ASSESSING PRESENTATION SKILLS OF ENGLISH SECOND LANGUAGE SCIENCE LEARNERS IN DRIEKOP CIRCUIT LIMPOPO PROVINCE

by

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DECLARATION

I, TLAKALE JOYCE MAGOWA, declare that the dissertation entitled "ASSESSING PRESENTATION SKILLS OF SECOND LANGUAGE SCIENCE LEARNERS IN DRIEKOP CIRCUIT LIMPOPO PROVINCE" hereby submitted to the University of Limpopo, for the degree of MASTERS OF ARTS IN ENGLISH has not previously been submitted by me for a degree at this or any other university, that it is my work in design and in execution, and that all materials contained herein has been dully acknowledged by means of complete references.

Signature:

Date:

DEDICATION

This study is dedicated to my daughters, Emily Pheladi Mahlangu, Felicity Meta Magowa, Mayfield Mahlako Magowa and Napoli Hunadi Magowa as well as my grandchildren, Bonolo and Olesego.

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ABSTRACT

Assessment of English Second Language (ESL) science learners' presentation skills is an area which has not received sufficient attention over the years. This is pertinent to both learners and educators. The study set out to assess (ESL) science learners' presentation skills in Driekop Circuit, Limpopo Province. Science learners and ESL educators in this rural area were assessed quantitatively as well as qualitatively; the learners' oral and report writing skills, and the educators' assessment skills were assessed, respectively. On the whole, the learners and educators lack presentation skills and as a result, need support in a number of respects. The teaching learning environment of these learners compounds the situation; it remains dire. Therefore, some intervention, in this domain, by the Department of Education could be imperative.

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CHAPTER 1

INTRODUCTION

1.1 THE PROBLEM DEFINED

Assessment of English Second Language (ESL) science learners' presentation skills is an area that has not received sufficient attention over the years. Traditionally, presentations were assessed through poetry reading, debating and so on. Today presentation skills tend to be valued as they motivate and improve second language learners' self-confidence in and outside the classroom.

South Africa is currently implementing Curriculum Assessment Policy Statement (CAPS). Educators of Grades 8-12 learners are expected by the Department of Education (DoE) to implement this curriculum because it is national policy. This can ramify into assessing ESL science learners' presentation skills orally and in writing. In this study, learners write reports after doing oral presentations. The expectation to master the skill of writing a report has become an enormous challenge particularly to ESL science learners in rural areas whose main source is usually their English educator (Dikgari, 2011: 15).

ESL is known as English First Additional Language (EFAL) at school level in South Africa. In line with language and education, additional language education is an area often divided into second language education and foreign language education. The former is about someone who studies their majority or official language which is not their home language while the latter is about someone who studies the language of another country (Cook, 2003: 7). EFAL learners study science in English which is an official language and EFAL and ESL will be used interchangeably, in this study.

According to de Chazal (2014: 254), content and delivery are two key aspects of presentations, both of them are crucial since they form the rationale for making a presentation. Presentations are typically judged on the quality of the material (content) and how effectively this was conveyed (delivery), although in some contexts, one may be favoured over the other. Thus, a successful presentation needs both quality content and good delivery.

The onus of selecting presentation topics for oral assessment rests with ESL

educators. Selected topics selected are usually general in nature in order to accommodate all the ESL learners in a given level. ESL science learners are more often than not given topics which are not related to their curriculum stream. Thus, assessment of presentation skills disadvantages ESL science learners more as they are expected to present on general topics.

Presentation plays an important part in the lives of ESL learners at school. This also has a place in the learners' lives after they shall have completed their secondary education. Thus learners need opportunities to present orally as well as in writing. For example, ESL science learners cannot write reports on the experiments done (English Curriculum and Assessment Policy Statement, 2011: 11). It is therefore crucial that educators teach ESL science learners presentation skills.

De Grez, Valcke and Berings (2010: 03) corroborate that although the teaching of oral presentation skills is stressed in many curricular, it has received little attention. Thus, it is important that ESL educators teach science learners presentation skills in order to help them not only in the secondary school classroom situation but also at undergraduate science level, particularly learners who could be interested in pursuing a science career.

ESL learners in secondary schools, especially science learners, need to be equipped with oral and written presentation skills. Dikgari (2011: 12) argues that learners need good teachers to teach them skills to present texts well. These can, nonetheless, be acquired through practice. Learners would improve if presentation skills can be practised more often. However, a presentation experience is still a once-off activity in most high schools because it is only done for examination purposes.

1.2 PURPOSE OF STUDY

The aim of this study is to assess Grade 11 ESL science learners' presentation skills in Driekop Circuit, Limpopo Province.

Objectives of the study are to:

- assess Grade 11 ESL science learners oral and written presentation skills.
- establish whether ESL educators are equipped with adequate skills to assess science learners' presentation skills

• make recommendations for the teaching and assessing of presentation skills to science learners

1.3 METHOD OF RESEARCH

- Literature on presentation skills in general as well as assessment of ESL presentation skills were explained.
- An oral test and a written report will be used to assess ESL Grade 11 science learners in Driekop Circuit, Limpopo province, while ESL educators will be interviewed on how they assess science learners' presentation skills.

1.4 PROGRAMME OF STUDY

- Chapter 2 discusses ESL science learners, the educators as well as presentation skills.
- Chapter 3 gives an overview of the methods used, the research design, the sampling procedures, the data collection instruments, the data collection process and quality criteria used in the study.
- Chapter 4 discusses the data collected and analyses the results derived from the data collected.
- Chapter 5 concludes the study and makes pertinent recommendations and suggestions for further research.

CHAPTER 2

ENGLISH SECOND LANGUAGE LEARNING PRESENTATION SKILLS

2.1 INTRODUCTION

Assessment of English Second Language (ESL) science learners' presentation skills is an area that currently needs attention. In the past, oral presentation skills were assessed through poetry reading, debating and so on. Today presentation skills are valued as they motivate and improve second language leaners' self-confidence in and outside the classroom environment.

This chapter seeks to discuss assessment, ESL science learners, the educators and presentation skills for ESL science learners.

2.2 ASSESSMENT

Language tests can either be norm-referenced or criterion-referenced. A norm-referenced test score would provide information about a learner's relative rank with reference to other learners who have written the test (Robinson, 1991:73; Graham & Neu, 2004: 296). However, criterion-referenced testing would be used to determine whether each learner has achieved specific skills or concepts (Dreyer, 2000: 270).

A key feature of all performance assessments is that they require students to be active participants; students should be responsible for creating and constructing their responses. This type of assessment provides educators with information about how a learner understands and applies knowledge (cf. Ngoepe, 2017: 173).

Uses of assessment could be formative, summative, diagnostic, continuous and performance-based (Ngoepe, 2007: 108). In this study, assessment will be used formatively.

de Chazal (2014: 54) states that formative assessment refers to ongoing assessment done during a teaching programme in order to monitor students' progress and give feedback with regards to specific teaching points covered. Furthermore, formative assessment is designed primarily to support teaching as well as learning processes. It also helps to inform the educator about a learner's

strengths and weaknesses and should feed back into his or her planning of lectures (cf. Genesee and Upshur 1996: 153; Department of Education, 1997: 29).

Ngoepe (2017: 172) asserts that when language and content lecturers in a multidisciplinary setting assess what they teach in concert, they tend to benefit from that enriching experience but learners stand to benefit more. Thus, ESL - and science educators can collaborate when assessing science learners' presentation skills.

Peixotto (2010: 31) cautions that assessment is a complex process that involves not only giving a reaction to the first impression but also a means of seeing the production of the learners in a much wider context in which a whole range of different aspects have to be considered. It is therefore important that ESL educators should monitor and assess learner's progress throughout, not just at the end of the term as most educators do. Assessment enables learners to show their knowledge in various ways, such as through presenting their ideas in both oral and written presentation.

According to De Grez, *et al.* (2010: 1), feedback and assessment play an important role in teaching and learning of oral presentations. Feedback should be provided by the educators as they are responsible for assessing learners. The main aim of giving feedback is to provide presenters, who are learners, with information about their performance and about future actions to take in order to improve their oral presentation skills. Another goal could be to enable the educators, as the assessors to compare the way they assess with the approach of others and become better assessors.

Black, Harrison, Lee, Marshal and William (2003: 108), argue that it is important to involve learners in the assessment process. The more the ESL science learners can be involved in a process such as making presentations, the more they will learn about the sub-skills involved. If the skills of oral presentations are important for learner learning, then there should be more to the process than a once-off assessed presentation that allows a tick to be put in a box that says the skill is "covered" somewhere on a programme. This means that both oral and written presentations should be practised several times until learners are well equipped with the presentation skills.

On the other hand, science teachers should be aware that they are also engaged in teaching language across the curriculum. This is particularly important for learners for whom the Language of Learning and Teaching (LoLT) is not their home language. It is important to provide learners with opportunities to develop and improve their language skills in the context of the learning sciences. It is therefore critical to afford learners opportunities to read scientific texts, to write reports and paragraphs as part of the assessment (Life Sciences National Curriculum Assessment: 2010).

2.3 ESL SCIENCE LEARNERS

The English language is used as a medium of instruction in most secondary schools in South Africa. So is the situation in the rural Driekop Circuit. This language is also used to assess ESL science learners' presentation skills. ESL is also known as English First Additional Language (EFAL) in South Africa.

The learning environment of rural ESL science learners is dire. Dikgari (2011: 23) argues that a large number of ESL science learners who attend rural secondary schools in the Driekop Circuit speak Sepedi as their home language. This implies that many of them have limited exposure to English outside the classroom and most of them are second language learners of the language. However, the English language which is a Second Language (L2) to the majority of learners, can also be a barrier to oral and written presentations.

Furthermore, Dikgari (2011: 24) corroborates that a large number of ESL science learners attend rural secondary schools in Moroke Circuit which is also situated on the same cluster as Driekop have a similar problem. They seem to rely more on the English language teacher's expertise regarding presentation skills. Presenting in English seems to be a worrisome activity as demonstrated by some learners' consistent poor performance.

According to Negash (2008: 24), ESL science learners are afraid to communicate their thoughts in English because their classmates will laugh at them or tease them. This could lead to code switching whereby a learner will present in home language. If the teacher allows this, the whole class presentation will be done in mother tongue. There could be students who do not have difficulty in expressing their ideas clearly,

but the majority could be afraid. The same applies to the ESL classroom; even those who want to try to take the risk of expressing their ideas seem to be discouraged by the group norm. Majority of ESL learners prefer not to present in English unless they are forced.

A study by Alwi and Sidhu (2013: 98) points out that an important feature of tertiary students in different parts of the world today is oral presentation. Science courses have been putting more emphasis on oral activities, such as presentation. Despite the pervasiveness of oral activities at university, relatively little literature has been published thus far about both oral and written presentation in the English classroom. This suggests that Science ESL learners are still experiencing challenges. Therefore, support from teachers is needed in both written and oral presentation. This implies that ESL science learners still find presentations demanding, because of their lack of training and experience in speaking conversationally in English.

Richard, Haber & Larelei (2001: 32) advance reasons why students are reluctant to speak up in the classroom in literature. For example, students may feel nervous at the thought of speaking out loud whilst in the presence of a large group. Learners may feel fearful at the possibility of embarrassing themselves or saying wrong things. Other possible explanations which discourage students from speaking up include a low self-esteem and self-belief.

In line with the above, the focus of the study was on assessing presentation skills of science learners which form part and parcel of their ESL content. Lack of confidence when presenting to an audience could also be attributed to lack of familiarity with the content of the topic at hand.

Dolliso and Koundinya (2011: 40) are concerned that after graduation, students need both oral and written presentation skills to succeed in the work place. Employers are looking for graduates with excellent presentation skills. They stated that business and industry leaders are looking for oral communication skills in all entry level workers. Therefore, it is imperative for the education institutions to help rural ESL learners develop oral and written presentation skills.

Black, et al. (2003: 47) place emphasis on helping rural ESL science learners to achieve success through their own efforts and the use of techniques that work for

them. Being wrong, making mistakes and struggling to understand or to do something is a necessary and formative part of learning. Accordingly, this can help the ESL Science learners to change their ideas about intelligence and understand how they can become better learners. It is necessary to help promote effective presentation assessment; educators need to go beyond simply telling learners what to do and how to do a task or activity.

The researcher has also observed that the majority of science learners are not willing to take part during ESL presentations. Giving a presentation, particularly an oral presentation, is a stressful experience for many rural science learners. Some learners have little or no experience of speaking before an audience, or handling unpredictable questions during discussions. In most rural schools, science learners have the tendency of avoiding any subject that has an oral or a group work assessment component.

2.4 THE EDUCATORS

In South Africa, the EFAL curriculum is organised according to the following skills: Listening and Speaking, Reading and Viewing, Writing and Presenting, and Language (English and Assessment Policy Statement, 2011: 10). This is in keeping with this study which is about oral and written and presentation skills, wherein ESL science learners and educators participated.

Different faculties such as the science and health ones at universities put more emphasis on presentation activities such as oral and written presentations. Students, who are doing their research proposals, need to have a well written paper which needs to be presented orally. Alwi and Sidhu (2013: 99) confirm that studies show that ESL science learners found making an oral presentation quite demanding, because of lack of training and experience in speaking conversationally in English.

Furthermore, a study by Lianghuo and Yeo Shu Mei (2007: 02) corroborate that there is a need for help and guidance of educators and learners in integrating oral presentation tasks into science teaching and learning. Learners should be given the opportunity to present and write in science classrooms. This will help prepare science learners to succeed in the workplace.

Moreover, Dolliso and Koundinya (2011: 40) point out that there is a need for

presentation skills. For example, after graduation science learners would need oral presentation skills to be successful in the workplace, since employers are looking for graduates with excellent oral presentation skills. It is therefore imperative that educational institutions help students develop oral presentation skills.

Lechelele (2007: 10) states that it is through preparation that the educator is able to see the depth and importance of presentation skills. Educators need to act as facilitators and give learners ample chance to practise presentations. Science learners need to be given topics relevant to their science class activities for both oral and presentation skills.

While on the other hand, Maluleka (2007: 22) argues that teachers have difficulties in presenting their subject matter constructively when using a language in which they lack proficiency. Even learners find it difficult to understand difficult scientific concepts taught through a language with whose native speakers they do not even have contact. The majority of ESL science educators in most rural areas find it difficult to do oral and written presentation in English. Some of the scientific terms for presentations are difficult for the learners to talk about, and this demoralises their confidence in the classroom situation.

According to Stuart (2013: 06), it is important to teach presentation skills to undergraduates who are seriously interested in pursuing a scientific career. By teaching presentation skills in the classroom, teachers will be empowering the students with self-confidence that will enable them to enjoy, rather than fear presenting.

Mogano (2007: 20) asserts that many teachers in rural areas work under difficult circumstances. Classes are overcrowded and the teacher ratio does not correlate with the number of ESL learners in the class. Full attention is not given to all learners and the educator's workload is too much. Teachers resort to concentrating on teaching in general rather than engaging learners with oral and written presentation skills. Assessment for both oral and written presentation skills are only done once or twice per annum.

Another challenging factor to science learners might be lack of support from the educators whose main focuses are only the facts given and not on how the language

is used. Lack of written presentation skills might result from educators' lack of support when assessing learners on written text (Moyaba, Otterup & Webb 2013: 1).

Life Sciences educators should be aware that they are also engaged in teaching language across the curriculum. This is particularly important to learners for whom the language of learning and teaching is not their home language. It is important to provide ESL science learners with opportunities to develop and improve their language skills in the context of learning Life Sciences. It is therefore critical to afford learners opportunities to read scientific texts, to write reports, logical paragraphs and short discussions as part of their assessment especially in the informal assessment for learning (Life Sciences National Curriculum Statement Assessment, 2011: 19).

Carner (2005: 7) points out that one of the most common mistakes educators tend to make when preparing science literacy objectives is to focus solely on vocabulary acquisition and not consider the structure in which that vocabulary is used. For example, in the 'Cell Inquiry' lesson, learners need to describe the shape of the cell they observed. To do this, ESL science learners need to know specific descriptive vocabulary such as smooth, rough, square, rectangular, regular, irregular, and so on. But they also need to know how to use that vocabulary within particular language functions. For example, learners can describe that 'The cells are shaped like rectangles'. If this can be a daily routine, the oral presentation skill assessment will improve.

Maluleke (2007: 34), on researching about the challenges of teaching Biology through the medium of English, contends that the use of English as the medium of instruction in most South African schools has severe consequences for the development of the country, more especially in the rural areas. Educators have difficulties presenting their subject matter constructively when using a language in which they lack proficiency. Even learners find it challenging to understand difficult scientific concepts taught through a language with whose native speakers they do not even have contact. As a result, most ESL science educators resort to code alteration as a solution to the deepening educational crisis.

Furthermore, Maluleke (2007: 36), on investigating whether or not English is a barrier in teaching Life Sciences' writing skills, argues that ESL science learners in rural high schools are not proficient in English as they are expected to make meaningful contributions during lessons. The fact that very few learners managed to participate effectively in class was a clear indication of a problem posed by English as a medium of instruction. Majority of learners lack adequate English vocabulary to make meaningful contribution during oral presentation in class.

ESL science educators are expected to complete all the science tasks before learners can sit for their final examination. As a result of the expectation, most of the educators rush through the pace setter without considering the needs of the learners. Such rush decisions always disadvantage learners. It is the responsibility of every educator to afford learners an opportunity to practise and improve on their presentations. Instead of giving them a second chance they are compelled to finish the syllabus on time as directed by the annual programme of assessment. Learners need versatile educators who are equipped with writing skills to help them achieve their goals (Maluleke, 2007: 38).

It could also be argued that resources for laboratory report writing are not sufficient. Anything that can help the educator teach learners how to write can be regarded as a teaching aid or resource material for writing. For effective writing to take place, resources must be available as resources simplify the writing process. For example, in some schools around Driekop Circuit, the Grade 11 science learners either do not have Life Sciences text books or one science book is shared by 3 to 4 learners. Some chemicals for experiments have expired. This inhibits the process learning. Although the sharing of text books may seem of little importance, the freedom of space allows learners to be at peace and concentrate on the task at hand. Thus, learners cramped together cannot possibly produce a solid piece of writing (Lechelele, 2007: 25).

Moreover, learners are not given guidance in their writing. Guided writing is a type of writing in which learners are guided by the educator on how to write a good report. In this case the ESL science educators are expected to guide science learners on how to write a coherent laboratory report. Learners need to be guided to focus on specific aspects of the topic to write about, aims, apparatus, method and findings, for instance when they write report (Lechelele, 2007: 27).

To improve writing skills, educators should give learners relevant topics that they would find relatively easy to understand. According to Dikgari (20110:25), educators need to provide learners with opportunities to write about topics that are relevant to their curriculum, to participate in various writing activities to write about what they have observed after performing given experiments.

Since many rural schools are under-resourced regarding laboratories, this limits the ability of ESL science learners to explore the basic rules of a written report on the basis of what they have experimented on. For example, there are insufficient apparatus and some of the chemicals have expired in most rural schools. It becomes difficult for the teacher to work under such difficult conditions.

Teachers have low expectations of learners; they do not encourage and support them with presentation skills. There is also poor utilisation of existing materials and inadequate usage of methods of instruction.

Furthermore, another difficult situation that enables ESL educators to assess presentation skills of ESL science learners are subject teachers who regard language teaching as the sole responsibility of the language educators. They do not know that they can also teach the language of the subject (Uys et al., 2007).

The introduction of a training module at North-West University, in which student educators were shown how to teach the language of the subject, is an encouraging development and proves that it can be done within an outcomes-based framework (Uys, et al., 2006).

Anstrom (1999: 1); Al-Ansarie (2000:194); Short (2002: 18) investigated whether it is only subject teachers who have received training that enables them to teach presentation skills and consciously promote the development of functional language skills in the classroom. The reasons for these teachers' inability to assist their learners may be ascribed to some, or all, of the following factors:

- Teachers were often unaware of their inability to meet the language-related needs of their pupils.
- Teachers not only lacked the knowledge and skills for teaching presentation skills, but also lacked the insight to identify strategies that would promote effective oral and written presentation skills.
- Teachers lacked the personal language proficiency required (both spoken and written proficiently) to assist their learners.
- Teachers were ignorant of the importance of applying methodological skills.
- None of the teachers had received training that equipped them with skills for effectively teaching through the medium of English.

In their recommendations, they suggested that in-service training should be extensive and ongoing. The findings stressed the need for developing an appropriate training course for ESL content subject teachers (Anston 1991: 1; Ai-Ansarie, 2000: 194; Short, 2002: 18).

Fleisch (2008: 31) argues that many teachers are not literate and have poor subject knowledge. Learners also receive less instructional time because of poor punctuality, absenteeism and preoccupation with other tasks. So are some ESL educators, by extension.

2.5 PRESENTATION SKILLS FOR ESL SCIENCE LEARNERS

In this study, ESL science learners' presentations will be assessed orally and in writing.

One of the educator's jobs is to mediate new material to learners so that it appears in aform that is most accessible for initial learning. This kind of mediation could be called 'presentation'. This term may also be applied to the learners' initial encounter with comprehensible input in the form of spoken or written texts, and various kinds of explanations, instructions and discussion of new language items or tasks (Ur, 1991: 11).

In secondary schools, ESL learners, especially science learners, need to be equipped with oral and written presentation skills. Dikgari (2011:12) argues that learners need good teachers to teach them skills to present texts well. These can, nonetheless, be acquired through practice. Learners usually improve if presentation skills are practised more often. However, a presentation experience is still a onceoff activity in most high schools because it is only done for examination purposes.

In addition, secondary school science learners are normally assessed on any topic provided by the educator, irrespective of their curriculum stream. It is, however crucial that learners' interests should come first because learners have different needs and interests. This will have some important influence on the effectiveness of their learning (Hutchinson & Waters, 1987: 08).

Dikgari (2011:15) asserts that the core objective of the Department of Education is to provide quality education to learners as prescribed by the national policies and

guidelines. All ESL educators are expected to be in possession of the relevant documents that will assist them in the effective implementation of the curriculum. Curriculum documents include some sections dealing specifically with process presenting and writing and their application. ESL educators are expected to have the following CAPS documents to assist and guide them plan their lessons effectively.

The researcher argues that both oral and written presentation skills are important components in language teaching and as a result, educators would be expected to assist learners in pertinent activities. It is therefore, essential that educators in Driekop Circuit be made aware of the departmental expectations and, where possible, be trained to teach new methods effectively as this would assist them in improving learners' presentation skills.

According to Bedford and Wilson (2013: 41), presentations are a good way of consolidating what one has learnt about a topic. This also implies thinking carefully about the content and approach. Researching and learning about a given topic, in preparation for the presentation, often makes it easier to recall the information. Presentations also demonstrate what learners know and understand. Thus, knowing how to present what one has learnt is a very useful skill.

2.5.1 Oral Presentations

In the majority of language based courses in institutions of higher learning, tertiary students are often called upon to make oral presentations. Lecturers at the tertiary level of education often assume that the students come with the necessary capabilities and knowledge to make effective oral presentations. Yet, many tertiary students tend to be anxious about the thought of having to stand in front of their peers and make an oral presentation. Thus, many students consider an oral presentation as one of the most challenging forms of assessment at university (De Grez, *et al.*, 2010).

Oral presentations are, however, also some of the most fruitful sources of personal growth in their tertiary tutelage, particularly for the business students. For the students' education and future work purpose, it is important to develop the skills and confidence in giving oral presentations (De Grez, et al., 2010).

Sigcau (2004: 242) argues that the most devastating problem is that the majority of rural ESL science learners are expected to do oral presentation in the English language which they rarely use in class. The presentation skills tasks serve as the main means of assessing their performance before they can progress to the next grade.

In addition, Morita and Kobayishi (2008: 90) point out that an important feature of tertiary education in different parts of the world today is oral presentations. For example, business courses have been putting more emphasis on oral activities such as oral and written presentations. Despite the pervasiveness of oral activities in universities, relatively little literature has been published thus far about oral presentations in the English classroom (Morita 2008: 90; Otoshi & Heffernan, 2008: 11). Hence the significance of this study which focuses on presentation skills.

The researcher observed that giving a presentation task, particularly an oral presentation, is a stressful experience for many learners in rural schools. Majority of learners have little or no previous experience of speaking before their classmates or handling unpredictable questions during discussion. In most cases, for learners to present better, educators do not give learners science topics that they have studied before. Sometimes feedback, for both oral and written presentation, is not given. Learners deserve feedback on their performance in order to improve.

A study by Lianghuo and Yeo Shu Mei (2007: 2) corroborates that there is a need for help and guidance for educators and learners to intergrade oral presentation tasks into science teaching and learning.

Shyam (2012: 9), in a study on the effectiveness of oral presentation assessment, states that time management is an important aspect of any presentation as each presentation is time-limited. In most cases the time allotted is used to discuss the content with little diversion from the topic. Which is why presentations are allotted time in this study; oral presentations 15 minutes per presenter and written presentations, 1hour 30 minutes.

2.5.2 Report Writing Skills

Wessels and van den Berg (1998: 286) aver that for learners to write well, they must be given opportunity upon opportunity to practise writing as well as be motivated to write.

Myles (2002: 01) argues that the ability to write and speak well is not a naturally acquired skill; it is usually learned or culturally transmitted as a set of practices in formal instruction settings or other environments.

In addition, Writes (2006: 88) points out that if the educators hope to successfully implement report writing, they should exercise patience with learners by collaborating with them during experiments and writing activities. For example, educators could only allocate marks to learners once they are satisfied that learners have acquired more writing skills.

According to Dikgari (2011: 25), educators also need to provide learners with opportunities to write about topics that are relevant to their lives, to participate in various writing activities and to feel that their writing has value. Ideally, these strategies may be relevant and important to enhance the ESL science learners' writing skills.

Murray (2004: 17) indicates that inexperienced writers often write too soon. In line with this study, the Grade 11 ESL science learners can be categorised as inexperienced writers, particularly in their writing of laboratory reports. Thus, they need maximum assistance from educators because English is not their home language. They still lack skills to write coherent texts.

Ngoepe (2010: 30), points out that these learners need to be exposed to scientific reading and writing. Thus, the main aim of teaching ESL learners is to equip them with academic language skills, and to help them cope with and pass other subjects. In this study, ESL science learners would be equipped with oral and written presentation skills. Learners will be taught concepts pertaining to how to write a laboratory report or how to present it.

Presentations learners make normally form part of the educator's assessment process. This involves the educator assessing learners formally and allocating them a mark. In that case, learners are most likely to be given verbal or written feedback on their performance (Bedford & Wilson, 2013: 41). Cottrell (2013: 357) points out

that the style and content of presenting a report should be appropriate to the readers for whom you write.

Writing tasks, such as written reports, are also used as the main instruments of measuring learners' performance (Sigcau, 2004: 242).

A report is a formal method of communicating the results of a project or research assignment. It may cover a laboratory experiment, survey, questionnaire or case study (Cottrell, 2013: 357).

According to Lee and Park (2008: 48), student presentations are a means of learning English. A presentation class would provide science ESL learners with a chance to learn on their own and to explain science topics as well as answer questions their peers have. If science learners can do presentations, they will prosper in their careers and be ready for their future use of presentations since such a demand is on the rise.

Lubron (2010: 53) points out that in scientific presentations, knowledge can either be a bridge or a barrier. This means that science ESL learners need to be given more practice on both oral and written presentation so that it will no longer be a challenge to them.

Govender (2010: 4) argues that Grades 8 and 9 are a solid foundation to good results in Grades 11 and 12, on which educators should focus. It is, therefore, necessary for ESL science educators to start practising both oral and written presentation skills from the lower grade in order to lay a solid foundation.

In addition, Alshare and Hindi (2013: 204), point out that many managers lack presentation skills due to focusing on words and neglecting spoken communication skills. The same applies to the ESL science educators who should rather focus on aspects of oral and written presentations such as language, content, deportment, aim, apparatus, method and so on (see Appendices A & B).

Moreover, Gibbons (2002: 53) argues that every genre has a social purpose, a structure and specific linguistic features. This implies that ESL science learners need to be taught the social purpose of writing, the overall linguistic features. Thus, in a science classroom learners could be taught that the purpose of a report, for instance, is to give information. In order to support this process, teachers need to ensure that

learners have knowledge of the topic they write about.

Drummond and Jones (2010: 33) emphasise that the more the students can be involved in the assessment process of skills such as oral presentation, the more they will learn about the sub-skills involved. This implies that ESL educators need to do a number of oral presentation practices over and over again. Presenting orally is an essential skill that needs to be practised even in schools.

One of the challenges that the researcher experienced is that only the generic oral presentation skills are practised in most schools. The researcher argues that the process of presentation would be fruitful if science oral and written presentations can be done simultaneously, and corrective feedback be given shortly thereafter, ESL science learners will benefit more from the experience.

2.6 RATIONALE FOR THEORY IN THE STUDY

This study is premised on a Social Constructivist theory. In Social Constructivism (SD) classroom learning is a process of peer interaction that is mediated and structured by the educator (see Appendix - Oral and Written Presentations).

Discussion in SD can be promoted by the presentation of specific concepts, problems or scenarios which are guided by means of effectively directed questions, the introduction of clarification concepts and reference to previously learnt materials such as the topics selected for science learners' presentations. Thus, the constructivist educator provides learners with opportunities to test the adequacy of their current understandings (Maddux et.al, 1997; Brooks & Brooks, 1999).

Learners play a more active role in a constructivist learning environment and accepts more responsibility for their learning (see Appendix B - Laboratory report).

The idea of learning-oriented assessment is that all assessment need to support their advancement of student learning. The apex of this framework is represented by the assessment tasks learners have to carry out. The tasks strongly influence how students direct their effort and what kinds of approaches they prefer (Carless, 2015: 6).

Proponents of Situated Learning (SL) argue that knowledge cannot be taught in an abstract manner, and that for it to be useful it must be situated in a relevant or

authentic context such as the science one in the study (Maddux, et al. 1997; Flick, 2006).

Types of assessment aligned to this epistemological position include group-based projects, presentations (verbal or poster), debating and so on (Maddux et al. 1997). Oral and written presentations in this study are therefore aligned to assessment in Social Constructivism. In support of this, Flick (2006: 81) asserts that research acts are also part of the social construction of what can be addressed and found in social research.

2.7 CONCLUSION

Since the situation in rural schools is dire, ESL science educators and learners need essential support to teach and learn presentation skills, respectively.

Although ESL educators have not received training on how to assess presentation skills, they assess learners' presentations annually for examination purposes. This study aims to close this identified gap.

Teachers, particularly in the Driekop circuit, need more development programmes to help them assess presentation skills as prescribed by the new curriculum. While learners struggle to make presentations orally and in writing, educators find it challenging to assess presentations.

ESL science learners should, for example, be afforded opportunities to speak and write in science classrooms about experiments performed. It is therefore imperative that ESL science learners be given more and more opportunities to present orally and in writing (cf. Lianghua & Mei, 2007: 02).

The next chapter discusses the method of research.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 METHOD OF RESEARCH

A quanti-quantitative approach was used in this study.

Fink (1998:143) describes qualitative methodology as a field which focuses on attempts to unveil the real world situation that exists within the classroom and which stands in contrast to theoretical from the perspective of the individual. In this study, the researcher aimed to uncover the real situation by requesting ESL science educators to be interviewed on presentation skills.

Quantitative research is naturally centred around numbers. This, therefore, opens a number of possibilities and sets limitations for researchers since numbers are powerful (Dornyei, 2007: 32). Thus, ESL science learners' oral and written presentations scores were thus, quantified and analysed.

3.1.1 Research Design

This study was descriptive and it took the form of an explanatory design. According to Richards, Ross and Seedhouse (2012: 308), an explanatory study is a two-phase sequential design which begins with a quantitative study which will then be followed by a qualitative phase. Arian (2013: 15) argues that an explanatory study obtains information about the link between the cause and the result of the evidence. This implies that science ESL learners presented orally and in writing first, and then educators were interviewed on how they assess the stipulated presentation skills. This design was suitable for this study because it was undertaken for a problem that had not been clearly defined.

3.1.2 Sampling

Purposive sampling was used. This sampling can follow a number of strategies

depending on the research, topic and setting. When designing the sampling plan, feasibility issues such as time and respondent availability need to be taken into account (Dornyei, 2007: 127). The sampling, in this study, was made up of learners and ESL educators; 60 ESL science learners from three different schools and three ESL educators from three schools in Driekop Circuit.

The study sample consists of Grade 11 ESL science learners. Three classes from 3 different schools namely, Makgamathu, Makopi and Makwadibe Secondary Schools were used, totalling 60 participants, with 20 learners selected randomly from each school. Topics from learners' Life Sciences Curriculum Statement were selected for oral and written presentation. Three ESL educators from these three schools in the Driekop Circuit were interviewed.

3.2 DATA COLLECTION

Twenty topics emanated from the learners' Life Sciences Curriculum. The topics were arranged in an alphabetical order and each learner tossed for a topic. Then, each learner was assessed out of 25 marks for an oral presentation on one of the selected topics for ten minutes.

In addition, the learners wrote a report on one of the experiments performed focusing on the aim, apparatus, method and findings. Their written reports were submitted to the researcher who then developed an assessment sheet that was used to assess the reports out of 25 marks.

Lastly, ESL science educators were interviewed on how they assess these learners' presentation skills.

3.2.1 Instruments

Three instruments were used to assess ESL science learners' presentation skills: an oral test, a written report and an interview with educators.

3.2.1.1 Oral test

Twenty (20) topics were selected from learner's Life Sciences Curriculum Statement. Learners tossed for a topic that had been taught in Life Science and then presented on it. The researcher developed an oral assessment sheet to assess individual

presenters. The total possible score was twenty-five (25) marks.

3.2.1.2 Written report

Learners wrote laboratory reports on an experiment they performed. The report was marked out of 25. The duration of writing a report was 1 hour 30 minutes. The researcher developed a marking guide for a written report. The writing process was invigilated by the researcher and the scripts were collected for marking.

3.2.1.3 Interview

The researcher developed a structured interview for the 3 educators of ESL science learners. The sessions were used to elicit how educators assess science learners' presentation skills.

A research interview is a conversation between the researcher and participants with a specific objective of gathering information about a topic being researched (Poggenpoel, 2003: 143). Structured interview questions were defined from the start and presented to the interviewee (Seliger & Shohamy, 1989: 167).

3.4 DATA ANALYSIS

Data collected was analysed quantitatively as well as qualitatively. Oral and written presentation scores were first analysed quantitatively and the performance of learners was explained. The collected educators' interview responses were analysed thematically.

3.5 QUALITY CRITERIA

The study followed both quantitative and qualitative approaches; reliability, validity, objectivity, conformability, credibility, transferability and trustworthiness respectively will be outlined.

3.5.1 Reliability

The researcher used purposeful sampling to select a representative sample size from the population. This type of sampling supports the reliability of the sample and the inferences and conclusions that will be made. Should a need arise to use the same population to select another sample, the inferences and the conclusions on the results should provide the same results (Kumar, 2014: 103).

3.5.2 Validity

The instruments selected for the study were both reliable and valid. Maduane (2016: 21) argues that a measuring instrument that is unreliable cannot be valid. Saunders *et al.* (2009: 64) suggest that in order to ensure validity, a representative sample of the population should adequately be supported by valid data collection methods and data analysis tools used. A series of interviews were conducted to few educators from a different group in order to confirm validity of the instrument.

3.5.3 Objectivity

The researcher made sure that the marks awarded to the participants during the oral and written presentations are not influenced by any personal feelings or opinion. The researcher was guided by the marking tools or rubric for assessing presentation skills. The results remain objective and unbiased.

3.5.4 Confirmability

The researcher asked whether or not the findings of the study could be confirmed by another. By doing so, evaluation was removed from some inherent characteristics of the researcher (objectivity) and placed squarely on the data themselves. The question was whether the researcher could provide evidence that corroborates the findings and interpretations by means of auditing.

3.5.5 Credibility

Credibility was an alternative to internal validity, in which the goal was to demonstrate that the inquiry was conducted in such a manner as to ensure that the subject had been accurately identified and described. The researcher tried to find out if there was a match between the research participant views and the researchers' reconstruction and representation of them (De Vos, *et al.* 2011: 420).

3.5.6 Transferability

The researcher asked whether or not the findings of the research could be transferred from a specific situation or case to another. Sometimes the qualitative study transferability to other settings might be problematic. To counter challenges, the researcher could refer back to the original theoretical framework; the constructivist educator provides learners with opportunities to test the adequacy of their current understandings (Maddux et.al, 1997; Brooks & Brooks, 1999; see 2.6). This shows how data collection and analysis would be guided by concepts and models. By so doing, the researcher stated the theoretical parameters of the research (De Vos, *et al.* 2011: 421).

3.5.7 Trustworthiness

Trust was vitally significant for individuals taking part in a study. It in turn helped put the individuals at ease during the research process. Thus, participants, who were, English language science learners and ESL educators in that case, appeared to trust the researcher, presupposing their optimal cooperation in the study.

3.6 SIGNIFICANCE OF THE STUDY

The study is significant to the science education field. It is particularly vital to ESL science learners, in that, assessment practices are likely to be reviewed in the long term.

The study suggests that there is a need to attend to challenges pertaining to ESL science learners' oral and written presentations skills.

The study was gender sensitive as it included both male and female learners from the three secondary schools around Driekop.

It is aimed that ESL educators would eventually be equipped with skills to assess science learners' presentation skills well.

3.7 ETHICAL CONSIDERATIONS

Ethical clearance was sought from the Department of Basic Education (DBE) and Turfloop Research and Ethics Committee (TREC).

The researcher ensured that the interests of the respondents were at all cost protected. Learners and educators who participated were informed that strict confidentiality and anonymity were maintained. The researcher also asked for permission from the three sampled schools that participated through a request letter which was attached as appendix.

3.8 CONCLUSION

This chapter highlighted the research methodology followed for the study. The research design, sampling, data collection, data analysis and quality criteria were also discussed. The population was from three rural secondary schools in Driekop Circuit where there is limited exposure to the use of the English language. Ethical considerations were also taken into account.

The next chapter focuses on analysis of results.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1 INTRODUCTION

Data is analysed and the results of the study are presented and discussed. The results are made up of science learners' oral presentation scores, laboratory report scores and interview responses of ESL science educators collected from 3 schools in Driekop Circuit.

4.2 ORAL PRESENTATIONS

Analysis of oral presentation scores is divided into the following four parts: structure, content, language and deportment. A sample of 60 presentations from the three (3) schools in Driekop were analysed on the basis of given criteria (see Appendix A). These components are discussed below as follows:

Learners (N=20)	Structure (5)	Content (10)	Language (7)	Deportment (3)	Total (25)	%
1	3	6	3	2	14	56
2	3	8	4	2	17	68
3	3	6	4	2	15	60
4	4	5	2	1	12	48
5	3	8	4	2	17	68
6	3	8	5	2	18	72
7	4	6	4	3	17	68
8	3	5	4	2	14	56
9	2	4	3	2	11	44
10	2	5	3	1	11	44
11	2	5	3	1	11	44
12	2	5	2	2	11	44
13	3	5	4	3	15	60
14	2	4	3	2	11	44
15	2	4	3	1	10	40
16	3	8	4	2	17	68
17	4	8	4	2	18	72
18	4	8	3	2	17	68
19	4	5	3	1	13	52
20	3	8	3	3	17	68

Table 1: Oral presentation scores for School A

Table 1 presents oral presentation scores in School A. Only 30% of the learners did not succeed in the structure section whereas 20% did not make it in the content

section. However, 45% of learners passed the language section while 75% passed the deportment section. Their overall scores range between 40% and 72%.

Learners	Structure	Content	Language (7)	Deportment	Total (25)	%
(N=20)	(5)	(10)		(3)		
1	2	6	4	2	14	56
				2	17	00
2	2	3	2	1	8	32
3	3	7	4	2	16	64
4	2	5	4	2	13	52
5	2	3	3	1	9	36
6	2	4	3	2	11	44
7	2	3	2	1	8	32
8	2	4	4	2	11	44
9	2	6	3	2	13	52
10	1	4	3	2	10	40
11	2	6	3	2	13	52
12	1	4	3	2	10	40
13	2	3	2	1	8	32
14	2	3	2	1	8	32
15	3	6	4	2	15	60
16	3	7	3	3	16	64
17	3	5	4	2	14	56
18	2	3	3	1	9	33
19	1	3	2	1	7	28
20	2	4	3	2	11	44

Table 2: Oral presentation scores for School B

School B's oral presentation scores are presented in Table 2. Fifty-five percent (55%) of the learners failed. The highest score is 64% while the lowest is 28%. Fifteen percent (15%) of the learners' scores range between 60% and 64% while 25% of the learners' score between 52% and 56%.

Learners	Structure (5)	Content	Language (7)	Deportment	Total	%
(N=20)		(10)		(3)	(25)	
1	3	5	3	2	13	52
2	2	4	3	2	11	44
3	2	4	2	2	10	40
4	1	3	2	1	7	28
5	2	5	3	2	12	48
			-	-		
6	2	4	3	2	11	44
7	2	6	4	2	14	56
8	2	5	3	2	12	48
9	2	5	3	2	12	48
10	2	3	3	1	9	32
11	3	5	3	2	13	52
12	2	5	3	2	12	48
13	2	7	3	3	15	60
14	2	4	2	2	10	40
15	2	4	3	2	11	44
		·				
16	2	3	2	2	9	32
17	2	3	3	2	10	40
	<u> </u>	0		2		
18	2	5	3	2	12	48
19	2	3	3	1	9	32
13	۷	3	3	I	3	32
20	2	5	3	2	12	48

Table 3: Oral presentation scores for School C

Table 3 presents oral presentation scores for School C. Only 10% of the learners passed the structure section while 90% failed. Fifty percent (50%) passed the content section whereas only 5% of the learners passed the language section. Eighty-five percent (85%) passed the deportment section. In this school, a mere 20% of the learners made it in oral presentations.

School	Structure (5)	Content (10)	Language (7)	Deportment (3)
A	59%	61%	49%	63%
В	41%	45%	43%	57%
С	41%	44%	40%	63%

Table 4: Summary of oral presentation scores for the 3 schools

In Table 4, a summary of the results for the three schools is presented. Only School A passed structure, content and deportment sections scoring 59%, 61% and 63% respectively. In the language section, all the three schools failed while in the deportment section the three schools scored above 50% and their scores ranged between 57% and 63%.

4.3 REPORT WRITING SKILLS

Written presentation which was in the form of report writing skills was divided into the following subheadings: aim of experiment, apparatus, method and findings (see Appendix). Data collected from the three schools is presented in tables as follows:

Learners	Aim (2)	Apparatus (8)	Method (12)	Findings (3)	Totals (25)	%
(N = 20)						
1	0	4	0	0	4	16
2	0	3	1	1	5	20
3	0	6	1	0	7	28
4	0	6	2	0	8	32
5	2	7	0	0	9	36
6	0	4	0	1	5	20
7	0	5	5	1	11	44
8	1	2	2	0	5	20
9	0	2	1	0	3	12
10	2	5	0	0	7	28
11	0	4	1	1	6	24
12	1	7	4	0	12	48
13	2	7	0	0	9	36
14	1	7	0	0	8	32
15	0	6	1	0	7	28
16	0	7	0	0	7	28
17	0	6	0	0	6	24
18	1	3	1	0	5	20
19	2	6	0	1	9	36
20	0	4	1	2	7	28

Table 5: Report writing skills scores for School A

Written presentation scores for School A are presented in Table 5. Forty percent (40%) of the learners passed the aim section while 60% failed in this section. The performance of the learners was wide-ranging in the apparatus section, scores range from 25% to 88% and none of the learners scored 0%. In the method section, 45% of the learners scored 0%, followed by 35% who scored 8%. Only 5% of the learners succeeded in the findings section. In School A, all the learners (100%) failed the written report presentations section.

Learners	Aim (2)	Apparatus (8)	Method (12)	Findings (3)	Totals (25)	%
(N=20)						
1	1	4	0	2	7	28
2	2	5	0	1	8	32
3	1	6	2	1	10	40
4	2	6	5	1	14	56
5	1	7	0	1	9	36
6	1	6	3	3	13	52
7	2	6	0	0	8	32
8	0	6	0	0	6	24
9	1	6	2	0	9	36
10	2	6	0	1	9	36
11	2	6	3	2	13	52
12	1	7	4	2	14	56
13	2	7	0	0	9	36
14	1	7	0	0	8	32
15	2	6	0	0	8	32
16	2	7	0	0	9	36
17	1	7	4	3	15	64
18	1	3	1	0	5	20
19	2	6	0	1	9	36
20	1	7	1	0	9	36

Table 6: Report writing skills scores for School B

Table 6 presents written presentation scores for School B. Forty-five percent (45%) of the learners scored 100% in the aim section while half of the learners (50%) scored 50%. Only 5% of the learners scored 0%. Thirty-five percent of the learners (35%) scored 88% while 50% of them scored 75% in the apparatus section. Only 5% of the learners failed in this section. However, the highest number (55%) of the learners scored 0% and only 5% of the learners scored 42% in the method section. Ten percent (10%) of the learners scored 100% and 15% scored 67% in the findings section. Seventy-five percent (75%) of the learners failed this section. The total scores ranged between 20% and 64% in School B.

Learners	Aim (2)	Apparatus (8)	Method (12)	Findings (3)	Total (25)	%
(N = 20)						
1	1	4	I	0	06	24
2	2	7	0	0	09	36
3	1	7	0	1	10	40
4	0	6	1	0	07	28
5	1	7	3	2	13	52
6	1	7	0	0	08	32
7	2	7	3	2	14	56
8	2	8	3	2	15	60
9	1	5	0	0	06	24
10	0	7	2	0	09	36
11	1	6	0	0	07	28
12	2	5	0	0	07	28
13	2	5	2	1	09	36
14	0	5	0	0	05	20
15	0	6	1	0	07	28
16	0	7	0	0	07	28
17	0	6	0	0	06	24
18	1	4	2	0	07	28
19	0	5	0	0	05	20
20	0	4	1	0	05	20

Table 7: Report writing skills scores for School C

In Table 7, the written presentation scores for School C are presented. In the aim section, only 25% of the learners scored 100%, 35% scored 50% while 40% scored 0%. Hundred percent (100%) of the learners passed the apparatus section. Fifty percent (50%)of the learners scored 0% and the remaining 50% scored below 50% in the method section. Eighty-five percent (85%) of the learners failed while 15% scored 67% in the findings section. The total scores ranged between 20% and 60%.

School	Aim (2)	Apparatus (8)	Method (12)	Findings (3)
A	30%	63%	8%	12%
В	70%	76%	10%	30%
С	41%	74%	8%	13%

Table 8: Summary of report writing skills scores of the 3 schools

Table 8 presents the summary of written presentations for the three schools. In the aim section, only School B made it with a total score of 70% while both School A and C scored below 50%. All schools made it in the apparatus section whereas in both method and findings sections, the three schools scored below 50%. Their scores ranged between 8% and 30%.

4.4 INTERVIEWS WITH ESL SCIENCE EDUCATORS

Three ESL science educators from the 3 sampled secondary schools were interviewed by the researcher. Interview questions focused on personal information, presentation skills, teaching, English Language, assessment and environment (see Appendix E).

The interview questions will be repeated for easy reference.

4.4.1 Personal Information

Personal information consists of educators' first language, their second language(s), teaching experience, subjects and the highest teaching qualification.

What is your first language?

Sixty-seven percent (67%) of ESL science educators' first language is Sepedi while 33% of ESL science educators' home language is Shona.

What is/are your second language(s)?

Hundred percent (100%) of educators speaks English as their second language.

When did you start teaching English?

The educators' teaching experience was as follows: Thirty-three point three percent (33, 3%) of educators had one year teaching experience. Those with a two year teaching experience were also 33,3% and the remaining 33,3% teaching experience of 15 years and more.

Did you study any science subjects up to matriculation level?

All (100%) educators studied a science subject such as Physical Science or Life Sciences up to matriculation level.

What is your highest teaching qualification?

Thirty-three percent (33%) of educators have only a diploma in teaching, that is, Senior Teaching Diploma (STD) as their highest teaching qualification. The remaining 67% of educators hold a Bachelors of Education in Senior Phase and FET (BEDSPF) as their highest teaching qualifications.

4.4.2 Presentation skills

Are ESL science learners equipped with oral presentation skills?

Over sixty-seven percent (67%) of ESL science educators indicated that learners were equipped with oral presentations skills.

Are ESL science leaners equipped with report wring skills?

Only 33% of the educators stated that learners had report writing skills.

Are ESL educators equipped with oral presentation skills?

ESL educators indicated that all (100%) are equipped with oral presentation skills.

4.4.3 Teaching

Do ESL educators teach presentation skills?

A hundred percent (100%) of educators responded that they did not teach presentation skills to ESL science learners in their science classrooms.

Do ESL science learners write reports after performing experiments?

All (100%) ESL science educators agreed that they allow ESL science learners to write reports after they shall have performed experiments in order to assess whether learners have understood what was tested in the experiment.

Are learners afforded opportunities to read scientific text?

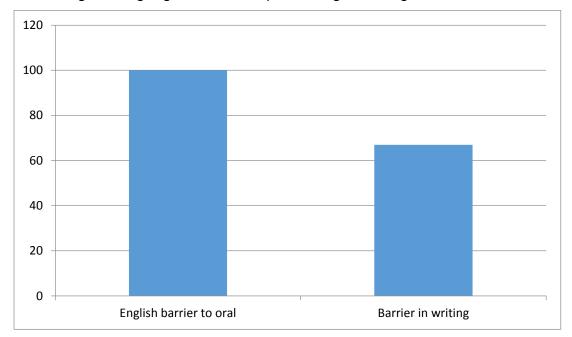
Not all the ESL educators afforded science learners opportunities to read scientific texts. Only 33% of educators afford learners opportunities to read scientific texts.

Are learners afforded opportunities to practise oral presentations?

None of the educators (0%) afforded learners opportunities to practise oral presentations.

4.4.4 English language

Is the English language a barrier to presenting orally?



Is the English language a barrier to presenting in writing?

Figure 1: English Language as a barrier to presenting orally and in writing

Figure 1 depicts educators' responses to the question whether English language is a barrier to presentations. All the educators (100%) agreed that English is indeed a barrier to oral presentations while 67% of educators indicated that it is a barrier to written presentations.

4.4.5 Assessment

Do you assess science learners written reports?

All educators (100%) indicated that learners were given written report test on what they have observed after they shall have performed their experiments. It is through assessment of written reports that educators can identify learners' strength and their weaknesses in this regard.

How do you assess ESL science learners' oral presentation skills?

Educators assessed learners' oral presentation skills by making use of rubrics, questions and group discussions. All of them (100%) have assessed oral presentations by making use of rubrics. Only 33% of the educators made use of questions and group discussions to assess oral presentations.

4.4.6 Environment

Are science laboratories adequately resourced?

A hundred percent (100%) of the educators from the three schools indicated that they did not have laboratories at their schools.

Is the presentation a once-off experience? Give an explanation

ESL science educators (100%) agreed that presentations are a once-off experience because their focus is on the work programme. They explained that due to overcrowding in classes, they did not have enough time to do presentations. Educators also cited a lack of resources. Therefore, under such circumstances they resorted to doing presentations once a year.

Do presentations motivate science ESL learners? Give an explanation

Only few educators (33%) stated that oral presentations motivate their learners. These educators argue that even shy learners could express their views. Educators stated that more time should be allocated to oral presentations practice. They also indicated that learners would gain self- confidence during presentations. Thus, presentations should not be a once–off activity. However, more educators (67%) responded that written presentations were still a challenge to most ESL science learners. They mentioned that the problem that leaners could not write reports, results from educators who are not competent to teach science in English and are scared to ask for help.

4.4.7 Comments of ESL science learners' educators on presentation skills

Most (67%) of the educators were of the opinion that presentation skills needed to be developed at school level. Since presentations allow learners to express themselves in English, this experience could afford educators an opportunity to get to know the language needs of learners better including their shortcomings so that they could improve on their presentation skills. Educators also mentioned that presenting at tertiary level remains a problem at first and second level of study.

On the whole, learners had difficulties in presenting in English. Thus, English language impacts negatively on learners' presentation skills in that some science learners struggle to write reports, for example. The situation is compounded by the fact that public schools are overcrowded and not well resourced. This is even more difficult for slow learners who take time to adjust to the language as well as to the content.

4.5 CONCLUSION

The research findings confirmed that learners are not well equipped with oral presentation skills. Written presentations also remain challenging to ESL science learners.

The English language was found to be a barrier in both oral and written presentations. For example, there is a need for science educators to teach Tense and the Passive voice so that learners can be able to write laboratory reports appropriately. Sequence markers such as next, then, thereafter etc. should also be taught.

Furthermore, overcrowded classes do not encourage educators to give practice in presenting and a shortage of laboratories in rural schools have a negative impact on the science learners' education.

On the whole, the findings of the study confirm that presentation skills remain challenging to both science learners and ESL educators.

The next chapter concludes the study and makes recommendations for further research.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH

5.1 INTRODUCTION

The aim of this chapter is to conclude the study and make recommendations for further study. The findings of the study will be used to give a conclusion of the study and recommend further research.

5.2 CONCLUSION OF THE STUDY

Presenting orally and in writing plays a very important part in the lives of ESL science learners, within and without the school environment. Thus, science learners need opportunities to present orally as well as in writing as presentations allow them to demonstrate what they have learnt and understood in line with the curriculum (see Appendix A).

During oral presentations, English language proved to be a major problem. For example, in the language section of oral presentations for the three schools, only 27% of the learners scored above 50% and the remaining 73% did not pass this section. Most ESL science learners were unable to express their views in English because their first language is Sepedi. This implies that they have limited exposure to the English language in their rural environment.

Presenting on science topics in English seemed to be a burdensome activity as demonstrated by the learners' poor performance. Some science learners were not confident to utter words in English. Other possible explanations which could have discouraged them from speaking up included low self- esteem and self-belief. Life Science concepts were unfamiliar and difficult to present on, to majority of the learners. Thus, most of the learners did not have much to say on the topics (see Appendix A).

Written presentations remain challenging to ESL science learners. It was glaring that the learners written laboratory reports were full of errors. In the method section, most sentences were poorly constructed; they contained tense, punctuation, concord, spelling errors and so on. Learners were supposed to construct sentences in the past tense because the experiment was already done. Most laboratory reports were not well structured, there was no clear distinction between method and findings (see Appendix B).

Although learners performed the same experiment using the same chemicals as well as apparatus, their laboratory reports differed. For example, after testing for the presence of starch in leaves, some learners' leaves changed from green to yellow, while some changed to dark green. There was a clear indication that the learners did not get sufficient practice on written reports after experiments were performed. In both method and the findings sections, the three schools scores were below 50%.

The ESL sciences learners' educators' responses indicated that presentation skills needed to be taught and developed at school level even though educators work under difficult circumstances. They also argued that they were unable to assess learners' presentation skills due to lack of resources in their schools. They further indicated that overcrowding in most schools was a serious problem as more time is needed to give each learner sufficient time in a class of over 70 learners, for example. Usually, such classes are not easy to manage.

Educators were unanimous that the English language remains a barrier to presenting on Life Sciences topics. For example, only a few learners tend to participate during discussions without fear of making mistakes. This implies that the majority of ESL science learners are not proficient in English. ESL science learners lacked Life Sciences vocabulary as well as concepts to make a meaningful contribution during oral and written presentations. More presentation assessment could be practised to develop educators.

The findings of this study have confirmed that assessment of ESL science learners' presentation skills is an area that has not yet received sufficient attention in most rural schools. It is implicit that learners are not equipped in both oral and written presentation skills. Thus, expectations of presenting on a topic and writing a report were challenging to ESL science learners. English as a language was also the main barrier to execution of presentations.

Since some schools do not have science laboratories where learners can perform experiments for written reports, education authorities should identify science learners' as well as ESL educators' needs regarding presentation skills.

Educators do not usually provide learners with opportunities to develop their presentation skills in the context of learning science. Learners are also not equipped with presentation skill, which should be acquired through practice.

ESL science educators should be work-shopped on both oral and written presentations. They should continually seek ways to improve their presentation skills. This can be done through in-service training or through short courses in areas where they lack content knowledge such as the science one. Since the curriculum has changed significantly over the past few years, it is vitally significant that educators upgrade their presentation skills.

This study would urge curriculum authorities to recognise presentation as a skill which can support learners not only in the science classroom, but also in the work place. Thus, presentations should be taught from Grade 10 to give learners a solid foundation in this regard. In the other streams such as the general and the commerce ones, presentation skills should also be taught. Other science subjects like Geography, Physical Sciences and Agricultural Sciences could also be used to select topics for oral presentations.

5.3 SUGGESTIONS FOR FURTHER RESEARCH

Since this study focused on assessing presentation skills of Grade 11 ESL science learners and how ESL educators assess these skills, future studies could research presentation skills of ESL science learners in other grades, in EFAL as well as how educators deal with assessment.

Future research could also look into any presentation detail such as structure, content or language of oral as well as written presentations.

In addition, the manner in which ESL science learners in other grades present the aim, method or findings of experiments performed, could be researched.

ESL educators in the whole Driekop Circuit and by extension, Limpopo Province, could be interviewed on how they assess science learners' presentation skills.

BIBLIOGRAPHY

Al-Ansarie, S. 2000. Sheltered curriculum exposure and unsheltered extra-curricular exposure as factors influencing the development of academic proficiency in ESL. *International Review of Applied Linguistics in Language Teaching,* 38: 175-194.

- Alshare, K. & Hindi, N.M., 2004. The importance of presentation skills in the classroom: Students and instructors perspectives. *Journal of Computing Sciences in Colleges*, *19*(4), 6-15.
- Alwi, N.F.B. & Sidhu, G.K., 2013. Oral presentation: Self-perceived competence and actual performance among UiTM Business faculty students. *Procedia-Social* and Behavioural Sciences, 90: 98-106.
- Anstrong, K. 1999. Preparing secondary education teachers to work with English language learners: Social Studies. *Resource Collection Series*, 13. *http://www.ncela.gwu.edu.*
- Arian, A.A. 2013. The advantages of explanatory research design. DJS Research Ltd.
- Bedfort, D. & Wilson, E. 2013. *Study Skills for Foundation Degree.* 2nd edition. London: Routledge.
- Bhati, S.S. 2012. The effectiveness of oral presentation assessment in a Finance subject: An empirical examination. *Journal of University Teaching & Learning Practice*, 9(2), 6.
- Black, P., Harrison, C., Lee, C., Marshal, B. & William, D. 2003. *Assessment for Learning: Putting it into Practice*. Maidenhead, U.K.: Open University Press.
- Brooks, M. G. & Brooks, J. G. 1999. The Courage to be Constructivist: the Constructivist Classroom. *Educational Leadership*, 3 (57), 18 24.
- Carless, D. 2015. Excellence in university assessment. London: Routledge.
- Carner, K.A. 2005. Supporting science learning through science literary objectives for English language learners, science activities. *Classroom Projects and Curriculum Ideas*, 42(2), 5-11.

- Cook, G. 2003. Applied Linguistics: Oxford Introductions to Language Study. Oxford: Oxford University Press.
- Cottrell, S. 2013. *The Study Skills Handbook*. 4th Edition. England: Palgrave MacMillan.
- De Chazal, E. 2014. *English for Academic Purposes*. Oxford: Oxford University Press.

De Grez, D. 2010. *Peer Assessment of Oral Presentation Skills. Procedia-Social and Behavioural Sciences*, 2(2), 1776-1780.

De Grez, L. Valcke, M. & Berings, D. 2010. Student Response System andLearningOral Presentation Skills. Belgium: University College Brussels.

- Department of Education. 2011. English Curriculum & Assessment Policy Statement. South Africa.
- Department of Education. 2011. *Life Sciences Curriculum & Assessment Policy Statement.* South Africa.
- Department of Education. 1997. Towards a Policy Framework for Assessment in the General and Further Education and Training Phase in South Africa. Discussion Document. Unpublished Report. Pretoria: Department of Education.
- De Vos, A.S., Strydom, H., Fouché, C.B., & Delport C.S. 2011. Research at Grass Roots Series: For the Social Sciences and Human Service Professions. 4th edition. Hatfield, Pretoria: Van Schaik Ltd.
- Dikgari, N.M. 2011. The Implementation of the Process Approach to the Writing of English Essays in Rural Grade 12 Classes in the Moroke Circuit.M.A. Dissertation. University of Limpopo: Polokwane.
- Dolliso, A. & Koudinga, V. 2011. An Integrated Framework for Assessing Oral Presentation using Peer, Self and Instructor Assessment Strategies. Iowa State University: Ames, IA.

Dornyei, Z. 2007. Research Methods in Applied Linguistics. Oxford: Oxford University Press.

Drummond, J. & Jones, D. 2010. Assessing Procedures for Councillors and Helping Professionals. New Jersey: Library of Congress Catalogue.

Fink, A. 1998. *Conducting Research Literature Reviews*. London: SAGE Publications Ltd.

- Fleish, B. 2008. Primary Education in Crises: Why South African School Children Underachieve in Reading and Mathematics. Cape Town: Juda & Co. Ltd.
- Free Encyclopaedia, 2014. *Quantitative Research*. http://en.wikipedia.org/wiki/ quantitative research. Accessed on 25 May 2014.
- Genesee, F. & J.A. Upshur. 1996. *Classroom-based Evaluation in the Second Language Education.* Cambridge: Cambridge University Press.
- Gibbons, P. 2002. Scaffolding Language, Scaffolding Learning: Teaching Second Language Learners in the Mainstream Classroom. Heinemann: Portsmouth.
- Govender, P. 2010. Back to Basic in Maths, Science: Experts Underscore Reasons for Poor Performance. *Sunday Times,* October 24:4.
- Hutchinson, T. & Waters, A. 1987. English for Specific Purposes: A Learning-Centered Approach. Cambridge: Cambridge University Press.
- Karen, A. Carner, 2005. Supporting Science Learning through Science Literacy Objectives for English Languages, Science Activities. *Classroom Projects and Curriculum Ideas*, 42(2) 5-11.
- Kumar, R. 2014. *Research Methodology: A Step by Step Guide for Beginners.* 4th Edition. Los Angeles: SAGE Publishers.
- Lechelele, M. 2007. *Writing in English: Problems Secondary School Learners Face in the Zebediela Area*. M.A. Dissertation. University of Limpopo: Polokwane.
- Lee, E. & Park, M. 2008. Student presentation as a means of learning English for upper intermediate to advanced level students. *Journal of Pacific Association of Applied Linguistics, 12(1) 47-60.*

Lianghuo, F. & Shu Mei, Y. 2007. Intergrading Oral Presentation into Mathematics Teaching and Learning: An Exploratory Study with Singapore Secondary Students. Ministry of Education: Singapore.

Lubrum, J. 2010. When the Scientist Presents. An Audio and Video Guide to Science Talks. Singapore: World Scientific Publishing Co. Ltd.

Maduane, L. 2016. *Barriers to Geography Learning and Teaching in Grade 12 in the Limpopo Province*. Ph.D. Thesis. University of Limpopo: Polokwane.

Maddux, C.D., D.L. Johnson & J. Willis. 1997. Constructivism and Social Constructivism in the Classroom. <u>http://www.ucdoer.ie/index.php/Education_Theory/Constructivismand_Social_Constructivism.</u> Date of Acess 2016/10/31.

- Maluleke, M.J. 2007. The Challenges of Teaching Biology through the Medium of English: The Case of Jim Chavani High School, Limpopo Province. M.A.
 Dissertation. University of Limpopo: Polokwane.
- Mogano, N.E. 2007. The Impact of English as the Medium of Instruction amongst Grade 12 Learners at Reholegile High School. M.A. Dissertation. University of Limpopo: Polokwane.
- Morita, N. & Kobayishi, M. 2008. Academic Discourse Socialization in a Second Language. In P.A. Duff & N.H. Hornberger (Eds.), *Encyclopaedia of Language* and Education (2nd Ed), Volume 8, 243-255.
- Moyaba, N. Otterup, T. & Webb, P. 2010. Writing in a Science Classroom: Some Case Studies in Swedish Second Language Classrooms. Nelson Mandela University: South Africa & Gothenburg University: Sweden.
- Murray, D. 2004. A Write Teaches Writing. Boston: Thomson Heinle.
- Myles, J. 2002. Second Language Writing and Research: *The Writing Process and Error Analysis in Student Texts,* Volume 6(2), 1-20.
- Negash, W. 2008. Journal of the IATELF: Ethnography of Boundary Relations between ESP and other Specialist Subjects. Ethiopian Civil College: Ethiopia. Volume 2(1), 261-278.

Ngoepe, L.J. 2007. The University of Limpopo Mathematics and Science Foundation Year Course in English and Study Skills: An Evaluation. Ph.D. Thesis,

Potchefstroom: North West University.

- Ngoepe, L.J. 2010. Defining Challenges of Lecturers in an EAP Situation. Professional and Academic English. Journal of the English for Specific Purposes Special Interest Group, Summer-Autumn Issue 36: 27-32.
- Ngoepe, L.J. 2017. Ethnographically-Oriented Assessment of an Emergent Multidisciplinary Science ESP Group Project Module. *South African Journal of Higher Education 31(2): 172-191.*
- Otoshi, J. & Heffernan, N. 2008. Factors Predicting Effective Oral Presentations in EFL Classrooms. *Asian Journal 10 (10).* Assessed at *www.asian-efijournal.com/ March 08 io-php* on 03/11/2008.
- Pienaar, M. 2009. Multingualism and Educational Interpreting: Innovation and Delivery. *Language Matters*, 40(2), 266-267.
- Peixotto, K. 2010. *The Inclusive Classroom: Mathematics and Science Instruction for Students with Learning Disability*. North-West Regional Laboratory: North-West.
- Poggenpoel, M. 2003. The Research Interview. In Rossouw, D. ed. Intellectual Tools: Skills for the Human Sciences. 2nd ed. Translated by Fourié, C. Van Schaik: Pretoria.
- Richard, J., Haber, D. & Larelei, A. 2001. Learning oral Presentation Skills. A Rhetorical Analysis with Pedagogical and Professional Implications. London: Emporia University Press.
- Richards, K.R., Ross, S. & Seedhouse, P. 2012. Research Methods for Applied Language Studies: An Advanced Resource Book for Students. London: Routledge.
- Saunders, M., Lewis, P. & Thornhill, A. 2009. Research Methods for Business Students. 5th ed. England: Pearson.
- Seliger, H.W. & Shohamy, E. 1989. Second Language Research Methods. Oxford: Oxford University Press.
- Shyam, B. 2012. The Effectiveness of Oral Presentation Assessment in a Finance Subject: An Empirical Examination. *Journal of University Technology Learning Practice*, 9(2), 25-43.

- Sigcau, N.E. 2004. Mother-Tongue Education: A Key to Success. In
 B. Brock-Utne, Z. Desai & M. Qorro (Eds): *Researching the Language of Instruction in Tanzania and South Africa.* 3(2), 239-254.
- Short, D. 2002. Language Learning in Sheltered Social Classes. *TESOL Journal, 11: 18-24.*
- Stuart, E. 2013. Engaging the Audience: Developing Presentation Skills in Science Students. Department of Cell Biology and Physiology. University of North Caroline. Chapel Hill, NC, 27599-7545.
- Underwood, J. & Underwood, G. 1999. Task Effects on Co-operative and Collaborative Learning with Computers. *Learning with Computers: Analysing Productive Interaction*, 10-23.
- Uys, M., van der Walt, J., Botha, S. & van den Berg. 2006. An Integrated Course for English Medium of Instruction Teacher Trainees in South Africa. *Journal for Language Teaching.* 40(2), 68-86.
- Uys, M., van der Walt, J., Van den Berg, R., & Botha, S. 2007. English Medium of Instruction: A Situation Analysis. *South African Journal of Education*, 27(1), 69-82.
- Wessels, M. & van den Berg, R. 1988. *Practical Guide Learning*. International Thompson Publishing: Johannesburg.
- Wright, J. 2006. Reflections on Process Writing. *Journal for Language Teachers,* 40 (2): 88-109.

APPENDICES

APPENDIX A: Topics for Oral Presentations

Toss for a topic from your Life Sciences curriculum and present on it for 10minutes.

- 1. Water is life
- 2. Problems caused by fertilizers
- 3. Carbohydrates
- 4. Lipids
- 5. Proteins
- 6. The role of enzymes
- 7. Vitamins
- 8. Plastids
- 9. Digestion
- 10. Transport systems
- 11. Differences between plants
- 12. Cancer
- 13. The role of mitosis
- 14. Organs
- 15. Transpiration
- 16. Functions of the human skeleton
- 17. Human blood
- 18. The circulatory system
- 19. Ecosystems
- 20. Ecotourism

Total Marks = 25

APPENDIX B: Oral Presentation Assessment Criteria

Time alloted:	15 Minutes
Learner:	
Topic tossed:	

Item	Possible Score	Actual Score
Structure	5	
Content	10	
Language	7	
Deportment	3	
Total Mark	25	

APPENDIX C: Laboratory Report Writing

Duration: 1 Hour 30 Minutes

Write a report on the experiment you performed testing for the presence of starch in leaves of plants. Your report should have the following four subheadings:

Aim of experiment (2).

Apparatus (8).

Method (12).

Findings (3).

Total Marks = 25

APPENDIX D: Marking Guide for Laboratory Report Writing

Experiment: Testing for the presence of starch in leaves

Aim of the experiment: The aim of the experiment is to test if a green leaf that had been heated would have the same amount of starch as a leaf that was not heated.(2)

Apparatus: Beaker; Test tube; Water 200 ml; Boiling water; Ethanol 5 ml; White tile;
Iodine solution - 3 drops; Safety Goggles; Leaves; Bunsen burner; Apron; safety
mat; gauze; tripod; forceps or tweezers; glass rod

Method:

- obtain a plant leaf as a sample for the experiment
- heat the plant leaf in boiling water for 10 minutes; this stops its chemical reactions
- heat it in boiling ethanol for a few minutes
- wash with water and spread onto a white tile.
- add iodine solution from a dropping pipette.

Findings: After the iodine reagent is added, the green areas on the leaf where starch is present will turn blue-black in colour. This indicates the positive test for starch. (3)

Total Marks = 25

(12)

APPENDIX E: Interviews with ESL Educators

1. Personal Information

What is your first language? What is/are your second language(s)? When did you start teaching English? Did you study any science subjects up to matric level? What is your highest teaching qualification? What is your highest academic qualification?

2. Presentation skills

- 2.1 Are ESL science learners equipped with oral presentation skills?
- 2.2 Are ESL science learners equipped with report writing skills?
- 2.3 Are ESL educators equipped with oral presentation skills?

3. Teaching

3.1 Do ESL educators teach presentation skills?

If no, explain why _____

3.2 Do ESL science learners write reports after performing experiments?

If no, give an explanation. _____

3.3 Are learners afforded opportunities to read scientific texts?

If not, explain why?

3.4 Are learners afforded opportunities to practise oral presentations? If not, explain why. 4. English Language 4.1 Is the English language a barrier to presenting orally? If yes, give an explanation. 4.2 Is the English language a barrier to presenting in written form? If yes, give an explanation.

5. Assessment

5.1 Do you assess science learners' written reports? If not, give an explanation why you do not assess the learners' written reports. 5.2 How do you assess ESL science learners' oral presentation skills? 6. Environment 5.2 Are science laboratories adequately resourced? 5.3 Is the presentation a once-off experience? Give an explanation. 5.4 Do presentations motivate science ESL learners? Give an explanation.

6. Please comment on ESL science learners' presentation skills.

Thank you.