early work on problem-solving was concerned with problems that were puzzles or games such as the Tower of Hanoi task (a mathematical game or puzzle that consists of three rods and a number of disks of different sizes, which can slide onto any rod. It starts with the disks in a neat stack in ascending order of size on one rod, the smallest at the top, thus making a conical shape (Wikipedia 2018). Later research has tended to focus on more complex 'real world' tasks taken from the domains such as science and writing.

2.3.3.4. Problem-solving and representation

One of the key elements to solving a problem is finding a good way of representing the problem. When a problem is represented, the solver places certain features of the problem first and then uses these features to choose what to do when searching

a problem space. This is often the case in politics. Frequently, rival political parties will form different representations of what is the cause of an economic problem, and propose very different operators to apply when solving the problem. Representing the problem in the case of this study involves language – finding the best words to explain the representation. This therefore forms part of language learning.

2.4. IMPACT OF HIGHER ORDER THINKING

Reading is essentially a problem-solving task. Comprehending what is read, like problem solving, requires effort, planning, self-monitoring, strategy selection, and reflection. As students move through school, reading materials become more complex, thus more effortful. Students who approach reading as a problem-solving activity take an active and strategic approach to reading and are metacognitively aware of how well they understand what they read. It, however, does not stop there. Reading, especially academic reading, has a goal: to answer comprehension questions, to use the information gleaned from reading to implement it in a specific situation or to write an essay or a report. The application of higher order thinking skills therefore has a ripple effect and has an impact on diverse areas of language learning.

Critical thinking skills should be taught as a foundation for metacognitive training. Kuhn and Dean (2004) propose that critical thinking requires two types of skill families: inquiry and argument. In the classroom, inquiry skills should lead learners to believe that there is something to find out and that the content being presented in class is not automatically true and complete. On the other hand, argument skills require deep level processing of discourses. Through regular discussion, learners internalise questions such as "How do you know?" or "What makes you say that?" and apply them to their own thoughts (Kuhn & Dean, 2004). Metacognition can therefore be facilitated through allowing learners to reflect and evaluate their classroom activities, forcing them to seek out the value of new information and tasks for themselves. Teachers are therefore encouraged to provide opportunities for this to take place and to allow for the internalisation of argument skills (Cockcroft, 2014).

Cockcroft (2014) suggests that all high school learners have a brief "refresher" course in preparatory reading and phonics. In this way, weaker readers are identified early on and can receive the necessary support to improve their reading and reading

comprehension. He recommends strongly that this should take place in rural schools, especially where teachers are often ESL learners themselves.

Reading instruction usually involves working through elements of the reading process. This is a three-phase activity that models independent reading strategies for decoding and understanding text. Not every step of the process is used on every occasion. For example, if learners are reading an unfamiliar text type or genre, they need to do a pre-reading activity that alerts them to surface features of this text type, and helps them make associations with their own experiences. Reading activities would thus help them analyse its structure and language features in more detail. Post-reading might involve learners in trying to reproduce the genre in a written text of their own (Department of Basic Education, 2011).

Specific techniques for teaching problem-solving include modelling a procedure, explaining a procedure to students, having them work in cooperative groups to follow the steps to problem solution, and asking them to explain orally or in writing how the solution was achieved. The following five-step problem solving sequence, based on Polya (1957; 1973), has been used in teacher workshops and methods courses:

1. *Understand the question.* Activities include reading the problem aloud, discussing prior knowledge about the problem type, drawing a picture or image of the problem, rewriting the question as a statement with a blank for the answer, paraphrasing the question.

2. *Find the needed data.* Activities include underlining or circling data needed, crossing out unnecessary information, and comparing circled numbers to the pictorial representation developed in 1.

3. *Make a plan.* Activities include deciding if one step or multiple steps are called for, choosing the operation(s), making a table or other graphic representation, guessing and checking, writing a number sentence, or otherwise setting up the problem.

4. *Solve the problem.* Activities include working with pencil and/or calculator to compute the answer to the problem(s) set up in 3.

5. *Check back*. Activities include comparing the answer to the representation made in 1 to see if it makes sense, reviewing the problem-solving steps, looking for more information in the problem, estimating the answer, checking calculations.

2.5. CONCLUSION

This chapter provided an overview of the theories underpinning problem-solving skills as well as of studies conducted in the field. The next chapter introduces the current study's methodology in terms of the qualitative paradigm, the site selection and it offers a detailed account of the methods employed in gathering data.

CHAPTER 3- RESEARCH METHODOLOGY

3.1. INTRODUCTION

When conducting research, there are many possible ways of gathering information from participants. In this chapter, the research methodology for collecting and organising of appropriate research data for this study is discussed and analysed. According to Cryer (2000), research methodology is an overarching concept, 'a rationale for the methods used to gather and process data, in what sequence and on what samples. Birley and Moreland (1998) describe data collecting as a part of a project where many researchers feel that the "real" research occurs. Van Manen's 1990 study (cited in Angellil-Carter 1995:33) defines methodology as referring to the "philosophical framework, the fundamental assumptions, and characteristics of a human science perspective." Guba and Lincoln (1989:183) regard methodology as:

> … the overall strategy for resolving the complete set of choices or options available to the inquirer. Far from being merely a matter of selecting among

methods, methodology involves the researcher utterly - from unconscious worldview to enactment of that worldview via the inquiry process.

For the purpose of this study the following methodology, design and data collection instruments were chosen.

3.2. RESEARCH METHODOLOGY

Qualitative research is considered particularly suitable for gaining an in-depth understanding of underlying reasons and motivations. It provides insights into the setting of a problem. This study was mainly qualitative and descriptive.

3.2.1. Research design

The current study employed a case study design. Yin (2011) defines case study research method "as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used." More clearly stated, case study research refers to an in-depth, detailed study of an individual or a small group of individuals. In this case, six educators from three schools were selected. A case study is, as a rule, qualitative and consists of a narrative description of behaviours or experiences. This study too looks at the behaviour of six educators and records their awareness and experiences of problem-solving in the EFAL classroom. It does not attempt to determine cause and effect, nor to learn generalisable truths or make predictions. Rather, case study research stresses the exploration and description of a phenomenon (in this study the teaching and learning of the problem-solving skill in EFAL). The main features of such research are that it is "narrowly focused, provides a high level of detail, and is able to combine both objective and subjective data to achieve an in-depth understanding" (CIRT, 2018).

3.3. POPULATION

A population is the total group of subjects that meet a designated set of criteria. Grade 9 EFAL educators in Limpopo were the target group. The population was selected because the researcher confirmed it to be information rich, which supplied valid and reliable first-hand information. In addition, this produced diverse views

about the teaching of problem-solving as a HOT skill since the schools are located in rural and semi-rural areas of the Limpopo province – a little researched setting.

3.3.1. Sampling

Purposive sampling was used. Sarantakos (2013:177) states that this purposive sampling technique allows the researchers to choose purposely subjects who, in their opinion, are relevant to the project. A sample of six grade 9 EFAL educators from three different schools in the Capricorn district was selected as participants; two teachers from each school were selected for the current study. The second sample was three problem-solving activities from the three schools that are attached at the end of the study as part of the appendices, one from each school.

Moreover, three lessons were observed, one from each school. This is because the educators usually initiate an activity in the lesson and it is important to observe and interview them to assess the implementation of problem-solving strategies. The reason I chose only six educators is because I wanted to get different views in terms of the knowledge and perspectives of problem-solving strategies as a teaching method in English as a subject. The other reason is that six educators were available and willing to be interviewed. This was a manageable number to interview and analyse their views and responses.

I chose the Grade 9 class because I was convinced that they the need to make independent decisions as they proceed to Grade 10, at which stage they are required to choose a stream that will lead to study at the tertiary level. Hence, it is important for them to have developed problem-solving skills and to think critically

Of the three schools where I conducted my study, two schools had two Grade 9 English subject educators with four Grade 9 classes (Grade 9 A to D). These two schools had 52 (31 girls and 21 boys) learner participants and 60 learner participants (42 girls and 18 boys) respectively. The third school had only three Grade 9 English educators with three classes and 40 learner participants (21 girls and 19 boys).

I also wanted to discover if problem-solving is taught in content subjects as there could be transfer of problem-solving skills from one subject to another. In fact, problem-solving skills should be taught in all school subjects as it leads to learners becoming independent, autonomous learners – a skill which will stand them in good stead at the tertiary level or in future employment.

According to Creswell (1998:110), sampling is the process of finding people or places to study; to gain access; and to establish a rapport so that participants provide relevant data. During sampling, the aim is to get a sample that is as representative as possible of the target population (Mouton, 1996:110). I chose two EFAL educators from the three-selected schools, a total of six, which focused on EFAL teaching in Grade 9.

In qualitative research, participants are carefully selected for inclusion based on the possibility that each participant will expand the variability of the sample (Maykut & Morehouse, 1945:45). In my case, I chose only educators who taught EFAL for Grade 9 learners because language is central to communication and problem-solving interaction. Qualitative researchers set out to build a purposeful sampling which - according to Macmillan and Schumacher (1993:379) – is selecting rich cases for in-depth study. The sampling that I used is purposive for the reason that I focused specifically on Grade 9 English educators, but also included an element of convenience sampling in that I had to take the EFAL teachers that were available and willing to share their views.

3.4. DATA COLLECTION

The researcher made an appointment with the principal to request permission to collect data in the school. The participants were from the three secondary schools, one Grade 9 English class from each school. Data was collected by means of three instruments: observation, text analysis and teacher interviews. In this research, the primary data was collected from interviews - that is, face-to-face individual interviews.

3.4.1 Observation

The researcher observed each EFAL lesson (in total 3 lessons) to see whether educators apply and teach problem-solving strategies and also to see the kind of oral problem-solving activities the educators tasked their learners. A checklist was used (see Appendix A).

3.4.2 Document analysis

Supplementary methods of data collection such as learners' workbooks were used in addition to observation. Therefore, the data was collected from the problem-solving activities learners completed in their workbooks. Classroom activities and presentations of Grade 9 learners were analysed in order to better understand the application of problem-solving skills by the learners.)

3.4.3 Teacher interviews

The main data collection method used was individual face-to-face interviews. The type of interview that was used is the semi-structured interview. According to Davidson and Wehipeihana (2010), a semi-structured interview is a qualitative method of inquiry that combines a pre-determined set of open questions (questions that prompt discussion) with the opportunity for the interviewer to explore particular themes further (Appendix B). An interview protocol was designed for purposes of collecting data from Grade 9 EFAL educators. The first few questions pertaining to the educators' background served to put the educators at ease. The Grade 9 EFAL educators were interviewed to determine if educators are aware of the importance of problem-solving skills for English as a subject as well as for their general learning in order to become independent learners.

These interviews enabled us to follow up on ideas, probe responses and investigate motives and feelings (Bell, 1987). These interviews enabled the researcher to get a wide and clear understanding on the knowledge that educators had concerning problem solving strategies, as well as the learners' level of performance in terms of the application of their problem-solving skills in the English subject. Creswell (2013) confirms that semi-structured interviewing is more appropriate when one is particularly interested in pursuing a specific issue. In this study, semi-structured

interviews were considered appropriate in eliciting specific information about the educators' awareness, their knowledge about the problem solving, and the implementation of problem-solving tasks in EFAL classes.

The responses I got from the interviews provided me with an opportunity to learn about that which I could not observe in person in the classroom setting, in a natural environment.

3.5 DATA ANALYSIS

According to De Vos (2005:334), data analysis involves the process of making sense out of data collected by consolidating, reducing and interpreting what participants have said and what the researcher observed. The researcher analysed the data by making replicable and valid inferences through interpreting and coding textual material containing evidence of problem-solving. The data collected was analysed in the form of tables and descriptions. These were used to compare the results from 3 categories of data from the three different schools.

The analysis of the data employed thematic content analysis; and looking for patterns and themes as well as gaps in the data. The lesson observations were analysed first; thereafter the responses of the EFAL educators were analysed. Lastly, the workbook activities were analysed.

Common themes were identified in all the data collected. The responses to the interview questions gave rise to a discussion of key findings. Conclusions were drawn from the key findings. The responses of the six educators were compared.

3.6. QUALITY CRITERIA

The researcher took care to ensure that quality criteria were applied so that the results are reliable, credible, transferable, dependable and conformable.

3.6.1. Reliability

The only possible threat to the reliability of data could be the researcher's failure to take notes during observation. De Vos (2005:166) defines validity as referring to the degree to which an instrument performs what it is intended to do. Validity was

maintained by choosing the sample that was accessible, with the hope of saving time and costs during the interview process. As a researcher, there was need to ensure that sources and content used are valid (accurate, consistent). This called for precision in analysing data.

3.6.2. Credibility

For the purpose of this study, the researcher ensured credibility by using multiple data sources. According to Babbie and Mouton (2001), credibility is achieved through referential adequacy. For credible results, they must be so from the perspective of the participant in the research. The researcher ensured that credibility was achieved by keeping a record of the information provided by the respondents in a notebook during the interviews.

3.6.3. Transferability

The researcher attempted to make the findings meaningful to others by giving descriptions and explaining findings resonating with existing literature from different settings.

3.6.4. Dependability

To enable dependability, the researcher provided a detailed account on how data was collected, how it was included in the research design and executed during the study, ensuring that data is correctly recorded in a notebook (Shenton, 2004).

3.6.5. Conformability

According to Shenton (2004), conformability entails the research process and results being free from prejudice. The researcher ensured as far as possible that the study's results are objective and are not reliant upon bias or personal motives and perspectives of the researcher.

3.7. SIGNIFICANCE OF THE STUDY

According to McMillan and Schumacher (2001:99), the significance of the study tells the reader why the study is important and indicates the reasons for the researcher's

choice of a particular study. Today there is a strong movement in education to incorporate problem solving as a key component of the curriculum. The need for learners to become successful problem solvers is a dominant theme in many national standards (AAAS, 1993; NCSS, 1997; NCTE, 1996; NCTM, 1989, 1991). The study shall also benefit educators by enabling them to produce independent and confident problem solvers.

3.8. ETHICAL CONSIDERATIONS

Ethics concerns the morality of human conduct (Edwards & Mauthner, 2002:14). It pertains to doing well and avoiding harm (Orb, Eisenhaurer & Wayenden, 2001:93). Orb et al. further say that harm is prevented or reduced through the application of appropriate ethical principles.

3.8.1 Consent - permission to conduct the study

Firstly, the researcher asked permission from the University of Limpopo Research and Ethics Committee (TREC) before the commencement of the study. A letter requesting permission to conduct a study was forwarded to the three schools that were a part of investigation. The letter informed teachers of their right to privacy, anonymity and protection from reprisal. Participants were assured that no recording means would be concealed from them.

3.8.2 Right to self-determination

According to Burns and Grove (2001:196), the right to self-determination is based on the ethical principle of respect for a person. The participants were continuously reminded and informed of their right to review the first agreement (process-informed consent). The participants were briefed on the objectives and purpose of the research during the interviews.

3.8.3 The right to privacy

According to De Vos et al. (2002:67), privacy refers to agreements between persons that limit the access of others to private information. In this study, privacy was maintained by not attaching participant's names to the information. The researcher maintained privacy in all personal matters arising from information coming from the participants. This was in the form of feelings, beliefs or attitudes, and opinions. Data was protected from unauthorized persons and no names are linked to the data.

3.8.4 The right to withdraw from the study

The participants were informed that they could withdraw from the study at any time if they wished to. This right was explained to them prior to engagement in the study, before the interview. This right is part of the informed consent.

3.8.5 Right to confidentiality

De Vos (2005:65) recommends that subjects who are recorded should give their consent, and their confidentiality be ensured. The participants were guaranteed access to any part of the recorded information. They were informed about how their responses would be used and about the value of the research. They gave their signed consent. Their names are not mentioned in the research report.

3.8.6 The right to anonymity

The researcher ensured that participants are not treated as objects but rather as individual human beings. Data was analysed in a way that does not tarnish the schools' image. Consideration was taken in ensuring that the schools are not negatively exposed by mentioning their names. It was necessary for the researcher to maintain trust and confidentiality when analysing data and so made sure that no names were mentioned.

3.9. CONCLUSION

This chapter outlined the research approach employed in executing the study. This was guided by the research problem and research objectives set out in chapter one of the study. The study area, population and sampling, the data collection procedures and ethical considerations were also discussed in this chapter. The following chapter, chapter 4, describes and analyses the interview data, observation checklist, and analyses the documents (learners' written activities) elicited from the educators and learners during face-to-face interviews and observations.

CHAPTER 4 - PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA.

4.1. INTRODUCTION

The research design and methodology were presented in the previous chapter. Therefore, this chapter outlines the findings of the case study. The research focused on participants who were primarily teachers and learners who were observed in the classroom and submitted their workbooks for evaluation. The study used observation and interview questions as instruments to collect data. The main aim of the research

was to investigate the evaluation of problem-solving strategies taught in English Grade 9 English First Additional Language Classrooms in selected schools in the Capricorn district, Limpopo, South Africa.

The study was conducted at three semi-rural secondary schools in the Limpopo province in South Africa. In these three schools, the focus was on the Grade 9 learners. In order to guarantee anonymity the schools were named: School A, School B, and School C. School A had 52 (31 girls and 21 boys) participants, School B had 60 learners (42 girls and 18 boys) and School C had 40 learners (21 girls and 19 boys).

The case study took place in the three schools of Capricorn District as already mentioned. In the study, they are referred to as School A, School B and School C. The researcher chose two English teachers from each school. This means that six teachers answered the research questions. All the six educators participated in the subsequent interviews.

4.2. BACKGROUND OF THE THREE SELECTED SCHOOLS

4.2.1. School A.
School A it is a secondary school that is located in a rural area at a village that falls under Molemole Municipality. School A falls under Bochum East Circuit in the Capricorn district, Limpopo, South Africa. School A covers streams in physical sciences (physics), Technical Drawing, Commerce and Mathematical sciences, from Grade 10 to 12.

4.2.2. School B.
School B is a secondary school located in a semi-rural area near a small town called Dendron. It also falls under the Bochum East circuit, in the Capricorn district, Limpopo, South Africa. School B covers streams in physical sciences (physics), commerce and economics, from Grade 10 to 12.

4.2.3. School C
School C is a secondary school located in a rural area. School C also falls under Bochum East Circuit, in the Capricorn district, Limpopo, South Africa. School C covers streams in physical sciences (physics), agricultural sciences, history and

commerce, from Grade 10 to 12. The three schools (A, B, and C) all fall under Molemole Municipality.

4.3. ANALYSIS AND INTERPRETATION OF DATA.

Analysis and interpretation of data are discussed under problem-solving incidences, the knowledge of the educators about problem solving, problem-solving activities tasked to the learners and the learners' behaviour and lastly, general interpretation of the interview questions and responses provided by the educators.

4.3.1. Findings

4.3.1.1. Observations of EFAL lessons - presentation and discussion

School A

The lesson was based on reading a comprehension passage about the story of a little boy called Samson. The boy had a challenge regarding his hobby as a soccer player. The teacher asked the learners to do this activity in pairs. As the story was emotional, the teacher asked the learners to imagine being in Samson's shoes and think what they would do in that situation, before they came up with answers to the questions asked. The learners were asked to analyse the story, identify the problem and then come up with a solution. It did not involve superficial content questions only, which would not have generated free discussion. (A free discussion is likely to involve learners giving opinions, presenting a point of view, supporting a point of view, taking a turn and listening to others, agreeing and disagreeing with opinions). This may be the case because they could relate to the topic.

Ideally, a problem-solving activity engages the learners' senses and is fun to do. In addition, in the observed lesson, they used the boy's picture of Samson to build their vocabulary also. It was a short activity, but can be spread over two lessons if more situations require that a problem be solved. The activity and topic generated discussion among the learners and they participated enthusiastically. It seemed to make an impression on each learner and if such activities are done regularly, it may build their confidence and carry over into their everyday lives.

The activity was an example of a problem-solving activity because the learners had to change their attitudes towards the story and imagine it as their own. This involved HOT skills such as recognising the problem (Crebert et al 2011:11), visualizing, association (Garafalo & Lester 1985) and critical thinking to propose solutions, as well as compare and evaluate different solutions and perspectives offered by peers (Wilson 2000). The problem-solving activities were arranged in three sections according to the stages of developing responsible learners' attitudes: raising awareness, changing attitudes, and transferring roles. For example, there were activities that allowed more room for learner initiative, activities that fall under the term 'changing attitudes.' Vocabulary building, reading comprehension, writing a report, and describing are types of problem-solving.

School B

The lesson in School B was about letter writing: how to write a well-structured formal letter, with clear, relevant and correct information using the correct key words or vocabulary. Before they could start writing the letter, the educator taught the learners about two types of letters, namely a business letter and a friendly letter. The educators explained the difference between a business letter and a friendly letter. The educators told the learners to write a friendly letter, where the educator instructed them to include the address, salutation, body and conclusion. However, the learners did not understand what the word "salutation" meant. Therefore, the educator had to explain that the word "salutation" comes from the word "salute", so the learners had to think that the word might mean "greeting" as they had to activate their knowledge and experience of writing a letter from their previous grades i.e. prior knowledge.

A clear incident of problem-solving was when the educator sketched a scenario and asked, "You have to go to a furniture shop to return the furniture that was mistakenly delivered to you. For example, you bought and paid for a double bed and the delivery truck brought a single bed, so what time do you think would be suitable for you to go to the furniture shop to return the goods?" The learners had to think about the shop's opening and closing times (that is, the problem was

defined and analysed – see chapter 2, section 2.6). Learners came up with the following responses after generating possible solutions and then choosing what they considered the best: the furniture shop opens at 08:00am and closes at 17:00pm, so they cannot go after 17:00pm, but they would rather go before 08:00am so that when the shop opens they are already there. The educators then showed the learners the importance of doing things in time and always getting organised to avoid disappointment. One educator also emphasised that the other point they should look at when writing a letter is the use of a language register. The teacher explained to the learners that there is sms language, which is informal and is not appropriate when writing a formal letter such as a business letter. The educator taught and gave information but also encouraged problem-solving, as he used the furniture shop incident as a problem-solving task which made the learners think critically, plan and have a solution at hand. In addition, the incident also taught the learners that when coming up with a solution, it is always important to always know and recognise the problem and the plan on to come up with a possible solution for that particular problem. As a results such examples or lessons are more likely to help learners to develop problem-solving skills and high order thinking skills.

School C

The lesson was based on a pre-reading activity. The learners read a comprehension text from a novel titled "Kayo's house" by Barbara Kimenye - a novel for English first additional language Grade 9. The comprehension was from a story about how people used to live in the remote past, looking at their beliefs and ways of doing things before the developments and the improvements that took over. The teacher read the comprehension together with the learners, in other words, what they did was 'shared reading'. All learners were taking turns to read the comprehension text, which made the lesson active and interesting as it proved that the learners reading strategies always have a positive impact in terms of improving their vocabulary as well as their pronunciation. Shared reading plays a role on the learners' confidence in the sense that if the educator announce in class that they are all going to read then no learner would be shy to

stand in front of his/her peers with a text book. After reading the comprehension, the teacher asked the learners what the comprehension was all about and more than half of the class said that they understood what the comprehension was about.

After that, the learners were given an activity to answer the question that followed under the comprehension text. There were five questions, so the educator put the learners in groups of 8 where each group was supposed to handle one question, discuss it, agree on the answers and decisions and then present it to the whole class. The learners arranged themselves in groups as the teachers asked, and in each group, I observed that every learner participated in the discussion. The learners wrote the activity in groups, they were given 15 minutes each to present their answers and all the groups did. I observed each group execute some of the steps outlined by Crebert et al., (2011) and Tull, (2012). Under the influence of cognitive learning theories, "problem-solving shifted to represent a complex mental activity consisting of a variety of cognitive skills and actions" (Garofalo & Lester, 1985). Problem-solving includes higher order thinking skills such as visualization, association, abstraction, comprehension, manipulation, reasoning, analysis, synthesis, generalization - each needing to be 'managed' and 'coordinated' (Garofalo & Lester, 1985); and each finding expression through language: hence a springboard for language practice."

The activity that the learners worked on was a problem solving activity set after reading a comprehension and understanding what the comprehension was about, brainstorming and negotiating the meaning of words, the comprehension and the answer by means of discussion and how best to answer the questions asked (Wilson, 2000, see chapter 2, section 2.3.3.3.: 38; as well as Dole et al., 1991; see chapter 2, section 2.3.3.3: 38). The activity falls under those that are designed to develop a comprehensive range of skills and attitudes, including "developing learner strategies, monitoring learning processes, establishing self-evaluation, promoting motivation and developing co-operation" (Scharle & Szabo, 2000). In this lesson the teacher used the analogical thinking strategy (see chapter 2, section 2.3.3.).

4.3.1.2. Teacher interviews
Interview questions: presentation and discussion

The interview questions focused on the following themes: learners' knowledge of and skills in applying problem-solving skills, the teachers' assistance to improve learners' understanding and use of English, activities that learners do which show problem-solving strategies, knowledge and skills that learners can take from the course (English subject), and what can be done by the educators for learners to participate in class (and so solve problems whether individually or collaboratively). The questions did not question the teacher's awareness and knowledge directly as it was highly likely that they would not admit to not knowing about problem-solving as a skills to be taught. Asking questions indirectly about the learners' application of problem-solving skills was more likely to give an indication of the teachers' knowledge. The data from the interview questions is presented in the following manner: question, (the schools are coded alphabetically),the two answers from the two educators (the educators are coded in numbers) and the interpretation.

Question 1: *What knowledge and skills do you as First Additional Language Educator (FALE) of English think English First Additional Language learners (EFALL) bring to the class?*

There were diverse responses to this question. Two teachers emphasised the importance of home language and background. While 3 educators focused on the importance of language skills, that is, speaking, listening, two (one each from School A and School B) mention analytical skills and a learner's thinking and reasoning skills.

Answer: Educator 1: Speaking skills: fluency in the English language.

The skills that the learners have in the native language, for second language acquisition are the same skills that are needed in the second language; hence it is important for learners to be fluent in their native language.

Answer: Educator 2:

Analytical skills, but with given activities on problem-solving (Comprehension text).

Answer: Educator 3: Traditional and Cultural skills.

The environment that the learners grow up in determines the learning progress of the learner as it also stimulates the learner's thinking and reasoning capacity.

Answer: Educator 4: The listening skills:

Answer: Educator 5: Listening skills:

Answer: Educator 6: Speaking skills:

Question 2: *What do you as EFAL teacher do, or think you can do, to improve learners understanding and use of English?   (For example: Would you find the following activity useful? Your mother is organizing a family gathering and has asked you to make a list of food and other things you would like for the children who are coming to the family gathering at your home. What are the most important items that should be on the list and why?)*

Three educators said that the language skills (reading, writing, speaking and listening) should be the focus. Three said that skills beside the language skills were

needed. Examples given were: sequencing of ideas (this may imply logical thinking), more activities or practice and problem-solving.

Answer: Educator 1: Reading and writing skills should covered equally in the syllabus.

Answer: Educator 2: By giving the learners tasks to sequence ideas.

Answer: Educator 3: By being taught the speaking skills, so that they can communicate among themselves using English.

Answer: Educator 4: The learners can be given written tasks to improve their writing skills.

Answer: Educator 5: By having tasks and activities to do in their spare time such as learning how to write letters.

Answer: Educator 6: By giving the learners tasks that are related to problem solving.

Question 3: *What activities do FALE think learners can, should, or actually do during the course (lesson) with respect to problem solving?*

Are there activities in the English learning materials that promote problem-solving (engagement with a problem) during the lesson?

Most of the educators see comprehension tests as developing problem-solving skills. (But do they realise that the kind of questions they ask about the comprehension passage is crucial? Mere content questions do not require critical thinking and finding solutions). Three educators mention higher order thinking skills such as challenging thinking skills and collaboration (working in pairs or groups).

Answer: Educator 1: By giving the learners activities that require critical thinking such as a comprehension text.

Answer: Educator 2: Reading a comprehension text in order to develop high order thinking skills.

Answer: Educator 3: The learners should be given essays that form part of the SBA (School Based Assessment)

Answer: Educator 4: The learners should have activities that challenge their thinking capacity.

Answer: Educator 5: The learners should be given tasks that require them to work in group or pairs.

Answer: Educator 6: By giving the learners comprehension-based tasks and texts.

Question 4: *What important knowledge or skills do you or other FALE want learners to take from their course (subject)?*

Answer: Educator 1: The learners should learn sentence construction so that they while learning complex sentences for their future grades as well.

Answer: Educator 2: The learners should know how to look for certain aspects of knowledge.

Answer: Educator 3: The learners should know how to acclimatize to an ordinary text such as comprehension text and be able to navigate through the text.

Answer: Educator 4: The learners should learn the communication skills as they

are going to meet different people in the future.

Answer: Educator 5: Reading and writing skills.

Answer: Educator 6: The learners should learn to have a critical eye over any situation that they come across in the classroom and know how to plan to come up with a solution.

Question 5: *Do you think learners participate enough in their lessons? Could interaction and discussion be promoted by problem-solving activities such as the one below? What skills do you think one could develop by having problem-solving activities in the English lesson? (e.g. working together in pairs or groups to help each other; vocabulary; use of dictionary; discussion; ask a peer for a translation).*

Answer: Educator 1: Interaction and discussion can be developed by grouping the learners according to their level of understanding.

Answer: Educator 2: Learners could also develop problem-solving skills by having self-assessments.

The learners will learn how to take control of their learning so that they do not encounter challenges in terms of presenting.

Answer: Educator 3: The learners do not really participate enough in class because they are not motivated.

Answer: Educator 4: The learners still lack confidence in terms of communicating in English in the classrooms.

Answer: Educator 5: By working in groups and in pairs, the learners could learn communication skills as they discuss the answers among themselves.

Answer: Educator 6: Group discussions develop learners' confidence in using the English language to communicate among themselves.

Question 6: *What could the educator do to assist the learners to take part in a problem-solving activity? (e.g. write relevant words on the board; put dictionary on the table; put learners in pairs or groups)*

Answer: Educator 1: By giving the learners individual activities in problem solving and then afterwards the educator would do the activity as corrections with the whole class.

Answer: Educator 2: By giving the learners homework to do, so that the parents can help them.

Answer: Educator 3: The educators could put learners in groups or pairs.

Answer: Educator 4: The educator could encourage the learner to have a vocabulary book to write key words and new words encountered in it.

Based on what teacher 4 said, by having a vocabulary book, the learners are forced to buy dictionaries so that they can look up the key words that they write during the lesson. One of the on-going practices should be vocabulary training in order to expand ESL learners' English vocabularies and thus indirectly improve their reading comprehension (Cockcroft, 2014)

Answer: Educator 5: By giving learners the activities that will stimulate their thinking.

Answer: Educator 6: By giving the learners such writing of a report and allowing them to extend this in their presentation.

The above section presented the teachers' responses to the interview questions. These will be interpreted in Section 5.4., page 60.

4.3.1.3. Document analysis

The learners' workbooks of three Grade 9 classes were scrutinised. There were mainly grammar and syntax activities and only one or two activities that could be described as problem-solving activities which was the reading comprehension (a

literary text) based on the solomon's story and the pre-reading text based from the Kayo's house novel.

Analysis and interpretation of data are discussed under problem-solving incidents, the knowledge of the educators about problem solving, problem-solving activities tasked to the learners and the learners' behaviour in the lesson as evidenced by those activities completed in their workbooks that fall under problem-solving strategies. There were only a few problem-solving activities because teachers rely much on superficial memorising and little critical thinking and problem-solving.

School A

The activities that I found in the workbooks at this school were comprehension tests and other tasks based on language structures. The one comprehension, for instance, was based on the story of a boy named Solomon. The story involved a life lesson. Comprehension tests constitute one kind of problem-solving activity. It requires the learners to recognise the problem and then focus on the implications of the problems. As mentioned in chapter 2, it is the problem that needs to be recognised and defined before one moves on to analysing and discussing it to come up with possible solutions. The comprehension activity also requires the learners to familiarise themselves with the problem and therefore apply problem-solving skills. An analogical strategy was used in this case (see chapter 2, section 2.3.3.). I have attached one of the learners' copy on the activity of the comprehension text on Solomon's story to give an example of problem-solving that the learners participated in. The teacher read the text to the learners and then he developed a discussion based on the text. The learners had to familiarise themselves with the text as they were asked the learners that what would they do if they were Solomon. And it made the learners to think beyond the activity and beyond the questions that were based on the comprehension text itself. As a results such activities help the learners in developing problem-solving skills.

 School B

The activity that I found in the workbooks at School B was a writing activity, where the learners were taught about letter writing. The learners were taught about the

different types of letters. They were told to look at and take note of the address, the body, the content, and the conclusion of the different types of letters. They were taught about the difference between the business letter/ formal letter and a friendly letter, but the educator focused on the formal letter and at the end of the lesson, the educator gave them an activity on a friendly letter. In this lesson, the means-ends strategy was used, which is a problem-solving strategy that involves repeated comparisons between the existing state and the goal state. A copy of a learner's letter was requested to attach at the end of the report as an appendix (see Appendix E).

The problem-solving activities in the workbook were arranged in three sections according to the stages of developing responsible learners' attitudes: raising awareness, changing attitudes, and transferring roles. For example, the above-mentioned activities allowed more room for learner initiative. The reading comprehension activity falls under 'changing attitudes' because the activities aimed to motivate the learners, to help the learners to enhance their learning strategies, as well as to help them become more self-monitoring. Vocabulary building, reading comprehension, writing a report, and describing involved different types of problem-solving in this classroom and this is confirmed in the literature on similar tasks (Scharle & Szabo, 2000:11).

School C

The activity that I found in the workbooks of School C is a pre-activity from a novel of the Grade 9 English FAL (Kayo's House by Barbara Kimenye), a comprehension activity. During the teaching of problem-solving, the teacher focused on the steps that have to be executed by the learners (Crebert et al., 2011:1011; Tull, 2012:1-2). The teacher put the learners in groups to assess whether they could recognise the problem, define and analyse it, generate possible solutions, choose the best possible solutions and to see whether they could implement the chosen solution they discussed and agreed on as a group. The comprehension was about the learners' convictions in the modern ways of living and the traditional ways. The activity was an opinion-based one. The learners had to think of the solution – "using knowledge or experiences with similar features or structures to help solve the problem at hand"

(Bassok, 2003). This activity also allowed the learners to identify alternative solutions. The learners had a discussion based on ancient traditional beliefs and the modern ways of doing things. A copy of one of the groups' work in class based on that activity serve is attached at the end of the study (see Appendix E). An opinion based activity demands the learners to develop various answers on one question and it also help the learners to not only develop different answer but also some facts that support that answer. In this case, as the learners were asked to do a presentation after, they were forced to come up with some facts to support their answer to make sound convincing than the answers of the other groups. Hence, having a critical eye is always important in any given scenario. In addition, the activity can help the learners to develop creativity, persistence, a proactive mindset and prepare them for real life in the real world (Todd B., & Barr L: 2016).

4.3.2. General observations from the triangulated data

As deduced from the literature discussed in chapter 2, learners develop higher order thinking skills if they are to succeed at school, tertiary education and at work one day. With regard to problem-solving skills in particular, learners should be involved in such activities as soon as possible. This applies to content subjects as well as to the learning of languages as the solutions are mostly expressed in language and in South Africa, it is usually in English. Giving the learners activities based on reading comprehensions and pre-reading activities facilitates the improvement of their higher order thinking skills. The first proven benefit of teaching learners' problem-solving skills is that their achievement, confidence, and skills in English and other curricula increases. The main reason is that problem-solving provides students with the ability to look on a task from different points of view using critical and analytical thinking. By being a critical thinker students can better foresee outcomes of a task that allows them to decide what pathway to the desired solution would be most efficient.

The learners were given tasks and activities to solve problems as the activities aimed to help the learners to improve their understanding and use of English. Both written and oral activities which made a learner visualise the situation or problem, make an association, analyse or synthesise events described in the passage contributed to development of both the learners' writing and communication skills. The reading activities further helped the learners analyse the structure and English language skills in more detail. When the educator included post-reading, it helped

the learners try to reproduce the genre in a written text of their own (Department of Basic Education, 2011). This was especially helpful for School B that had the lesson on letter writing.

The educators wanted the learners to master certain skills from their course or subject, skills such as higher thinking order skills, communication skills, writing, reading and listening skills. But mostly, they wanted the learners to understand the language beyond the curriculum. Problems are a part of life so they felt it is important to teach children how to solve and cope with them. Life brings challenges that learners must learn to overcome. This involves the steps described by Crebert et al. (2011) and Tull (2012) in section 2.3.3.1. in chapter 2.

Problem-solving produces self-confidence and builds self-esteem. It develops creativity, persistence, a proactive mindset and prepares children for real life in the real world. It also creates language for learners to talk about things that are not going right, in relationships and learning. It helps them advocate for themselves. In addition, problem-solving teaches the learners how to collaborate and work together, especially with people that are different than themselves (Todd B., & Barr L: 2016).

Some of these aspects of problem-solving were identified in the classrooms. The researcher observed the educators from school A and school C put the learners in groups so that they could motivate each other as peers and help each other to improve their learning and problem-solving skills. According to Frederick (2014), another benefit that students gain from learning problem-solving skills is that they learn how to collaborate and work cooperatively with their peers - this should benefit them not only during school but also in sports that they may play at home, and in current and future jobs. The ability to work effectively in a group or on a team is often a quality that employers look for because a team that works well together produces better results than a team that does not work well together. Some groups in the lessons collaborated better than others. There was evidence of collaboration, evaluation of problems and solutions, and decision-making. In school C, where the educator gave the learners a group activity, one of the groups argued for almost the full 15 minutes and the educator had to intervene and encourage them to reach a resolution.

4.3.3 Asking questions: What do educators already know about problem solving?

I have observed that two out of three educators from school A and B were asking the learners content questions, such as, can you tell the difference between a formal letter and a business letter? They also asked questions of how the address should be written for both letters, which was something that most learners were not aware. One of the other educators was teaching the learners and giving them the answers without setting aside sufficient time to think about the answer.

From the three schools, the two at which the educators taught about reading comprehension, the teachers asked the learners insight questions based on the comprehension. For example, the teacher asked the learners if they thought they could solve the problem differently. The other teacher from school A who was teaching them a novel, and dealt with the section on pre-reading activities. The activity demanded that the learners give their opinion in almost all the questions as the questions of the activity were based on beliefs about traditional practices, such as, "Do you still believe in curses and spells? Explain why you have this belief"; "Do you think it is important for girls to be educated? Give reasons for your answer". It was a good activity as the learners could relate to it and made them think, discuss, argue and emerge with own opinions and feelings about issues they probably encountered in their homes and communities.

All the educators from the three schools gave the learners activities that involved finding solutions, alternative solutions, approaches to the problem or event or the incident; for example, the activity that teacher B gave the learner on reading comprehension. Reading comprehension is an extract based on someone's story, and the extracts can be used to establish if learners can relate with the story and put themselves in the character's shoes because most of the questions are personal, such as, why does the character encounter those problems, what do you think the character can do to solve that problem. It allows the learner to think about the situation and how they would approach it and why they would choose a particular approach.

4.3.4. Activities given: Encouraging participation and engagement with views

During the lessons, the educators told a story and provided examples involving a life lesson, so that the learners could relate and be familiar with what the educator was teaching so that they could answer the question based on the knowledge that they already have on certain approaches to a problem.

Two educators from the two out of the three schools focused their lessons on dictionary searches, reading comprehension and a novel, on writing a report, as one of the activities were presented by the learners in groups. The lessons also involved vocabulary building as the educators explained to the learners the keywords encountered in the lessons. For example, teacher C had a lesson on writing a letter and the word "salutation" was a new one. The teacher in question had to explain to the learners the meaning of the word "salutation," including its etymology so that the learners could both grapple with the roots of the word and its contextual meaning since every letter must have a salutation.

Learners

4.3.5. Do learners voluntarily ask questions?

The learners from school A and C voluntarily asked questions during the lesson about the tasks and the activities they were given. Even when the educators were doing corrections with them, they would participate since most of them had the confidence to raise up their hands and give answers to the whole class. The learners from school B did not participate enough and one of the reasons could be that the students were not confident enough to give the answers using English. Out of an entire class of over forty students, only two or three learners participated and asked some questions.

4.3.5.1. Are learners given enough time to ask questions after a lesson?

Not all the teachers from the three schools gave the learners enough time to ask questions after a lesson. It was observed that when the educators get in a classroom they just want to know whether the learners completed the tasks set for homework or not, but after the lesson learners are not really given a chance to ask questions based on the corrections or assigned activities.

4.3.5.2. Do learners ask questions as a group or individually?

The learners from the three schools did not ask questions as a group or individually; they asked their peers instead.

4.3.5.3. Do learners ask their peers for assistance?

The learners from the three schools asked their peers for assistance as most of the assigned activities were done in groups as well as in pairs. The learners were forced to ask their peers for assistance because everyone in the group had to participate and they all had to discuss the questions of the assigned activities and agree on one answer and solution. Most learners asked their peers for assistance because they found it easier and comfortable to ask their peers rather than their educators.

4.4. LEARNERS' BEHAVIOUR AND REMARKS.

The learners were able to come up with a solution to most problem-solving activities. They were formulated alternative solutions. Most learners would respond when asked for solutions as most of them had some idea of problem-solving strategies. However, they sometimes lacked the confidence to use those skills in the classroom during the English subject lesson. In most cases, the learners were apparently familiar with the problem as the tasks were connected to their lived experiences.

The educators played their role in assisting the learners to take part in the problem-solving activities. For example, during the lesson, they put the learners in groups and pairs and gave them questions to discuss and stimulate each other's thinking.

Some of the learners appeared to understand problem-solving skills but others did not as they asked their peers questions concerning the set activity. The learners who displayed problem-solving skills applied them to the set tasks. This was evidenced by their being able to give answers and solutions to the problem set for group activity. They identified the challenges and shared these with their group members.

From my observations, some learners had problem solving skills, but they just did not have the confidence to apply those skills and also lacked the confidence to express their views and suggest solutions. A particular problem was that a number of learners had difficulty expressing themselves in English. However, there were learners who had problem solving skills, who knew how and when to apply those skills. In addition, those learners were confident enough to stand in front of the whole

class and give a presentation on the given activities that were done in pairs and in groups.

The learners were satisfied when they could identify an acceptable solution and they used English to do so. The activities that they had to complete at School A, for instance, were based on general knowledge as they were about one's cultural beliefs; hence the learners used English to do the presentation more readily. This could be attributed to a familiar topic.

From my interview questions, four educators clearly knew about and were aware of problem-solving strategies. The other two educators also knew about them but they did not know how to apply those strategies based on their teaching experience since they did not get the chance to receive training on the new curriculum changes during their tertiary education.

4.5. CONCLUSION.

This chapter presented qualitative data from the samples with in-depth discussions and interpretation of the research results. Chapter 5 presents the summary, concluding remarks and recommendations of the research.

CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. INTRODUCTION

Chapter four provided an analysis and interpretation of findings. This chapter reflects on chapters 1 to 4 in a bid to evaluate the study, its findings and the aptitude of the methods used to reach the conclusions. It further comprises the summary, recommendations and concluding remarks of the study.

The study "An evaluation of problem-solving strategies taught in the English Grade 9 English First Additional Language Classrooms in selected schools in the Capricorn

district, Limpopo, South Africa" sought to answer the three main objectives investigated where six questions were developed from the objectives through the interviews, the observations and the learners' written and oral activities.

This concluding chapter provides an overview of the study with reference to the literature review, research questions and data analysis. The main conclusions and recommendations, suggestions for further research, implications for theory, practice, and the limitations of the research are discussed.

5.2. RESEARCH DESIGN AND METHOD

This was a qualitative research study that applied a case study design. Purposive sampling was used to select participants. Grade 9 EFAL educators were interviewed about problem-solving skills and strategies in their teaching. Data were collected by means of three instruments: observation (which included mainly the educators but involved the learners because they were taught problem-solving skills), teacher interviews, and text analysis. Educators usually initiate an activity, so was important to target Grade 9 EFAL educators in this investigation on the implementation of problem-solving strategies.

The data was collected from interviews, lesson observations and the analysis of documents (learners' workbooks which are the assignment, written and oral presentations and classroom activities). Six participants were selected from six secondary schools in the Capricorn district Limpopo as part of the study. Participants were interviewed, and the learners were observed to triangulate the data. This was done to achieve the following overarching aim of the study: to evaluate the teaching of problem-solving strategies for improved English reading and writing in the Grade 9 English first additional language classroom.

5.3 THE OBJECTIVES OF THE STUDY

The evaluation of the teaching of problem-solving strategies for improved English reading and writing in the Grade 9 English first additional language classroom led to the following objectives, set to determine whether EFAL educators from three secondary schools in Limpopo teach problem-solving as a learning strategy.

Problem-solving strategies help the learners to improve the higher thinking order skills, in order to solve the problems they come across in their learning. Therefore,

not all my findings answered my objectives. My observations showed that only the educators from school A and C taught problem-solving strategies and they engaged in problem-solving incidents in the classroom. During the educator's interview, it was clear that the not all the educators were aware and already had knowledge about the problem-solving strategies. I also found out that only few activities that the educators were using in their lessons and giving the learners were problem-solving activities, as I mentioned activities such as reading comprehension and vocabulary building that covered in the letter writing activity. The teachers taught much memorisation and rote learning.

The study also sought to determine the extent to which the educators are aware of and recognise problem-solving strategies in the teaching of English in the grade 9 classroom.

The Grade 9 EFAL educators should start teaching the learners to identify the problem. Eventually, they should learn to work up to more challenging problems and help them ask questions so that they also understand the problem. Then the educator should encourage the learners to obtain more than one point of view or perspective on the problem, that is get others involved in the conversation and so generate ideas for possible solutions. After that, the educator could help each group to pick an idea to try to develop a plan of action steps for carrying it out. Todd and Barr (2016) recommend reflection. In preparing for a problem-solving activity, the educator should reflect about how the learner clearly demonstrates when the problem is solved. These steps give the learner a model that s/he can apply in other problem-solving situations.

In addition, this study sought to establish the kind of problem-solving activities, if any, educators use in their lessons.

There were only a few problem-solving activities (reading comprehension, literary text-pre-reading activities and letter writing) because teachers rely too much on superficial memorising and little critical thinking and problem-solving.

5.4. SUMMARY AND INTERPRETATION OF THE FINDINGS

The findings of the study are based on the responses to each teacher's interview, the lesson and learner observations done at the three schools.

The findings of the research revealed that educators experience many challenges in terms of teaching the implementation of problem-solving strategies so that the learners can understand the concepts and lesson content and use problem-solving skills. The ultimate goal should be set to get the learners apply them in their learning through the set tasks and activities. Through the interviews I conducted with the educators on the use of the problem-solving activities, I found that four out of six educators had knowledge of the problem-solving strategies; therefore, they were able to teach the learners through the various problem-solving strategies.

Mankga (2004:2) reports in his research that most experienced teachers are not willing to unlearn old teaching methods to accommodate new ones. This was also found in this study. The other two educators also had some vague notion about problem-solving strategies but because of their experience in the teaching department, they find it difficult to adjust to the new teaching strategies. The two educators both obtained a three-year diploma in education, one has 35 years of teaching experience and the other has 33. Through the lessons that I observed, these two educators focused more on what they wanted the learners to learn and not on how the learners mastered the content and skills.

However, through all the teaching in the English subject, their aim was similar, because at the end of the day, they wanted the learners to acquire the four skills of listening, speaking, reading and writing.

During the lesson, which was a period of an hour, I noticed that some of the learners were participating, whereas others were not participating in the given problem-solving tasks and activities. The reason the other half of the learners were not participating in the problem-solving activities is not because the learners do not have something to say, but those learners do not have the confidence to raise their hands and give the answers since they still have problems with the use of English and their communication skills are not strong.

Not all the teachers supported the idea of giving learners the problem-solving tasks in groups; some preferred individual activities. When I interviewed the teachers, I could tell that they are not fully aware that the learners need to be encouraged. I think the educators should communicate and explain that the process is more important than the answer so that the learners master the strategies rather than just

the solution. This is learnt through the educators' acceptance of the learners' pace of accomplishing targets and tasks, through the learners' refusal to let anxiety pressure them into giving the right answer, and through the educators' example of problem solving through a step-by step process.

5.5. RECOMMENDATIONS

Problem-solving skills are the most essential skills that learners need and must have, not only for academic purposes but also for the future where they need the problem-solving skills to face the challenges in the workplace.

Therefore, I recommend that the Department of Education should arrange teacher training workshops designed to improve the educators' teaching strategies, since most educators, especially those who obtained their teaching qualification with a 3years diploma find it difficult to let go of their old teaching methods and adapt to the new strategies such as the problem-solving. Foshay, and Kirkley, (1998), outline the principles for teaching problem solving, which the educators have to adapt in order to get the wide and clear understanding on how to make sure that the learners understand problem-solving strategies. The first principle for teaching problem-solving is that the educators need to model a useful problem-solving method. Problem solving can be difficult and sometimes tedious. Therefore, educators need to show the learners by example how to be patient and persistent following following a structured method. They should articulate their method as they use it, so students see the connections.

To classify tasks based on the characteristics, content and the ways of doing of TBLT should help teachers adopt different teaching modes according to different learners, reading tasks and reading stages. This should invariably help promote English reading teaching and learning efficiency as these principles form part of TBLT.

The second principle is that the educators should teach within a specific context. Teaching problem-solving skills in context (e.g., mole fraction calculations in a chemistry course) is a helpful approach. Using real-life problems in explanations, examples, and exams makes the problem-solving task a realistic choice. They should not teach problem solving as an independent, abstract skill.

Thirdly, they should help students understand the problem. In order to solve problems, students need to define the end goal. This step is crucial to successful learning of problem-solving skills. If the educator succeeds in helping students answer the questions "what?" and "why?", finding the answer to "how?" becomes much easier.

Fourthly, they should take time to inculcate the skills. When planning a lesson, budget enough time for understanding the problem and defining the goal, both individually and as a class; dealing with questions from them and their students; making, finding, and fixing mistakes; and solving entire problems in a single session.

The educators should ask questions and make suggestions. They should ask students to predict "what would happen if …" or explain why something happened. This helps them to develop analytical and deductive thinking skills. Also, ask questions and make suggestions about strategies to encourage students to reflect on the problem-solving strategies that they use. The educators should clearly teach the problem-solving strategies by developing language for problem solving and modelling the necessary steps with the learners' own problems. Then, directly teach them how to solve problems where the educators can teach it in a variety of settings such as literacy, mathematics, science, and relationships.

It is highly important that the educators should have a training course as the curriculum change. Hence, if the educators attend the training, then the educators would adapt to the new teaching approaches strategies. I believe that every learner is always ready to learn, and every teacher is always ready to pour out to his or her learners. The problem-solving skill that learners would have acquired becomes applicable not only with the English subject but the other learning subjects.

Furthermore, one hopes that independent learners are a product of any education system but for this to be accomplished in South Africa many changes will be needed in the educational sphere. Based on Corkcroft's findings in his study and the 2012 findings, he suggested that all high school learners have a brief "refresher" course in preparatory reading and phonics. In this way, weaker readers will be identified early on and can receive the necessary support to improve their reading and reading comprehension. He also recommended strongly that this takes place in rural schools especially where teachers are often ESL learners themselves. Another ongoing

practice should be vocabulary training in order to expand ESL learners' English vocabularies and thus indirectly improve their reading comprehension (Corkcroft, 2014).

5.6. CONTRIBUTIONS OF THE STUDY

The study will contribute to raising an awareness of the importance of helping learners to develop higher order thinking skills, particularly problem-solving skills in order to enhance their learning of English. By teaching these skills they may produce learners who will not only be able to solve problems in their learning but also in their working environment in the future the ability to recognise problems, come up with solutions independently and in teams and make decisions.

5.7. LIMITATIONS OF THE STUDY

There are over 50 secondary schools under Capricorn district, Polokwane municipality. Nevertheless, due to insufficient time and resources, the researcher had to choose the selected secondary schools, three secondary schools were limited to participate in the study and a number of six educators were purposely selected. In addition, the other secondary schools such as, Capricorn high school, Noordeland high school, ect, could not be reached. However, this could be explored further to enrich the findings of the investigated topic.

Moreover, the study discovered that not all the grade 9 English subject educators were aware of the problem-solving strategies, due their number of years of experience. Mankga (2004:2) report in his research that most experienced teachers are not willing to unlearn old teaching methods to accommodate the new one, and the confirm Mankga's statement. In addition, not all the learners participate enough in the classroom, and it is not because they do not problem-solving skills, but it is because they lack the confidence, and some still have problems in using English in front of their peers.

5.8. CONCLUDING REMARKS

The literature review revealed that there were various problems experienced by educators in teaching the problem-solving strategies. These includes lack of the teacher's training, learners not participating enough in the classroom because they do not have the problem-solving skill and under qualified teachers for using their old

methods of teaching in the today's curriculum of learning especially in schools that are in the rural areas.

Many curriculum theories for basic as well as secondary education advocate a primary method within the proposed school programme. This method usually consists of some form of problem-solving technique as the basis for most, if not all, teaching-learning activities. Problem-solving is a competency that many students are not exposed to because the educators do not teach it sufficiently. Problem-solving helps learners to be independent. It not only helps them to remember what they have been taught but also understand and apply what the educator is teaching.

Chapter four of the Revised National Curriculum Statement (RNCS) (2002:31) contains the information related to the senior phase learners. Learning Outcome 1 receives special attention. It stresses that "the design process and its associated skills of investigating, designing, making, evaluating and communicating, form the backbone of the learning area should be used to structure the delivery of all the three learning outcomes in an integrated way".

It is also mentioning that "learners should be exposed to problems, needs or opportunities as a starting point, and that they should engage in a systematic process that allows the development of solutions that solve problems or satisfy needs". The information relates very well with what is described in the Curriculum and Assessment Policy Statement (CAPS). It is crucial that the learners must be taught the associated knowledge and the skills needed to design and create a solution as they progress through a task (Department of Basic Education, 2011:9). This does not apply to the content subject only but also to effective language learning.

Children think and reason largely in the same ways as adults. However, they lack experience, and they are still developing important metacognitive and executive function skills. Learning in classrooms can be enhanced if children are given diverse experiences and are helped to develop self-reflective and self-regulatory skills via teacher modelling, conversation and guidance around social situations like play, sharing and conflict resolutions.

Language is crucial for development. The ways in which the teachers talk to the learners can influence learning, memory, understanding and the motivation to learn.

There are also enormous individual differences in language skills between children in the early years. Interactions around books are one of the best ways of developing more complex language skills.

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7. APPENDICES

7.1. Appendix A: Observation Checklist
TEACHER:

Problem-solving incidences:	Yes	No
Does the teacher familiarize them or prepare them for the background to the problem situation? (refer to previous experiences?)		
Do teachers use previous skills or existing problem solving techniques such: identifying a problem,		

brainstorming, analyzing, inferencing, evaluating, breaking a problem into smaller manageable steps, making a plan, testing a solution.		
Asking questions: What do we already know about problem solving?		
Does the teacher ask content questions?		
Does the teacher ask questions such as: Do you think the problem could be solved differently? What do you think the character should have done in her situation? Has this happened to you? Have you also felt like the character? Would you change the ending to the story?		
Does the teacher give tasks or activities which involve finding solutions or alternative solutions/approaches to a problem/event/ incident?		
Activities given: (encouraging participation/ engagement/ views)		
Telling a story involving a life lesson		
Crossword puzzle/ jigsaw		
Dictionary quest		
Web quest		
reading comprehension		
writing a report		
Vocabulary building		

	Yes	No
Do learners voluntarily ask questions?		
Are learners given enough time to ask questions after a lesson?		
Do learners ask questions as a group or individually?		
Do learners ask their peers for assistance?		

LEARNER:

Learners' behaviour	Remarks
Comes up with a solution	
Comes up with alternative solutions	
Responds when asked for solutions	

Familiar with the problem	
Understands problem solving skills	
Have problem solving skills	
Apply problem solving skills	
Does not appear to have problem-solving skills (lack of confidence; problem with English etc.)	
Do learners show satisfaction when finding an acceptable solution (and using English to do so)?	

7.2. Appendix B: TRANSCRIPTS OF TEACHER INTERVIEWS AT LIMPOPO SECONDARY SCHOOLS A, B, AND C.

1. What knowledge and skills do you as First Additional Language Educator (FALE) of English think English First Additional Language learners (EFALL) bring to the class?

2. What do you as EFAL (or other English educators) do, or think you can do, to improve learners understanding and use English by giving them tasks to solve problems? (For example: Your mother is organizing a family gathering and has asked you to make a list of food and other things you would like for the children who are coming to the family gathering at your home. What are the most important items that should be on the list and why?

3. What activities do FALE think learners can, should, or actually do during the course (lesson) with respect to problem solving?

Are there activities in the English learning materials that promote problem-solving (engagement with a problem) during the lesson?

4. What important knowledge or skills do you or other FALE want learners to take from their course (subject)?

5. Do you think learners participate enough in their lessons? Could interaction and discussion be promoted by problem-solving activities such as the one below?
What skills do you think could one develop by having problem-solving activities in the English lesson? (e.g. working together in pairs or groups to help each other; vocabulary; use of dictionary; discussion; ask a peer for a translation)

6. What could the educator do to assist the learners to take part in a problem-solving activity? (e.g. write relevant words on the board; put dictionary on the table; put learners in pairs or groups)

7.3. Appendix C: Consent Form

30 January 2018

Consent Letter: Teacher

Dear Sir/Madam

Research Study On The Evaluation of Problem-Solving Strategies Taught In The English Grade 9 English First Additional Language Classrooms In Selected Schools In The Capricorn District, Limpopo, South Africa.

I am Ms M. Ntatamala, a Master's student at the University of Limpopo conducting a research study in the field of English Studies and Education, particularly writing. I have requested permission to conduct this study at your school (with one grade 9 English writing classroom). The study is done in order to fulfil the requirements for the degree of Master of Arts in English language studies in the Faculty of Humanities

(School of Languages and Communication Studies) at the University of Limpopo. My study is supervised by Dr. R.V McCabe in the Department of Languages.

I would like to ask you in your capacity as a Grade 9 English teacher of a Limpopo school to take part in this study of writing as this study might contribute some crucial and valuable information in the field of English language studies, particularly writing. Kindly be informed that your participation is voluntary, and you can withdraw at any time without being questioned about your decision for withdrawal. Also, be aware that your participation will be kept anonymous and the information given will be shared only with the researcher's supervisors.

Should you feel dissatisfied with any action in the course of your participation, please contact the researcher's supervisor on 015 268 2586 or 0827730282. Should you consent, please sign below as proof of agreement.

Surname and initials:_____   Signature:_____
Date:…../…../……

Best regards

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

(0713728321)

7.4 Appendix D: Ethical Clearance Certificate

University of Limpopo
Faculty of Humanities
Executive Dean
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 4895, Fax: (015) 268 3425, Email:richard.madadzhe@ul.ac.za

DATE: 15 November 2017

NAME OF STUDENT: NTATAMALA, M
STUDENT NUMBER: 201213161
DEPARTMENT: English Studies
SCHOOL: LANGCOM
QUALIFICATION – MA Coursework

Dear Student

FACULTY APPROVAL OF PROPOSAL (Mini Dissertation)
I have pleasure in informing you that your MA proposal served at the School Senior Degrees meeting on 9 November 2017 and your title was approved as follows:

TITLE: AN EVALUATION OF PROBLEM-SOLVING STRATEGIES TAUGHT IN THE ENGLISH GRADE 9 ENGLISH FIRST ADDITIONAL LANGUAGE CLASSROOMS IN SELECTED SCHOOLS IN THE CAPRICORN DISTRICT, LIMPOPO, SOUTH AFRICA

Note the following:

| Ethical Clearance	Tick One
Requires no ethical clearance Proceed with the study	
Requires ethical clearance (Human) (TREC) (apply online) Proceed with the study only after receipt of ethical clearance certificate	√
Requires ethical clearance (Animal) (AREC) Proceed with the study only after receipt of ethical clearance certificate	

Yours faithfully

Prof RS Maoto
Executive Dean: Faculty of Humanities

CC: Dr JR Rammala
Supervisor: Dr RV McCabe

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7.5. REQUEST LETTERS FOR PERMISSION
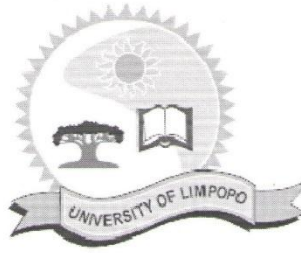
School of Languages and Communication Studies
Department of Languages
University of Limpopo
Private Bag X1106, Sovenga, 0727, South Africa
Tel: (015) 268 2586, Fax: (015) 268 2868, Email: Rose-marie.Mccabe@ul.ac.za

Mr Mokwele
The School Principal: V.P. Manthata High School
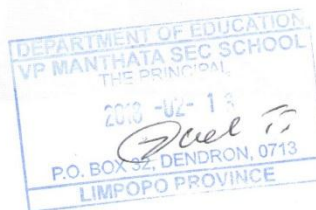
Copy: The Circuit Manager

Dear Sir/Madam

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Ms Motlatjo Ntatamala is conducting research as requirement for her master's degree in English studies. The title of her study is **An evaluation of problem-solving strategies taught in the English Grade 9 English First Additional Language Classrooms (FAL) in selected schools in the Capricorn district, Limpopo, South Africa.**

I would greatly appreciate it if it would be possible for her to collect her data for her research report from your school's Grade 9 teachers. Please be assured of full confidentiality. The data collected will only be shared with me, her supervisor, and destroyed once the study is complete.

Yours sincerely

Rose-marie McCabe
Mobile: 0827730282

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University of Limpopo

30 January 2018

Consent Letter: Teacher

Dear Sir/Madam

Research Study On The Evaluation Of Problem-Solving Strategies Taught In The English Grade 9 English First Additional Language Classrooms In Selected Schools In The Capricorn District, Limpopo, South Africa.

I am Ms M. Ntatamala, a masters student at the University of Limpopo conducting a research study in the field of English Studies and Education, particularly writing. I have requested permission to conduct a study at your school (with one grade 9 English writing classroom). The study is being done in order to fulfil the requirements for the degree of Bachelor of Arts: Masters in English language studies in the Faculty of Humanities (School of Languages and Communication Studies) at the University of Limpopo. My study is being supervised by Dr. R.V McCabe in the Department of Languages.

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Should you feel dissatisfied with any action in the course of your participation, please contact the researcher's supervisor on 015 268 2586 or 0827730282. Should you consent, please sign below as proof of agreement?

Surname and initials: _ILADI M._   Signature: _____   Date: _31.03.18._

Best regards

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

(0713728321)

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Appendix C

30 January 2018

Consent Letter: Teacher

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Surname and initials: _MACHAKA L·K._   Signature:_____   Date: 13./.02./.2018

Best regards

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

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School of Languages and Communication Studies
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Mr Matsapola
The School Principal: Dendron High School
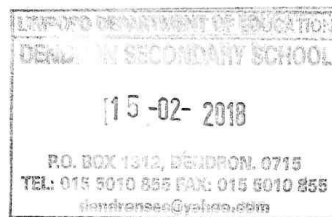
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Rose-marie McCabe
Mobile: 0827730282

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30 January 2018

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Surname and initials: MOHOSANA SE   Signature:＿＿＿＿＿   Date:....15/02/2018......

Best regards

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

(0713728321)

Finding solutions for Africa

30 January 2018

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Surname and initials: _LEPAKO PW_   Signature: _PW. Lepako_   Date: _15.02.2018_

Best regards

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

(0713728321)

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Mr ME Setwaba
The School Principal: George Tladi Technical High School
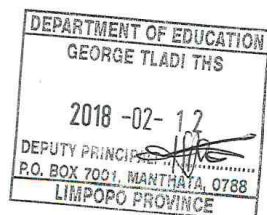
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Yours sincerely

Rose-marie McCabe
Mobile: 0827730282

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Appendix C

30 January 2018

Consent Letter: Teacher

Dear Sir/Madam

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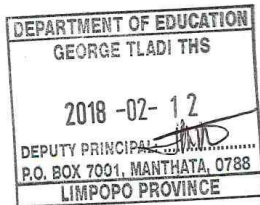
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Surname and initials: Makhubela MA   Signature: _____ Date: 12/02/2018

DEPARTMENT OF EDUCATION
GEORGE TLADI THS

Best regards

2018 -02- 1 2

DEPUTY PRINCIPAL
P.O. BOX 7001, MANTHATA, 0788
LIMPOPO PROVINCE

Researcher: Ms Ntatamala M.   Supervisor: Dr R.V. McCabe

(0713728321)

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Consent Letter: Teacher

30 January 2018

Dear Sir/Madam

Research Study On The Evaluation Of Problem-Solving Strategies Taught In The English Grade 9 English First Additional Language Classrooms In Selected Schools In The Capricorn District, Limpopo, South Africa.

I am Ms M. Ntatamala, a masters student at the University of Limpopo conducting a research study in the field of English Studies and Education, particularly writing. I have requested permission to conduct a study at your school (with one grade 9 English writing classroom). The study is being done in order to fulfil the requirements for the degree of Bachelor of Arts: Masters in English language studies in the Faculty of Humanities (School of Languages and Communication Studies) at the University of Limpopo. My study is being supervised by Dr. R.V McCabe in the Department of Languages.
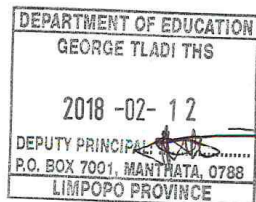
I would like to ask you in your capacity as a grade 9 English teacher of a Limpopo school to take part in this study of writing as this study might contribute some crucial and valuable information in the field of English language studies, particularly writing. Kindly be informed that your participation is voluntary and you can withdraw at any time without being questioned about your decision for withdrawal. Also be aware that your participation will be kept anonymous and the information given will be shared only with the researcher's supervisors.

Should you feel dissatisfied with any action in the course of your participation, please contact the researcher's supervisor on 015 268 2586 or 0827730282. Should you consent, please sign below as proof of agreement?

Surname and initials: MOROKA M.P   Signature: _____   Date: 12.02.2018

Best regards

DEPARTMENT OF EDUCATION
GEORGE TLADI THS

2018 -02- 1 2

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Finding solutions for Africa

NAME: Menokwana Morgod

GRADE: 09B

SUBJECT: English FAL

SCHOOL:

Spot On

English First Additional Language

Learner's Book

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Keywords

exile: sent away from one's country

Umkhonto we Sizwe: the ANC military organisation that fought against the apartheid government

veld: flat, open land with grass and no trees

T-junction: place where one road meets another but does not cross it (the roads form the shape of the letter 'T')

Unit 4   A literary text

Activity 4.1   Pre-reading: What do you want most?

5 minutes

Have you ever wanted something so badly that you were willing to go on a dangerous journey to get it? Solomon Mahlangu and his friends did. They wanted freedom from the abuse of apartheid. He was only 20 years old when he went into **exile** as a member of **Umkhonto we Sizwe**. He had to leave his family without telling them where he was going and he didn't know what was going to happen to him. He bravely made that choice. What do you want most? Think about what you need to do to get it.

Activity 4.2   Reading comprehension

30 minutes

Read the extract from the book *Solomon's Story* and answer the questions that follow.

The train travelled away from Pretoria, away from Mamelodi, through lots of smaller towns.

I remember that it was getting dark, so I couldn't see as much as I would have liked, but what I saw was really beautiful. I remember thinking that South Africa was really *beautiful*. The houses I saw were proper houses. They had proper roofs. There were even gardens and swimming pools.

You don't get proper houses and you don't get proper roofs in Mamelodi. And you don't get swimming pools. You don't even get green grass. There were also lots of trees along the way. Those jacaranda trees, they had turned the sky into a soft purple carpet. And if you could imagine the sun setting behind those trees, you would be able to see the bright pink sky behind the jacarandas and you would agree with me that South Africa is *beautiful*.

As the train moved along that night, my life as I knew it disappeared along, along with the sinking sun and the jacarandas. But then, as we approached the Eastern Transvaal, later in the evening, I could still make out the colours of the pink and white bougainvillea trees. And they were beautiful too. And somehow, somehow they were less sad and weary looking than the jacarandas. The colours of the bougainvilleas are much brighter. The trees just seemed much more alive.

When we arrived in Hectorspruit the next morning, Thomas led us onto a bus. But once we were on our way, Thomas realised that we were on the wrong bus. He told us to get off. There was only **veld** all around us. Temba and I waited on the road while Thomas went into the veld. He found a tractor driver and came back to fetch us. Thomas gave the tractor driver directions to take us to a certain place. The driver knew the place but I did not know where it was. There, we boarded another bus and travelled with it until we reached a **T-junction**. That's where we got off. Then we walked on foot. A road sign said we were walking to Mozambique.

Spot On English First Additional Language Grade 9

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We walked for the whole day up a mountain until we got to a place where there were two lines of wire. Thomas explained that he should crawl first and then we should do what he did. So that's what we did. That's how I first got to Mozambique.

That was on 2 October 1976.

They must have seen us crawling there. We were crawling under those wires and our heads were down. We were like small rabbits, scratching at the ground.

But when we looked up we looked straight into the barrel of a gun.

Content

1. List three contrasts between Mamelodi and the smaller towns through which Solomon travels. (3)
2. Name two forms of transport Solomon takes during the journey he describes. (2)
3. What problem do they encounter in Hectorspruit? (1)
4. Where is Solomon headed? (1)

Imagery

5. Explain the metaphor in the line *Those jacaranda trees, they had turned the sky into a soft purple carpet.* (1)
6. Why do you think the trees seem more alive further away from Pretoria and closer to Mozambique? (1)
7. a) Identify the figure of speech in *We were like small rabbits.* (1)
   b) What is being compared? (2)

Typography

8. a) Why do you think *italics* are used for the word *beautiful* in the second and third paragraphs? (1)
   b) Why does Solomon repeat the word *beautiful*? (1)

Language

9. Rewrite the following in direct speech: Thomas explained that he should crawl first and then we should do what he did. (4)

Inference and prediction

10. a) What significant event happened in South Africa in 1976? (1)
    b) Discuss how you think this may have influenced Solomon and his friends? (2)
11. How do you know that Thomas is the leader? (2)
12. The passage ends with the characters staring into the barrel of a gun. What do you think happens next? (2)

Total: 25

Spot On English First Additional Language Grade 9

Class work   06 February 2018

Content

1. Three contrasts between Momelodi and smaller towns
through which Solomon travel.

a) eastern transvaal x
b) Mozambique x
c. Hectorspruit x

2. The form of transport Solomon taken during
the journey he describes

- Train ✓
- Bus ✓

3. The problem that they encounter in
Hectorspruit - They were on the wrong
bus and this bus was only held around
town

4. Solomon treated Mozambique

Home work   07 February 2018

Imagery

a) Soft purple carpet - is to fallen things
b) Because the tree seem need more
water and Pretoria there's no more water
than Mozambique and freedom

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Unit 2 Conjunctions

In the dialogue you listened to in Activity 1.1, the call centre agent says, *We are not obliged to do anything __because__ the contract protects us.*

The word 'because' is a conjunction. Conjunctions join different phrases and clauses. The boxes below contain conjunctions that will come in handy when you need to argue a point in a dispute. Using them will help you build convincing arguments.

Conjunctions that express reason	Conjunctions that express contrast	Conjunctions that express a condition	Conjunctions that express choices
• because	• although	• unless	• either... or
• as	• whereas	• if	• neither ... nor
• since		• until	

> **Keywords**
>
> **phrase:** a group of words without a finite verb, e.g. a binding contract
>
> **clause:** a group of words containing a finite verb, for example a contract that is binding
>
> **fine print:** long lists of details printed in very small font in contracts

Activity 2.1 Using conjunctions to create convincing arguments

15 minutes

Copy and complete these sentences with conjunctions in your exercise book. Look carefully at the meaning and the structure of the two clauses or phrases being joined in each case. Some conjunctions are appropriate in more than one sentence, but choose the most appropriate conjunction from the boxes above.

1. _____ you refund me, I shall take this matter to the small claims court.

2. _____ you refund me, _____ I shall be obliged to see my lawyer.

3. _____ you pay the full amount, delivery cannot take place.

4. I bought this bike _____ you assured me it was in working condition.

5. The Bike Shop offers after-sales service _____ Cycles for You does not.

6. _____ the seller _____ the purchaser had read the contract properly.

7. _____ you sign this contract tonight, you can't change your mind tomorrow.

8. You have no claim now _____ I sold this bike to you at buyer's risk.

9. _____ he promised to fix the buckled back wheel before delivery, he never did.

10. I advise you not to sign the contract ___ you haven't read the **fine print** yet.

Total: 10

1. (a) Mozambique

1. (a) The crawling of people compared to rabbit scratching
and crawling

Homework   08 february 2018

1. Unless you refund me, I shall take this matter to the small court claims

2. Either you refund me or I shall be obliged to see my lawyer

3. Unless you pay full amount, delivery cannot take place

4. I bought this bike because you assured me it was in working condition

5. The bike shop offers after-sales service whereas cycles for you does not

6. Neither the seller nor the purchaser had read the contract properly

7. If you sign this contract tonight, you can't change your mind tomorrow

8. You have no claim now since I sold this bike to you as a buyer's risk

9. Although he promised to fix the buckled back wheel before delivery, he never did

10. I advise you not to sign the contract because you haven't read the fine print yet

VP Manthata School
P O Box 32
Dendron
0795
08 February 2018

Dear Mother

Hello mother today I am asking you to buy me school
thing because they want some few things here at school

Mother I (will ~~be~~ wanting the following things like files
Stationery, and I am asking you ~~to~~ buy me the school
~~uniform~~ uniform. At school ~~will~~ we will be wearing the
uniform like T-shirt, tracksuit, skirt, socks, ~~jasie~~ jersie, school
shoes, etie and a ~~bpullover~~ so Stationary like rule, Notes
books, Penciel, eraser, pens and files

Mother ~~and~~ look and here at school Mr machaka is
Selling few things, School uniform like tracksuit is ~~ises~~ R410
jersies is R185, Pullover is R167 I hope ~~that~~ when you
have money you will buy me the school uniform
mother, and that you love me a lot you are
the best mother in the ~~wer~~ whole world

Hoping to hear from you soon.

Your daughter
Amogelang

The Story of my Life

My name is Thabang Joseph, i am 15 years old.
My surname is maenetja from p seshego polokwane.
I was born on 2003/10/25
I was born at mankweng hospital and the house n.o
is 198 at fatima manthata.

The name of my parents is Suzan and tebogo all is my
reality parents, no one is passed. At home i supported
by three parents is grandmother, mother and father.
On my parents i am first born, the second born is
my sibling kgotlelelo and the last born is koketso, now
they live at mamelodi because of work and they work
together on the same company.

Now I live with my Brother, grandmother, grandfather
, uncle and my siblings. We are live at mohodi manthata,
before i moving to mohodi manthata, i was stay at zone1
Seshego polokwane. We were stay at my mother's home
So my mother marriage by tebogo Roseletebana.

I was started to attend primary school on 2008 when i
was 5 years, my first pre-school is malatji at moletji,
my second creche is matia at seshego polokwane.
I was attend primary at phishego school, high school
at bokamoso sss at seshego polokwane and today i attend
at V'p manthata secondary school. Whe i grow up, i want
my goals achieved.

FAL NOVELS

Kayo's House

Barbara Kimenye

A novel for English FAL Grade 9

1. Work in small groups and discuss the following:
   a) Have your family members ever told you stories that are traditional in your family, but that you, as a modern teenager, find difficult to believe? If so, share these stories with your group and discuss them.
   b) Do you believe in spells or curses? Explain why you have this belief.
   c) Do you think ancient traditions have any place in modern society? Give reasons for your answer.
   d) What is your opinion of arranged marriages?
   e) Do you think it is important for girls to be educated? Give reasons for your answer.

2. What does the cover of the novel tell you about it? Look at the title, the images and the blurb on the back. What do you think the novel will be about?

3. What do you learn from the title page and the imprint page of the novel?

4. What makes this book a novel rather than a short story?

5. Visit a library or an internet café and do some research on the author of *Kayo's House*, Barbara Kimenye:
   - Where was she born?
   - How did she meet her husband?
   - Why did she move to Kampala?
   - What else did she write besides this novel?

a). Yes our family members have told us stories that are traditional, for example: Girls didn't attend school inorder to help their mothers with household chores but we find it difficult for us to believe because we are nowadays forced to attend school inorder to be educated.

b. No we don't believe in curses because its an internal conflict that each person or family member always have in mind.

c. Yes because we still have museams that display everything that happened in the past inorder for us to leave (live) (why) according to that same applies to history studies, it has been added in our educational system for us to learn and live on the past.

d. It is not fair for girls because some end up in loveless marriges and some engage in domestic violence and they cannot be independant for themselves.

e. Yes it is important for girls to be educated inorder for them to be independent and not be controlled by boys.

15\02\2018

7.7. Appendix F: Editing Certificate

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Date: 24th October, 2018

TO WHOM IT MAY CONCERN

CERTIFICATE OF EDITING

I, **Muchativugwa Liberty Hove**, confirm and certify that I have read and edited the entire dissertation, **An evaluation of problem-solving strategies taught in Grade 9 English First Additional Language Classrooms in selected schools in Capricorn district, Limpopo, South Africa** by **NTATAMALA MOTLATJO, Student Number: 201213161,** submitted in accordance with the requirements for the degree of **MASTER OF ARTS in ENGLISH LANGUAGE STUDIES, FACULTY OF HUMANITIES, School of Languages and Communication Studies at the University of Limpopo**

NTATAMALA MOTLATJO was supervised by **Professor RV McCabe** of the University of Limpopo.

I hold a PhD in English Language and Literature in English and am qualified to edit such a thesis for cohesion and coherence. The views expressed herein, however, remain those of the researcher/s.

Yours sincerely

Dr M.L.Hove (PhD, MA, PGDE, PGCE, BA Honours – English)