

**EXPLORING THE TEACHING SHELTERED
INSTRUCTION OBSERVATION PROTOCOL
FROM TEACHERS' PERSPECTIVES**

by

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ABSTRACT

The educational change brought about by the South African Constitution and the Language in Education policy has resulted in many parents choosing to send their children from pre-school to an English medium school, so that their children can become proficient in the English language. As a result, many learners are learning in a language that is not their mother tongue and are therefore struggling to acquire reading and writing skills. Although there are many misconceptions regarding the learning of a language, the underlying theory on how learners learn a second language through Cummins BICS and CALP theory is explored in this research.

The main purpose of this study was to evaluate the effects of the Sheltered Instruction Observation Protocol (SIOP) on teaching English Second Language (ESL) learners in primary schools. The study further intended to determine the effectiveness of SIOP in the South African context. To facilitate the understanding of the problem statement of this study, an evaluation framework based on the Context-Input-Process-Product (CIPP) model of Stufflebeam's model was applied. The research was carried out at one primary school who had predominantly ESL learners in the school and who had teachers trained in implementing SIOP.

The main research question posed by this research is to determine the effectiveness of SIOP on teaching an ESL learner in a primary school in the South African context. The sub-questions of the research are to what extent does SIOP differ from traditional methods, how does SIOP affect teachers' planning and instruction in the classroom; to what extent do the learners understand the content when the teachers implement SIOP and to what extent does SIOP contribute to the improvement of academic performance of ESL learners in content areas. To answer the research question, mixed methods was used to fit together the insights provided by qualitative and quantitative research into a workable solution and therefore make use of the pragmatic method as a system of philosophy. As qualitative data was collected first, followed by the analysis of the secondary data, the typology used for the research is the QUAL → quan. Interviews and observations were carried out on teachers who are currently implementing SIOP using interview protocol and observation protocol and data obtained from the University of Pretoria was analysed to determine

academic performance of ESL learners. Legitimation occurred at various stages of the research which included peer review and member checking,

From the data collected through interviews and observations, the following themes emerged, namely (i) language focus; (ii) difference between SIOP and the traditional methods of teaching; (iii) planning and assessment; (iv) learner attitude towards SIOP and (v) Grade R influence.

Although data collected from the University of Pretoria showed gains achieved, the methodology conducted in this research was not an experimental design. A paired t-test was used to determine gains made between the target school, comparison school and the whole sample. Therefore, tentative statements regarding the influence of SIOP on academic performance is thus made in this research. Although no experiment was undertaken for this research, the findings from the data show that the null hypothesis indicates that there is no significant difference between the scores of the baseline assessments and the follow-up scores. As the significant values (p-value) were less than .05, the null hypothesis can be rejected. As part of the analysis, the effect sizes were also calculated which indicates a large effect size for the total scores and reading scores while the phonics scale showed a medium effect and the mathematics scale showed a small effect size.

Based on the results of the study, it was found that the programme needed some revisions to make better use of the existing opportunities. The following recommendations and suggestions are that an experiment design should be explored to ascertain actual contribution SIOP can make to an ESL class. SIOP should be implemented as a teacher development programme and possibly a module for teacher training at university level. Resources needs to be readily available for teachers to use which could contribute to the improvements of academic performance of ESL learners. Teachers should form planning teams with other teachers to share good practices and lastly adequate support is needed for the implementation of SIOP.

The importance of this study is that it provides insight into and understanding of the role of implementing an intervention programme to improve academic performance

of ESL learners. It also sheds light on the need for an intervention programme and the extent to which the programme can improve academic performance of ESL learners.

The main contribution of this study to the body of knowledge was its insight into and understanding of a number of factors, categorised as inputs, process and outcomes, that had an effect of the implementation of the SIOP programme. The development of the conceptual framework was applied by the CIPP evaluation model, as a framework that illustrated the relationships and outcomes of the SIOP programme that had previously not been done. This study thus emphasises the importance of intensive research and proper planning of intervention programmes.

The aim of this inquiry was to determine the effectiveness of a model of teaching that was developed in the USA. Throughout the research, the findings presented indicated that the Sheltered Instruction Observation Protocol would be a functional model to employ in South Africa's education system and, if implemented correctly, would yield positive results. Therefore, this study was an initial step towards implementing a programme that would improve academic performance in schools, where the LoLT is different from the mother tongue. Although some valuable information was obtained, there is much scope for further research on how to evaluate the effects of SIOP on academic performance of ESL learners.

Key Words

Sheltered Instruction, English Second Language, Teaching, Language Instruction, Programme Evaluation, Literacy, Numeracy, Mixed Methods, Paired t-test, content analysis.

A FABLE

In a house there was a cat, always ready to run after a mouse, but with no luck at all.

One day, in the usual chase the mouse found its way into a little hole and the cat was left with no alternative than to wait hopefully outside.

A few minutes later, the mouse heard a dog barking and automatically came to the conclusion that if there was a dog in the house, the cat would have to go. So he came out, only to fall into the cat's grasp.

'But where is the dog?' – asked the trembling mouse.

'There isn't any dog-it was only me imitating a barking dog', exclaimed the happy cat.

After a pause, the cat added,

'My dear fellow, if you don't speak at least two languages, You can't get anywhere nowadays.'



Source: Tiedt, P.I. and Tiedt, I.M. (2002). Multicultural Teaching. A Handbook of Activities, Information and Resources. Sixth Edition, Boston: Allyn and Bacon.

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List of Acronyms

ANA	- Annual National Assessment
APLLC	- Accelerated Programme for Language, Literacy and Communication
BICS	- Basic Interpersonal Communicative Skills
CALP	- Cognitive Academic Language Proficiency
CAPS	- Curriculum and Assessment Policy Statement
CEM	- Curriculum Evaluation and Management Centre
CEA	- Centre for Evaluation and Assessment
CESA	- College of Education Of South Africa
CIPP	- Context, Input, Process and Product Model
CREDE	- National Centre for Research on Education, Diversity and Excellence
DDSP	- District Development and Support Project
DoE	- Department of Education
EFAL	- English First Additional Language
ESL	- English Second Language
FI	- French Immersion
GDE	- Gauteng Department of Education
HoD	- Head of Department
HSRC	- Human Science Research Council
IQMS	- Integrated Quality Management Systems
JET	- Joint Education Trust
LEP	- Limited English Proficiency
LEP	- Limited English Proficiency
LoLT	- Language of Learning and Teaching
OBE	- Outcomes Based Education
PEAS	- Pearson Education Achievement Solution
PIPS	- Performance Indicators at Primary School
PIRLS	- Progress in Reading Literacy Study
QUAL	- Qualitative Research
QUAN	- Quantitative Research
RNC	- Revised National Curriculum
RNCS	- Revised National Curriculum Statement
SACMEQ	- South Africa Consortium for Monitoring Educational Quality
SAMP	- South African Monitoring System for Primary Schools
SASA	- South African Schools Act
SI	- Sheltered Instruction Protocol
SIOP	- Sheltered Instruction Observation Protocol
SLEP	- Story-based Language Enrichment Programme

- SPSS - Statistical Package for Social Sciences
TIMSS - Third International Mathematics and Science Study

CHAPTER 1

1.1 INTRODUCTION

The aim of this research is to evaluate a model for teaching and learning currently being implemented in schools in the province of Gauteng. Following success in the United States of American (USA), Pearson's Education Achievement Solution (PEAS) took the initiative to implement a programme in South Africa known as Sheltered Instruction Observation Protocol (SIOP)¹, which aims at improving the academic performance of those learners who are being taught in a language that is not their mother tongue.

SIOP facilitates the development of English as a language of learning, it having already become the language of economic, technological and political communication in the country. This ubiquitous use provides a strong incentive for parents and learners to choose it as the language of learning and teaching (LoLT) (Heugh, 1999),² and those whose mother tongue is not English therefore choose to send their children from pre-school or at a later stage to an English medium school so that their children can become proficient in it (Lessing & Mahabeer, 2007). However, research indicates that learners who switch medium of instruction before they have grasped the new target language of learning do not succeed and therefore both the mother tongue and the LoLT is affected (Macdonald, 1990), with these learners struggling to acquire reading and writing skills (Lessing & Mahabeer, 2007). The consequence is that many learners, as in the researcher's class, where the LoLT is English, are learning in their second or sometimes third language. Teachers who teach such learners are extremely frustrated as they find difficulty in helping them, firstly to become more proficient in the language of learning and secondly in developing the necessary knowledge and skills in the learning areas.

An indication of the problems that arise with the language of learning is to be seen in research conducted in schools in South Africa. The country took part in the Third International Mathematics and Science Study (TIMSS) in 1995 and again in 1999 (TIMSS-Repeat) and 2003 and in these studies the performance of the Grade 8

¹ Literature on SIOP refers to it as a model, but it is a model for teaching and learning.

² Further discussion regarding the importance of English as a second language is discussed in Chapter 2, Section 2.3.

learners was very poor compared to the other participating countries. However, in the studies, more than 70% of the pupils wrote the tests in their second or third language (Howie, 2003). South Africa had the lowest performance scores in mathematics and science compared to the other TIMSS participants. The international average scale score for mathematics was 467 (SE = 0.5), and for science, 474 (SE = 0.6). The South African scores were 264 (SE = 0.5) and 244 (SE = 0.6) respectively (Reddy, Kanjee, Diedericks & Winnaar, 2006). Even though TIMSS focuses only on Mathematics and Science, the poor performance might not have resulted from the content of the areas being tested, but rather from the reading and understanding of the questions in the test. More recently, in the latest Progress in Reading Literacy Study (PIRLS, 2006), South African Grade 4 learners came last out of 40 countries in the literacy assessments (Howie, Venter, Van Staden, Zimmerman, Long, Scherman & Archer, 2007). Again, the language issue arose, for although this test was conducted in all eleven official languages, in many cases the test itself was not in the mother tongue of the learner. Most learners taking the test in English were attending African schools and English would not be their first language (Reddy, Kanjee, Diedericks & Winnaar, 2006).

Aware of the above research, former Minister of Education Naledi Pandor admitted that the scores in international assessments of reading and numeracy were “poor to alarming” (Pandor, 2008), while the current Minister of Basic Education, Angie Motshekga has announced in the *Curriculum News* (Department of Education {DoE}, 2010) that clear targets in numeracy and literacy have been set for improvement in learner achievement by 2014. As a result, Annual National Assessments (ANA), geared towards improving the quality of education, will focus on critical foundational skills of literacy and numeracy that are fundamental to all learning. The minister also stressed that changes in the curriculum are ongoing and will be made with minimal disruption to the day-to-day teaching in the classrooms. However, some short-term relief to the administrative load has been promised, with a single, comprehensive and concise Curriculum and Assessment Policy Statement (CAPS) having been developed for each grade, R-12. These CAPS will provide clear guidelines on what is to be taught and assessed on a grade-by-grade and subject basis (DoE, 2010).

1.2 AIMS AND OBJECTIVES OF THE STUDY

The main aim of this research is to evaluate the SIOP model to establish whether it is applicable to the South African context, while ascertaining whether the implementation of the SIOP programme has contributed to the performance of learners and to teaching English Second Language learners.

1.3 BACKGROUND TO SIOP

With the USA is becoming increasingly diverse, both ethnically and linguistically, with more than 90 percent of the immigrants coming from non-English speaking countries, the impact of this is being felt in many areas of public life. As it seeks to accommodate these immigrants in their new country, the education system is feeling the effect of increasing numbers of learners entering the schools with limited skills in English. It was found that these immigrant learners lagged significantly behind their language-majority peers, not only resulting in a high dropout rate but also indicating that most schools were not meeting the challenge of educating linguistically and culturally diverse learners effectively. This is a challenge to the US government, which expects all learners to meet high standards as promulgated in the so-called “No Child Left Behind Act” (2001) (Echevarria & Graves, 2003).

As a result, a ‘sheltered instruction protocol’ (SI) was developed as an approach to extend the time learners have to engage with language support services and to improve their academic success (Echevarria & Graves, 2003). The theoretical underpinning of the model is that language acquisition is enhanced through meaningful use and interaction. Through the study of content, learners interact in English with meaningful material that is relevant to their schooling, and as language processes, such as listening, speaking, reading and writing, develop interdependently so the SI lessons incorporate activities that integrate those skills. In effecting SI lessons, language and content objectives are systematically woven into the curriculum of one particular subject area. Teachers present the normal lesson on the specific learning area to the learners through modified instruction in English. Therefore, teachers aim to develop learners’ academic language proficiency consistently and regularly as part of the lessons and units they plan and deliver

(Echevarria & Graves, 2003). The SI approach is not a set of additional or replacement instructional techniques that teachers implement in their classrooms, but rather draws on and complements methods and strategies advocated for both second language and mainstream classrooms.

SIOP was thus a revised version of the SI approach, but with similar theoretical principles. The first version was drafted in the early 1990s in the USA during an observation of teachers in order to exemplify the model of SI. Characterised by careful attention to the English learners' distinctive second language development needs, SIOP has been developed specifically for learners with limited English Proficiency (LEP), as it aims to bring together content by providing an approach to teaching it. In 1996 the National Centre for Research on Education, Diversity and Excellence (CREDE) conducted a seven-year research project in the USA on the SIOP model, findings from which indicated that teachers who had been trained in implementing SIOP, their learners showed significantly higher writing scores than those who had not.

A key factor in the model is that it can specifically improve and expand teachers' instructional practice and therefore improve learner performance. It also provides a framework for well-prepared and well-delivered sheltered lessons for any subject area, which allows for creativity in teaching. SIOP is composed of thirty items grouped into eight main components, namely: preparation, building background, comprehensible input, strategies, interaction, practise/application, lesson delivery and review/assessment. These components emphasise the instructional practices that are necessary for second language learners as well as high-quality practices that benefit all learners. Each of the above components is further sub-divided into features to be discussed later in the dissertation.

In the component of *preparation*, the features are lesson-planning processes, including the language and content objectives, the use of supplementary materials and the meaningfulness of the activities. *Building background* focuses on making connections with learners' background experiences and previous learning, and developing their academic vocabulary. *Comprehensible input* looks at adjusting teacher speech, modelling academic tasks and using multimodal techniques to enhance comprehension. The *Strategies* component focuses on teaching learning

strategies to learners, scaffolding instruction and promoting higher order thinking skills. *Interaction* emphasises speech and group learners appropriately for language and content development. *Practice/Application* provides activities to extend language and content learning, while *Lesson Delivery* ensures teachers present lessons that meet the planned objectives. Lastly, *Review/Assessment* allows the teacher to review the key language and content concepts, and to assess learning and provide feedback to learners on their output.

The features discussed above are critical instructional features that must be attended to in order for teachers to respond to the unique academic and language development needs of these learners (Short, 1999). Thus, SIOP is an English Second Language teaching and learning model that teachers can employ while instructing English language learners in the classroom. This model requires teachers to adapt their lesson plans in tactical ways in order to make subject matter understandable for ESL learners.

1.4 PROBLEM STATEMENT

In October 2007, the South African Department of Education (DoE) conducted the second cycle of Systemic Evaluations at the Foundation Phase (Grade 3) level, with the support from an independent agency, the Joint Education Trust (JET) Educational Services. A similar study had been conducted in 2001, thus enabling a comparison over time, as learners were assessed through standardised written exercises to measure their levels of achievement in literacy and numeracy. The overall mean performance in both was at a low 36% and 35% respectively (Pandor, 2008). In light of the research statistics, Pandor launched the Foundations for Learning Campaign (2008) to address the issues raised. The campaign was a call to schools and communities to focus on reading, writing and calculating, in an attempt to develop a solid foundation in languages and mathematics in the foundation and intermediate phases. The measure of the intervention would be that the average learner performance in language and mathematics increases to no less than 50% in the four years of the campaign. By 2011, another national evaluation was to be conducted, with learners to be assessed in the two subjects (Pandor, 2008).

ANA tests will be conducted for Grades 3 and 6 in 2011 in the form of literacy and numeracy tests set by the DoE. A selected sample of 200 schools from each province would have had the test administered and moderated by an independent agent to build quality, reliability and credibility into the assessment, while the remainder of the schools in the province will administer them internally. The aim of the ANA, as noted above, was to improve the current levels of literacy and numeracy of grades 3 and 6 of between 27% and 38% to at least 60% by 2014 (GDE, 2010), with these tests to be conducted annually.

However, due to poor results from the systemic evaluations, the pressure is on teachers to increase academic performance in their classrooms. This would be more easily achievable if all learners were taught in their mother tongue, but many schools are faced with the challenge that the majority of learners in their classrooms are English Second Language (ESL) learners (Heugh, 1999; Nel & Theron, 2008). Teachers therefore have to impart knowledge in a specialised learning area and in a language foreign to the learner, a problem exacerbated by most not being trained to teach ESL learners, and therefore unable to deal with and handle the diversity of the modern day classrooms.

Taking this background into account, research into SIOP has shown that learners, who were provided with sheltered instruction using the SIOP approach, scored much higher and made greater improvements in English writing compared to learners who have not been exposed to instruction via the SIOP approach (Echevarria, Vogt & Short, 2002). More projects in the USA conducted by CREDE have shown that English-limited learners who had teachers trained in SIOP scored higher in expository and narrative writing compared to the control group who had teachers not trained in the SIOP Model. This research has proved that SIOP is a valuable instrument that promotes reflective teaching for those working with English language learners at all levels (Echevarria & Short, 2004).

1.5 RATIONALE

Following its development in the USA, SIOP has not been formally incorporated into the South African education system but is currently being piloted in a few schools in

Pretoria (Gauteng) by the Tshwane District of Education. Teacher training universities have been approached to assist with the selection of schools to be trained in the piloting, and this study will be the first to conduct research into SIOP in South Africa. Although there have been other programmes piloted in schools, such as the Accelerated Programme for Language, Literacy and Communication (APLLC) in the Tshwane South District, and the Story-based Language Enrichment Programme (SLEP) in the Western Cape (Nel & Theron, 2008), not one has been formally implemented, nor has any formal evaluation of the programmes taken place in the education system. APLLC aims to accelerate listening, speaking, reading, writing and comprehension skills of learners through an in-service teacher training, mentoring and monitoring programme linked to appropriate resource provisioning in public schools. In order to do this, teachers have to be trained to implement APLLC; however, there needs to be constant mentoring and support and classrooms needs to be adequately stocked with effective resources for the programme to be successful.

Prior to the system-wide roll out of the APLLC programme, which was intended to run from 2006 to 2012, a pilot was conducted in October 2006 to test the implementation of selected methodologies in the Foundation Phase of 24 schools (two per district) (Gauteng Department of Education {GDE}, 2005). Unfortunately, this programme has ceased until further notice and the ripple effect has frustrated teachers, not trained to teach ESL learners and not being able to cope in the mainstream classrooms due to language challenges. APLLC is a programme that was intended to improve academic performance of ESL through extensive training based on a methodology that involves training teachers on how to teach English language to ESL learners. However, it does not focus on specific outcomes as the SIOP model does, nor does it provide the educator with set guidelines.

The second mentioned programme, SLEP, supports inclusive education, while facilitating responsiveness to diverse needs of learners. It is also in line with the main aims of the Language in Education Policy, and there was a consensus that it has the potential to empower ESL teachers. In essence, SLEP has the potential to make a contribution to the practice of ESL teachers, but with limitations. This specific intervention programme was specifically designed for Grade 4 rural learners, but it

seems that further programme development would be required as there are some minor refinements needed in order to make it effective for the rural teachers (Nel & Theron, 2008).

Short and Echevarria (1999) examined the model of the SI whereby teachers were assisting in improving academic success of their ESLs. SIOP has assisted teachers in expanding their knowledge base in several areas, giving them opportunities to increase their understanding of the subject matter and also equipping them with new teaching and assessment strategies. The study shed some light on understanding the challenges English language learners face as they study multiple learning areas through a non-native language (Short & Echevarria, 1999). Thus, the focus of this research is to highlight the importance of and the need to address the challenges teachers face with teaching ESL in their classrooms in the South African context. The purpose of this study is to investigate whether SIOP has the potential to improve instructional practice in primary schools where the LoLT is not the same as the learners' mother tongue.

1.6 RESEARCH QUESTION

Against the above background, the research question is posed as follows:

To what extent does the implementation of the Sheltered Instruction Observation Protocol (SIOP) model assist teachers in teaching ESL learners in primary schools?

To be able to answer this question, specific research questions posed by this research are:

1. To what extent does SIOP differ from traditional teaching methods?
2. How does SIOP affect teachers' planning and instruction in the classroom?

3. To what extent do the learners understand the content when the teachers implement SIOP?
4. To what extent does SIOP contribute to the improvement of academic performance of English second language learners in content areas?

1.7 POSITION OF THE RESEARCHER

I teach in a primary school (Grade R-7) in a township in Pretoria. The medium of instruction in the Foundation Phase (Grade R-3) is Sepedi while in the Intermediate Phase (Grade 4-7) it is English. As a Head of Department (HoD) for the Intermediate Phase, my major challenge is the language of learning. Learners are taught in their mother tongue in the Foundation Phase, with very little instruction being given in English. However, when the learners enter Grade 4, the medium of instruction changes to English. Learners are taught specialised subjects in a language with which they are not very familiar and therefore perform poorly in standardised testing. The level of learning is low and the quality of learning is of a very poor standard. Learners are unable to read at the appropriate age level and, in addition, find writing very difficult. Because of the learners' inability to read at an age appropriate level, the instructions given to these learners are very basic. As a result, the formal education that takes place in the classroom is pitched at a grade or two below their actual grade level.

The Constitution of the Republic of South Africa (Act 108 of 1996) provides the basis for curriculum transformation and development, the Preamble stating one of its aims as being to improve the quality of life of all citizens and free the potential of each (Revised National Curriculum Statements Grade R-9, 2002). I therefore have an obligation, as a teacher and fellow citizen, to make a concerted effort to help my learners improve their academic performance. I would be doing a great injustice to these learners if I did not provide them with a quality education that helped them become successful and responsible citizens.

1.8 OVERVIEW OF THE STUDY

Chapter 1 has outlined the aims and objectives of the study. The background to SIOP was discussed, as was the problem statement and rationale of the research. The chapter also posed the research questions within the context of the study.

Chapter 2 reviews the literature based on the research. Relevant publications on teaching English second language learners (ESLs) and the challenges they face are reviewed, as well as those on the acquisition of English as a second language. Published research on SIOP and on other programmes aimed at improving academic performance of ESL is examined, and the CIPP model is explored as the conceptual framework for this study.

Chapter 3 examines the research design and mixed methods methodology undertaken in this study. It relates to how sampling was undertaken and details the instruments and methods used in the data collection. Measures taken in adherence to ethical considerations are described, as are measures to ensure validity and reliability.

Results of the qualitative data analysis occurs in **Chapter 4**, where the analysis of the interviews and observations are conducted, conclusions drawn and recommendations made.

Chapter 5 presents the analysis of the quantitative data with the conclusions and recommendations, and **Chapter 6** concludes this study with the recommendations and limitations.

1.9 CONCLUSION

In this chapter the importance of choosing English as a LoLT has been highlighted, and the challenges that teachers and learners are faced with in learning in a second or third language discussed. Against this background, the need for a programme that has shown success in the USA, known as the Sheltered Instruction Observation Protocol (SIOP), is being introduced to the South African Education system. Although there have been other programmes implemented, they have not been

formally evaluated, so there is a need for a formal evaluation of a programme that aims to improve academic performance in this country's context.

The following chapter looks at the literature based on the research and the CIPP model is explored as the conceptual framework for this study.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Language is at the heart of school learning, if you can't use it for the purpose of learning, it becomes a barrier to, rather than a channel of education
(Clegg, bilingual education in Africa, 2007, p.2)

Evidence shows that English second language learners often receive an education that is inadequate (Alidou & Brock-Utne, 2006) due to low teaching ability. Teachers are often not confident in English as a language of learning and teaching (LoLT) (Mwinsheikhe, 2002) and learners often do little talking, reading and writing in the LoLT (Alidou & Brock-Utne, 2006). Therefore, in order to understand the extent to which the Sheltered Instruction Observation Protocol (SIOP) model improves academic performance of ESL learners in a primary school where the mother tongue is different from the LoLT, a review of the literature was undertaken.

The literature reviewed in this chapter includes that which has examined the effects of English globally (Section 2.2) and the challenges faced by English second language learners (Section 2.3). Section 2.4 explores teaching and learning English in the South African context and in Section 2.5 research conducted on SIOP in the USA is discussed. Research regarding other programmes aimed at developing language in South Africa with their results is investigated in Section 2.6, and in Section 2.7 the CIPP Model of Evaluation is discussed as the conceptual framework. This chapter concludes with Section 2.8.

2.2 THE GLOBAL USE OF ENGLISH

In the development of international communication, through radio, television and the Internet, together with the speed and accessibility of international travel, the modern world has been reduced to what Marshall McLuhan labelled a 'global village' (cited in Crystal, 2003). There has always been a need for international communication, but with the world becoming increasingly accessible the need for a global language is even greater. Historically, literacy in a European language was generally part of the

curriculum in Africa, particularly in the higher classes. Although indigenous languages were used as a medium of instruction in primary schools, tuition has tended to be conducted through the medium of a former colonial language. However, change in South Africa following the adoption of universal suffrage in 1994 has led to a revised language policy.

The effect of globalisation on schooling is still in its infancy stages, though researchers such as Porter argue that many Western countries are not educating for democracy but rather focussing on literacy and numeracy skills. Most people view the spread of literacy as a tool of empowerment and are thus committed to spreading it (Porter, 1999). Further research indicates that in the last five centuries there has been a radical change of the existing world order and the subsequent creation of the modern global era. Global infrastructures such as economics, trade and commerce, industry, communications, travel, and education in English have become the basis for an interconnected world. Therefore, proficiency in this lingua franca has become critical for survival, and as a result it is no longer sufficient to be literate in one's own mother tongue (Nihalani, 2010).

Some of the effects of globalisation on school include the growing mobility of school-leavers as they are able to study anywhere in the world with the same rights and fees as nationals, and many are migrating from the developing countries to developed ones. With the growing use of electronic communications between teachers and pupils, and the extensive use of the Internet as a source of information (Moritmore, 2000), English has become a necessity in an increasing technological world. Learners are able to embark on distance education from a tertiary institution of their choice (Moritmore, 2000), and they are not limited to an institution because of their language. With the expansion and improvement of English, emphasis is placed on the results obtained in international tests such as the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). The outcomes of these international tests have important implications for the country, and results in the growing interest in comparative information by researchers, policymakers and practitioners (Moritmore, 2000).

The desire to be fluent in English as a second language in South Africa has increased amongst many parents who are not English First Language speakers themselves, with the result that many learners in South African schools are English second or third language- speakers. The way that English is taught is therefore vital.

2.3 LANGUAGE POLICY IN SOUTH AFRICA

The Language in Education Policy based on Section 3(4)(m) of the National Education Policy Act (Act 27, 1996) states that all learners shall be taught in at least one approved language as a subject in Grades 1 and 2, while from Grade 3 onwards all should be taught in their LoLT, with at least one additional approved language as a subject. The inclusion of languages in the RNCS stipulates that all learners shall be taught in at least two official languages from Grade 3 until the end of Grade 12.

The Languages Learning Area underlies all other learning areas as it is the medium through which all learning takes place. First Additional Language assumes that learners do not essentially have any knowledge of the language when they arrive at school. The curriculum starts by developing learners' ability to understand and speak the home language by building literacy. Learners' are then able to transfer these literacies developed in their home language to their first additional language (RNCS, 2002). Therefore, in a school where the home language is Sepedi, the school should teach Sepedi in Grade R to Grade 3 and ensure that the learners understand the basics of the home language before introducing the First Additional Language, such as English.

The DoE's Language in Education Policy thus advocates additive multilingualism where the learners must learn an Additional Language while at the same time maintaining and developing their Home Language. This may seem a simple task to undertake but the transition from Home Language to First Additional Language is sometimes traumatic and can cause barriers to learning a Second language. This transition can become very problematic for both learners and teachers as it occurs abruptly, and so does not allow sufficient time for the learner to become proficient in English. Research in the USA and Canada has shown that a second language

needs four to eight years to learn, and as a result many learners find difficulty not only in communicating in English but also in learning through the medium of English.

Heugh (1995) confirms that most ESL learners are not proficient enough to learn mathematics, science or geography in their second language and therefore are unable to achieve the desired outcomes stated in the Revised National Curriculum (RNC). Many ESL learners are usually exposed to English as an oral communicative subject in Grade 1 but do not have formal pre-school exposure to it at home or in pre-primary school (SA, 2002), which forms the foundation for learning a language.

In the school in which the research was conducted, the learners speak the LoLT, Sepedi, at home, thus learning in Sepedi from Grades R to 3. However, the LoLT switches to the First Additional Language from the Intermediate Phase onwards, that is to English from Grade 4. Effectively, learners have first to master the basic skills in their Home language and simultaneously the First Additional Language (English) to enable them to switch to this in the Intermediate Phase (DoE). However, whether this is happening effectively in the classrooms requires further research, but from a personal observation, there does appear to be a decline in learner performance once they move from the Foundation Phase to the Intermediate Phase.

The following section explores misconceptions related to how learners learn a second language, which further substantiates the need for an effective programme that will improve the academic performance of ESL learners.

2.4 MISCONCEPTIONS OF LEARNING A SECOND LANGUAGE

Research by McLaughlin (1992) has shown that there are many misconceptions about how learners learn a second language, which teachers should familiarise themselves with to ensure they will not be used in the classrooms. A common myth is that children can learn languages faster than adults, research having shown that in second language learning adults outperform young children under controlled conditions (McLaughlin, 1992), even when the methods of teaching appear to favour learning in children (Asher & Price, 1967). An implication of the myth is that teachers expect astounding results from children learning a second language in the classroom (McLaughlin, 1992), whereas they should implement more strategies and techniques

to ensure that the ESL is able to grasp the content being taught and to acquire vocabulary in learning, as specific to the SIOP.

Teachers should be sensitive to the children's feelings and not call learners to perform in a language they are in the process of learning. Children are likely to be shy and more embarrassed before their peers and can become extremely anxious when singled out (McLaughlin, 1992). SIOP has techniques encourage constant peer and group work, where learners can express themselves first before being called upon in the class to report back.

Some researchers (Krashen, Long & Scarcella, 1979) argue that the younger the child the better they learn the second language. However, this may also be a myth, with evidence varying and often contradicting the claim. For instance, in the USA it has been estimated that it takes four to eight years to become proficient in ESL, that is to achieve the ability to read or to communicate abstract ideas, whereas in Canada it reportedly takes four-to-seven years (Feinberg, 2002). What research does show is that the earlier child learns a second language the more native-like the accent will be (Oyama, 1976, McLaughlin, 1992). Although older children will show quicker gains in acquiring a second language, younger ones will need continuous support of their first language, so as not to fall behind in content-area learning. SIOP ensures that the teacher continuously plans according to the needs of the child and supports him or her in all content-areas.

Another misconception is that all children learn a second language in the same way, but this disregards differences among linguistically and culturally diverse groups, and between learners within these groups (McLaughlin, 1992). Research by Heath (1983) has shown that in many ESL and minority American families, cultural backgrounds have an effect upon the ways of talking, whereas in the mainstream children are accustomed to an analytic style of talking. Many from culturally diverse groups are accustomed to an inductive style of talking in which assumptions must be inferred from a series of concrete statements (McLaughlin, 1992). In most schools, emphasis on the language functions and styles of talking are that of an analytic nature where the truth of a specific argument is deduced from general propositions. In the higher grades, the style of talk is analytical and deductive, with children rewarded for clear

and logical thinking. Therefore, children who have a background of inductive style of talking, and who are not accustomed to using a language that is very different from what is expected in school, experience tension and frustration (McLaughlin, 1992).

Another form of difference is to be found in social class. For instance, in urban centres of literate, technologically advanced societies, children from middle-class parents are taught through language, with instructions given verbally from a very early age. This is in contrast to the experiences of immigrant children from less technologically advanced societies, where traditionally teaching is carried out through non-verbal means, such as observation, supervised participation, and self-initiated repetition, with practical topics such as cooking or house-building (Rogoff, 1990). Many of the children from disadvantaged backgrounds are cared for and taught by older siblings or cousins and are taught to be quiet in the presence of adults, therefore making them less accustomed to learning from adults, including teachers, and more likely to pay attention to their peers.

Children also react differently within the school according to their cultural background, which has an impact on their learning a second language. Learners with diverse backgrounds bring a variety of educational and cultural experiences to the classroom, as well as linguistic differences (McLaughlin, 1992). These characteristics have significant implications for instruction, assessment and programme design (Echevarria, Vogt & Short, 2008), thus there is an urgent need to change instructional practice for ESL learners. In the first half of the twentieth century, most language teaching focussed on the direct method of instruction or a grammar translation approach. However, in the 1970s the focus from the direct method was changed to a more communicative curriculum, with learners being given an opportunity to discuss material, which in turn led to an increase in motivation to learn. In the past three decades, modern cooperative learning has become widely used in instructional procedures from pre-school through to high school, in all subject areas, in all aspects of instructional and learning and in non-traditional as well as traditional learning situations (Johnson, Johnson & Stanne, 2000).

Learners are now encouraged to experiment with language and assume greater responsibility for their learning (Echevarria, Vogt & Short, 2008), a communicative

approach that engenders the content-based ESL approach. Keeping in mind the importance of the curriculum and the meaningful content of the curriculum for English learners, the content-based curriculum was developed with accompanying instructional strategies to assist second language learners. In content-based ESL, content from multiple subject areas is often presented through thematic units (Echevarria, Vogt & Short, 2008), although content-based ESL instruction has not been sufficient to help learners succeed academically, and as a result sheltered instruction emerged.

2.5 CHALLENGES THAT FACE ENGLISH SECOND LANGUAGE LEARNERS

According to Clegg (2007, p.2): “You can’t learn if you don’t understand lessons and you can’t teach if you’re not confident enough in the language of learning.” In this regard, research has shown that South Africa faces many challenges in providing quality education for its multi-cultural society. This rich diversity is reflected in the large number of official languages, of which English is the one usually used at schools as the LoLT, even though it is not the common language spoken at home (Howie, 2003).

The South African Schools Act 84 (1996) stipulates that the governing body of the public school may determine the language policy of the school subject to the Constitution, this Act and any provincial law (South African Schools Act {SASA} 84, 1996). As a result, many schools teach through the mother tongue in the Foundation Phase, but as soon as the learner is promoted to the Intermediate Phase (Grade 4), the LoLT is changed to English.

Besides language, there are other challenges that ESL learners face in the schooling system, such as diverse backgrounds and education profiles, which influence prior knowledge and skills as well as availability of resources (Nel & Theron, 2008). Some ESL learners are able to read and write in their own language, but not in English, while others have limited schooling. Some have a good support structure while others have a negative school experience. Some hail from middle-class families with high levels of literacy, while others live in poverty without books (Short & Echevarria, 2005). The difference in socio-economic circumstances leads to poor parental

involvement as many parents are themselves illiterate and therefore unable to develop and stimulate their children to develop their literacy levels. The importance of parental involvement is pivotal in the teaching and learning of an ESL learner who experiences barriers to learning because of inadequate English proficiency (Nel & Theron, 2008). However, this lack of support from parents at home reinforces the support needed from the teacher in the classroom.

Additionally, there is a challenge of school teachers having little or no knowledge about the teaching and acquisition of ESL. Research has shown that if teachers do not have any support or training when it comes to teaching a second language, this could result in learner frustration and academic failure (Hugo, 2008, Nel & Theron, 2008). Nel and Theron further state that in many cases ESL educators with a limited English proficiency teach ESL learners (Nel & Theron, 2008).

As well as the abovementioned challenges, the large number of learners per class makes the effective use of time to support ESL learners who have barriers to learning difficult. Teachers believe that the quality of their teaching and interactions with learners declines as the size of the classes increases. Availability of resources, coupled with differences in socio-economic circumstances of parents, affects the teaching and learning of and ESL learner. Many parents are illiterate and cannot read to their children (Nel & Theron, 2008), which means that the responsibility for schooling rests solely with the schools themselves.

2.6 ACQUISITION OF ENGLISH AS A SECOND LANGUAGE

Although there are many learners in township schools who struggle with English First Additional Language (EFAL), as they are not proficient in English, a possible solution is Outcomes Based Education (OBE). Regarded by exponents as the foundation of the curriculum in South Africa, OBE was introduced to advance the teaching and learning in schools, and strove to enable all learners to achieve their maximum potential (RNCS Grades R-9, 2002). OBE advocated that EFAL teachers change from an educator-centred approach to a learner-centred approach, a change that affected the strategies of EFAL teachers since they may be accustomed to teaching in their preferred style. When the teacher does most of the talking and learners

merely listen, learners are deprived of the opportunity to express themselves in the language they are learning. Teachers and learners should interact in a meaningful way to create two-way communication, a process that takes place through feedback (Schlebusch & Thobedi, 2005).

However, learner-centredness is more than just an approach to teaching and learning, it is a philosophy which guides the teachers' practices in how they teach, interact with the learners and design their courses, learning activities and assessment strategies, as well as the goals they value and what they hope their learners will achieve. The teaching pedagogy should focus on learning rather than teaching, which requires teachers to rethink their role and that of the learners in the teaching and learning process. This would imply that teachers undergo a paradigm shift by analysing their traditional ways of teaching (Schlebusch & Thobedi, 2005) and moving to the required learner-centred approach. The RNCS encourages a learner-centred and activity-based approach to education (RNCS Grades R-9, 2002).

For teachers to undergo this paradigm shift, they need to know how second language learners learn. It is also important for EFAL teachers to teach using a pedagogy which differs from the one they use when working in a first language. This pedagogy is designed to help learners understand the subject when their second language ability is still developing (Clegg, n.d.). Second language learners are faced with two levels of complexity simultaneously, the academic content of the lesson and the acquisition of a second language. Unless the teacher makes instruction comprehensible, the learner experiences a sense of frustration and failure (Gersten, 1996). Some methods of making this instruction comprehensible is to talk in a manner that is clear to the learner, for example using signals, visuals, summary and explanation. The teacher should utilize tasks which explicitly supports language development and simultaneously develop reading and writing abilities within the subject in the second language. The teacher should encourage learners to talk in groups and to use the LoLT, as well as teaching them strategies for learning in a second language (Clegg, n.d.). All the above pedagogical techniques are advocated by SIOP in its teaching ESL (see Chapter 1.3).

As mentioned in the SIOP model, one of the key components is making content comprehensible (comprehensible input). While many of the features of the SIOP model are indicators of effective instruction for all learners, this particular component comprises features that make instruction different from 'just good instruction'. A teacher implementing SIOP takes into account the unique characteristics of the ESL learner and makes verbal communication more understandable. To do this, the teacher needs consciously to attend to the learners' linguistic needs, using logical input techniques that are essential in helping the ESL learner understand what the teacher is saying (Echevarria, Vogt & Short, 2008).

Many learners who learn through a second language have been found to run a greater risk of underachievement, a phenomenon explained by language acquisition theory, where the use of language in informal everyday situations, known as basic interpersonal communicative skills (BICS), differs from language used in academic situations, referred to as cognitive academic language proficiency (CALP) (Cummins, 2003). BICS develops through social interaction from birth but becomes differentiated from CALP after the early stages of schooling to reflect the language that children acquire in school and which they need to use if they are to progress through the grades. The term CALP is specific to the social context of schooling (Cummins, 2003), but the distinction was intended to draw attention to the very time periods normally required by immigrant children to gain conversational fluency in their second language as compared to grade-appropriate academic proficiency in that language. (Cummins, 2003). BICS in ESL learners takes approximately two years to develop, which allows learners to communicate through English in everyday situations. However, these skills are not sufficient for academic success as they do not include the academic language needed for tasks (Lemmer & Squelch, 1993) and because learners can take approximately five to seven years to develop CALP (Brice, 2000).

Second language learners require both BICS and CALP to achieve optimally in the school situation, and those deficient in CALP will struggle to master the academic content needed to become proficient in specialist subjects. The essential distinction between BICS and CALP is the extent to which the meaning being communicated is supported by contextual or interpersonal cues (such as gestures, facial expressions,

intonation), or dependent on linguistic cues that are highly independent of the immediate communicative context (Cummins, 2009).

Cummins (2009) states that any bilingual programme should be genuine, with coherent and planned introduction of English reading and writing, including that in the learners' home language. This statement supports the argument of this paper that SIOP is an effective programme when the language outcomes are being taught at the same time as the content outcomes, and reading and writing occur in every lesson presented. This form of lesson delivery requires that the teacher is thorough in the planning process and careful consideration is given to the way the teacher introduces the language content, making it understandable to the ESL learner. Any instruction programme in ESL classes should be designed to promote the learners' CALP by ensuring that the teaching allows for higher-order thinking skills rather than low-level memorization and application skills. The academic content should be integrated with language instruction and, lastly, the development of critical language awareness should be fostered throughout the programme by encouraging learners to compare and contrast their languages, and by providing learners with extensive opportunities to carry out projects through investigations (Cummins, 1999).

Learners who are using English as their LoLT can probably demonstrate higher order thinking skills in their own language; however, they lack the CALP required to verbalise their thinking through the medium of English (Manyike & Lemmer, 2008). Therefore, it is ideal for the learners in the classroom to attain a CALP level of English proficiency in order to experience the academic success. In the case where the BICS is achieved but the learner struggles with the CALP, there is an indication that learners have not yet reached the language proficiency levels required to learn English (Viljoen & Molefe, 2001). However, the OBE approach allowed for teachers to be creative and involve learners in classroom activities which might positively have enhanced the transition from BICS to the development of CALP (Schlebusch & Thobedi, 2005). It is very challenging for ESL learners to transfer CALP to literacy skills, as literacy in the classroom implies vocabulary, genres of writing, language of the textbook, comprehension and writing skills required for assessment (Lemmer & Squelch, 1993).

2.7 RESEARCH RELATED TO SIOP

As cited above, each year the USA is becoming more ethnically and linguistically diverse, with more than 90% of immigrants coming from non-English speaking countries (Echevarria & Short, 2004). Learners from such backgrounds represent the fastest growing subset of the student population, (Echevarria, Vogt & Short, 2000) as shown in the 1985-86 school years through 1994-95. The number of limited English proficiency (LEP) learners in public schools escalated to 109%, while the total enrolment increased by only 9.5% (Olsen, 1997). In 1994-95, over 3.1 million learners in school were identified as LEP, and it is this group of ESL learners who struggle at school, resulting in them having a higher dropout rate. These findings show that many schools in the USA are not meeting the challenge of educating linguistically and culturally diverse learners, which has become problematic as the federal and state governments are calling for all learners to meet high standards and to reflect these new levels of achievement. In order for these LEP learners to succeed in school and become productive citizens, they need to receive better educational opportunities in the schools (Echevarria & Short, 2004).

Many learners in the USA face similar challenges to those in South Africa, such as learning, comprehending and applying the academic English through which teachers and textbooks impart knowledge (Echevarria, Vogt & Short, 2000). At the one end of the spectrum, some immigrant learners have strong academic backgrounds and are literate in their native language, needing only English language development to become more proficient in English. At the other end, many immigrants arrive with very limited formal schooling and are not even literate in their native language. As a result of the gaps in their educational background they lack specific subject knowledge and need to become accustomed to school routines and expectations (Echevarria & Short, 2004).

Of further concern, many teachers are under-prepared in making content understandable to ESL learners who are not proficient in the language of instruction. Over and above classroom assessments, ESL learners have to take a high stake test to demonstrate their content area knowledge before they are proficient in English. The federal and state governments are calling for all students to meet high

standards and are adjusting national and state assessments as well as state graduation requirements to reflect these new levels of achievement. With all the challenges facing LEP, fundamental shifts needed to occur in teacher development, programme design, curricula and materials, and instructional and assessment practices. The SIOP model promotes strategies for improved teacher development and instructional practice (Echevarria & Short, 2004).

The approach to improving the academic performance of ESL learners in the SIOP Model, developed in the USA, incorporates best practices for teaching academic English and provides teachers with a sound approach for improving the achievements of their learners. Teachers present curricular content concepts through strategies and techniques that make academic content comprehensible to learners. While doing so, teachers develop learners' academic English skills across the four domains, reading, writing, listening and speaking (Short & Echevarria, 2005). The SIOP model shares many characteristics recommended for high quality instruction for all learners, such as cooperative learning, reading comprehension strategies and differentiated learning. However, the model adds key features for the academic success of ESL, such as language objectives in every content lesson, developing background knowledge and content-related vocabulary, and emphasising academic literacy practice. It allows for some deviation in the classroom execution while at the same time providing teachers with specific lesson features, so that when implemented it consistently leads to improved academic outcomes for ESL (Echevarria, Short & Powers, 2006).

In 1996, the National Centre for Research on Education, Diversity and Excellence (CREDE) included a study on sheltered instruction in its research programme (Echevarria & Short, n.d.), known as *The effects of Sheltered Instruction on the Achievement of Limited English Proficient Learners*. This seven-year research project (1996-2003) followed a cyclical process, from which the SIOP model was developed through researchers and teachers designing, using and analysing redesigned features of the model (Echevarria, Short & Powers, 2006). The purpose of the research project was to develop a model of sheltered instruction that could be implemented by teachers of learners with limited English proficiency in order to improve the academic success of the learners (Echevarria & Short, 2004.).

The SI model was initially developed as a research observation instrument to determine how well teachers included the essential features of effective sheltered instruction in their classes. Results from the seven-year project showed significant difference between the groups of teachers who were trained using the SIOP model and the group that was not. In a follow-up analysis of learner performance on the writing assessment, the intervention group performed at a significantly higher level in language production, organization and mechanics than those in the comparison group, whose teachers had not received the training to deliver SI. Those results reveal the positive effects of the SIOP model on student literacy achievement, and this model offers a promising approach for helping ESL learners develop academic literacy skills needed for success in schools (Echevarria, Short & Powers, 2006).

In a study conducted by Honigsfeld and Cohan (1996), the purpose of the project was to merge two professional development models for teachers who teach ESL without prior training. The two developmental models used were the 'lesson study' approach, which began in Japan, and the SIOP model. Findings from a combination of quantitative and qualitative data sources show that the lesson study approach merged with the SIOP is more effective for in-service teacher training. Interestingly, they also showed that teachers used in the project changed their perceptions about teaching ESL, especially regarding SIOP. There was a clear demonstration of sheltered instructional teaching skills and most cohort members agreed that the SIOP model was among the most effective professional development activities that they had participated in, since both their knowledge base and skills increased. From the in-depth interviews with participants, reports indicate that the SIOP model was used to a greater extent than the lesson study approach, and that the SIOP model would greatly enhance teaching and learning focussed on ESL (Honigsfeld & Cohan, 2006).

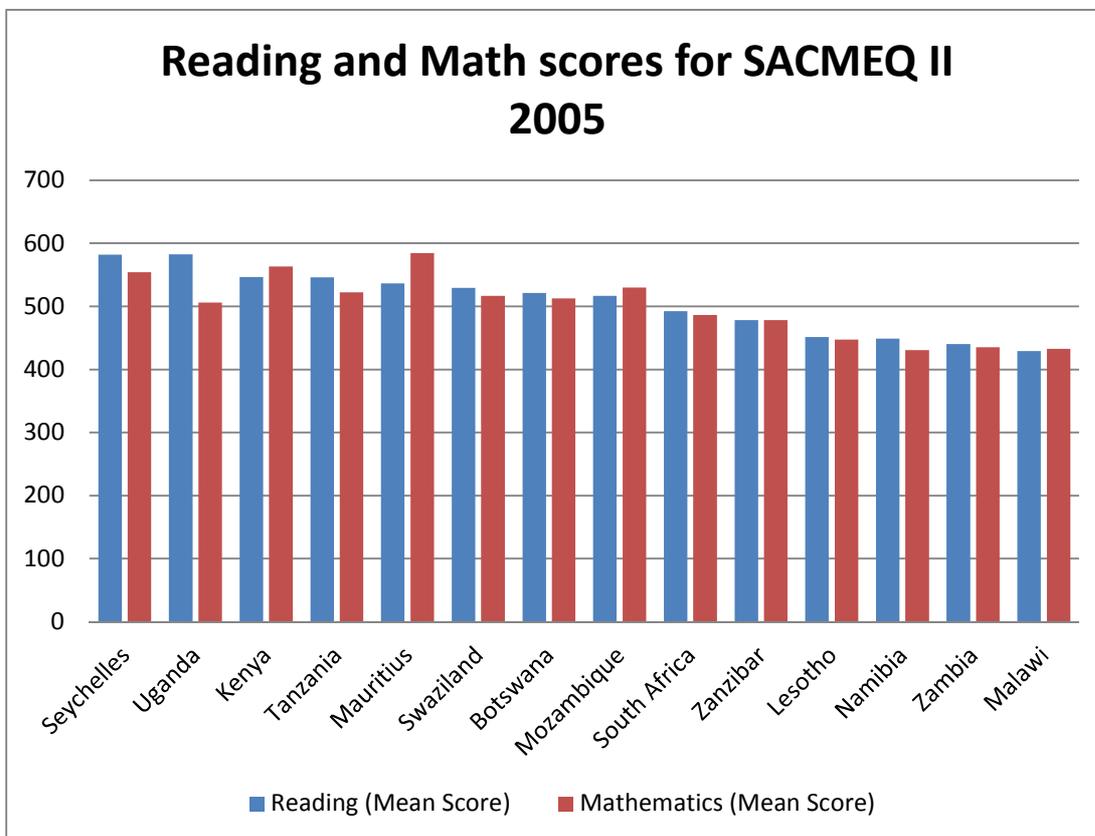
Research indicates that the academic language demands of school relate to mathematics no less than to other subjects (Bailey, 2007). Lesson development by teachers guided by the SIOP Model focuses on addressing both language and content objectives in each mathematics lesson, and on using large concept definition to guide the focal concept and key vocabulary. New language input is made clear through demonstrations, pictures, manipulatives and sufficient opportunities for

learners to discuss information at the onset of each lesson. The body of SIOP includes mathematical strategies and procedures demonstrated by the teacher and mathematics activities in which learners practice and apply new strategies and procedures. A SIOP lesson concludes with shared or individual maths journaling and review of concepts, key vocabulary and content, and language objectives (cal.org/saill/siopmathproject.).

2.8 RESEARCH RELATED TO OTHER PROGRAMMES AIMED AT DEVELOPING LANGUAGE

The poor state of reading and writing in South African schools has emerged through cross-national tests which regularly show learners performing lower than those in many other countries, including much poorer neighbours such as Mozambique, Botswana and Swaziland. South Africa came ninth out of the 14 African countries that participated in the SACMEQ Grade 6 literacy test published in 2005 (Taylor, 2003).

Table 2.1: SACMEQ II Grade 6 Literacy Scores



Although formal teaching of grammatical constructions was researched by Parkinson (n.d.), to determine a change in English Second Language learners, emphasis was placed on the assumption that given a large amount of clear input in academic English, ESL learners will automatically display a noticeable improvement in academic English. The results indicate that in neither the experimental group nor in the control group was there a significant difference. The experimental group were given explicit instructions and showed no significant improvement or deterioration compared to the control group, who received no explicit instruction. One explanation for the lack of improvement could be that the amount of instruction and the length of time, two months, over which learners received the instruction was insufficient (Parkinson, n.d.).

The poor state of reading and writing in South African schools is well documented (PIRLS, 2006), with cross-national tests resulting in the lowest score of all 45 education systems (PIRLS, 2008). In further research, the GDE, JET Education Services and READ formed a partnership to improve the state of literacy in all Gauteng public schools. It has therefore become the aim of the Accelerated Programme for Language, Literacy and Communication (APLLC) to appropriate reading materials and to train teachers to use these effectively. The strategy represents a programme to involve all 1 915 public schools in Gauteng by including a professional development programme for literacy teachers, detailed reading and writing programmes for learners, appropriate reading materials for teachers and learners and a quality assurance framework to identify early problems and solutions (Taylor, 2008).

The District Development and Support Project (2000-2003) (DDSP) was the first initiative based on an explicit systemic design (HSRC, 2003). Working in primary schools in the four poorest provinces, interventions were directed at improving the functionality of districts and schools and improving classroom teaching in Language and Mathematics. Tests of pupil performance in literacy and numeracy at Grade 3 level were conducted during each year of the programme and again a year later. Significant changes were recorded, and these were holding secure a year after the closure of the DDSP.

Table 2.2: DDSP scores for numeracy and literacy

Mean %				
	2000	2001	2002	2003
Numeracy	25.84	26.78	38.04	37.32
Literacy	52.58	50.23	57.22	56.01

(Source: HSRC, 2003)

While the gains shown by the DDSP schools appear to be impressive, in the absence of control scores, the significance of these results cannot be ascertained. Under the circumstances, programmes such as the DDSP are systemic in design only, whereas in reality schools are essentially on their own, with virtually no support or monitoring from the district (Taylor, 2008).

In light of the above research, it has become apparent that there is a need for an intervention programme aimed at increasing performance in ESL learners. However, there do not seem to be any models that have been researched extensively and implemented in the South African schooling system, therefore there is a need for an intervention programme to improve instructional practices in schools in which the majority of learners are ESL. SIOP is a model that is incorporated in every lesson every day of the teaching week. This model is not a lesson in isolation that would give explicit instruction of English grammar, which would be the learning area in English as a Second Additional Language in primary schools. Rather, SIOP is a method of teaching English as part of a specialised subject where language objectives are taught simultaneously with content.

However, implementation of SIOP would demand more support and mentoring from the district as it focuses not only on improving learner performance, but also on the professional development of the teacher (Short & Echevarria, 1999). Therefore, the district would need to monitor the progress of the teachers as this would affect the Integrated Quality Management Systems (IQMS) of the teachers. At present, the SIOP model is being piloted in only a few schools in the province, and therefore this

research will be beneficial to all stakeholders if it can prove the effectiveness of SIOP.

2.9 INTERNATIONAL TRENDS AIMED AT DEVELOPING LANGAUGE

In a study conducted by Hafiz and Tudor, a group of ESL learners of Pakistani origin in Leeds in the UK were used as an experimental group in a research project to determine whether an extensive reading programme would yield significant results for reading for pleasure. The programme used graded readers in the second language with no follow-up language work or productive tasks expected after the reading exercise (Hafiz and Tudor, 1989). The programme was therefore purely for the learners to read material in a second language for enjoyment. The results showed an improvement in performance in the experimental group, especially in terms of their writing skills (Hafiz and Tudor, 1989).

Likewise, Elley and Mangubhai conducted a two-year study on Fijian primary schools where the effects of an extensive reading programme on language-skill development were researched. The results showed that learners who received extensive reading had made a substantial improvement in receptive skills (reading and word recognition). By the end of the second year, this improvement had extended to all aspects of the learners second language abilities, including both oral and written production (Elley & Mangubhai, 1983).

However, while there is evidence that a reading programme can improve the development of skills in a second language, the extent to which it can improve the academic performance of the ESL learner in other specialised subjects is unknown. Therefore, the importance of a programme that allows for the improvement of all language skills and not specific to reading, that could be applied to all other learning areas is necessary and could improve the proficiency in a second language.

A more holistic programme model known as immersion education which involves teaching and learning of school subjects through two different languages in varying proportions has become more popular in China, although only limited empirical research has been conducted to evaluate learner's academic achievement in these

programmes (Cheng, Li, Kirby, Quang and Wade-Woolley, 2010). This type of programme model which has been adopted from the French immersion (FI) in Canada, has demonstrated that immersion is an effective means of improving learner's language proficiency, literacy and cognitive development. However, Stern believes that no matter how effective the FI model is, many learners will have to learn in a non-immersion core programme. Most language teachers operate in regular programmes and in other countries, for example Europe, immersion as from of schooling does not exist. Even though very little research has been conducted to evaluate the success of such a programme, the Chinese school system have seen an exponential increase in the number of parents who chose this programme for their children (Stern, 1983).

This FI programme is very similar to the SI programme originally created in the United States, however, the difference between the two programmes arise as the SI was further restructured and adapted to suit a ESL learner through the various components discussed in Chapter 1, Section 1.3.

In Australia, the 'ESL in the Mainstream (Carder, 2006, 212) was launched. This was aimed to raise awareness and give skills to content teachers so that they can better teach second-language learners. The purpose of mainstreaming ESL learners is to provide naturally occurring opportunities to use and develop language through purposeful use (Carder, 2006) which is what SIOP provides if implemented effectively.

2.10 CONCEPTUAL FRAMEWORK.

The conceptual framework for this study draws on evaluation theory, particularly Stufflebeam's Context Input Process Product model.

The CIPP Model of evaluation

The research method that will be used is a programme evaluation which Scriven defines as the systematic determination of the quality or value of something (cited in Davidson, 2005). Evaluations are conducted for one or two main reasons: to find

areas of improvement and/or to give an assessment of overall quality or value (Davidson, 2005). The specific model for this particular research will be the Context, Input, Process and Product (CIPP) model (Robinson, 2002), which is a comprehensive approach to evaluation developed by Daniel Stufflebeam in the 1960s. *Context* evaluation assesses needs, problems and opportunities to help decision makers define goals and priorities. *Input* evaluation assesses alternative approaches, while *process* evaluation assesses the implementation of plans to assist staff to carry out activities and, at a later stage, judge programme performance. Lastly, *product* evaluation identifies and assesses outcomes, whether intentional or unintentional (Stufflebeam, 2003). Essentially, the CIPP model asks: What needs to be done? How should it be done? Is it being done? Did it succeed? (Stufflebeam, 2007).

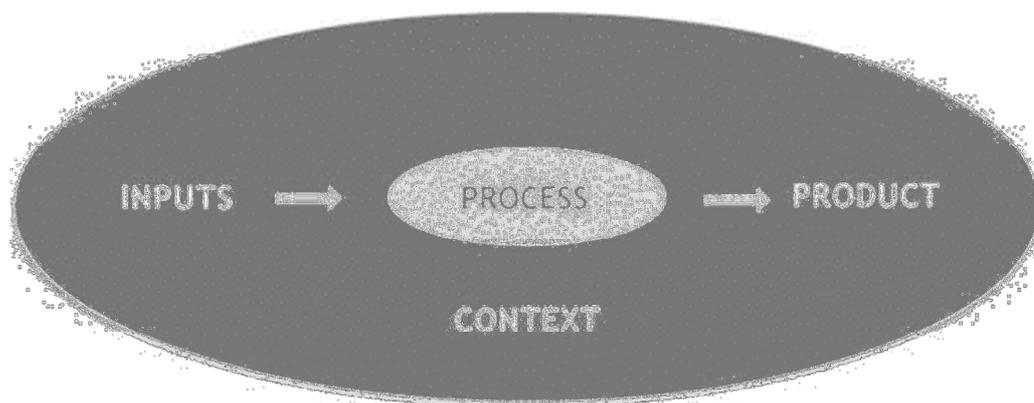


Figure 2.1: The CIPP Model (The CIPP evaluation model).

In addition to the core elements, the CIPP model includes other features such as the Values Component, which is divided into four evaluative foci associated with any programme, namely, goals, plans, actions and outcomes. There is a reciprocal relationship between the context, input, process and product and the four values component. Finally, the CIPP evaluation model has a checklist to help evaluators plan, conduct and assess evaluations based on the requirements of the CIPP Model.

Therefore, according to the CIPP model, an evaluation is a systematic investigation of the value of a programme or other evaluand. In line with the values-orientated definition, the CIPP model defines evaluation as a process of delineating, obtaining, reporting and applying descriptive and judgmental information about some object's

merit, worth, probity and significance, in order to guide decision-making, support accountability, disseminate effective practices and increase understanding of the involved phenomena (Stufflebeam, 2003).

The CIPP evaluation model is used in this study focussing on context, input, process and product of the SIOP programme (Figure 2.2 below) and the major components of the CIPP model are discussed below.

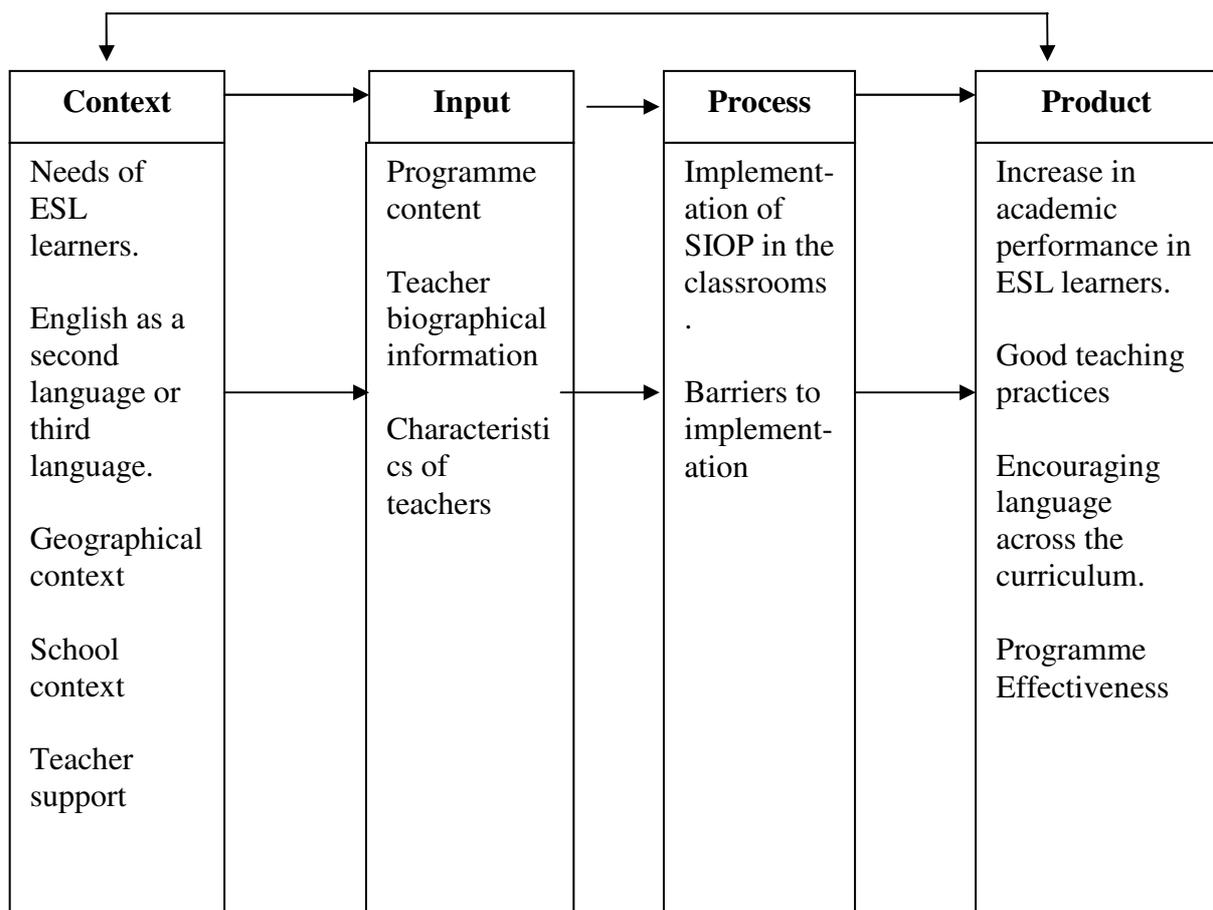


Figure 2.2: The CIPP evaluation model (adapted from Worthen, Blaine, Sanders, James, Fitzpatric & Jody, 1997).

Context

Context evaluation assesses the needs, problems, assets and opportunities within a distinct setting. The needs include those things considered essential or useful for fulfilling a valid purpose. Problems are impediments to overcome in meeting and continuing to meet targeted needs. Assets include available expertise and services

that could be used to help fulfil the desired purpose. Opportunities look at funding programmes that might be used to support efforts to meet needs and solve associated problems (Stufflebeam, Madaus & Kellaghan, 2000). In the context of this research, the focus of this study will be problems arising as the needs of the ESL learners in learning specialised learning areas are considered. The geographical context of the school and the population of the school, as well as the school context are also taken into account.

Input

An input evaluation assesses the proposed model and the associated work plan, as well as the budget for the project (Stufflebeam et al., 2000). In this study, the input evaluation specifically evaluates the content of the SIOP model, the activities of the model and the willingness of the teachers implementing the model. Added to the willingness of the teacher are the characteristics of the teachers implementing SIOP and the biographical details of the teachers involved in the research.

Process

A process evaluation is a continuous monitoring of the implementation, including changes in the plan as well as important omissions and/or poor execution of certain procedures (Stufflebeam et al., 2000). For the purpose of this research, the evaluation of a process will focus on the implementation of the programme and omissions of important processes. Barriers to implementing the programme will also be assessed as poor execution procedures.

Product

Stufflebeam stated that product evaluation is to measure, interpret and judge achievements (Stufflebeam et al., 2000). Product evaluation will be used to measure, in terms of mixed methods data, how SIOP can improve teaching ESL learners and the effectiveness of SIOP in the South African context. Good teaching practices will also surface through the qualitative component of the research enabling a sound judgment on the achievements of SIOP based on the data analysed

2.11 CONCLUSION

The growing need for English as a language was argued in this chapter, seen increasingly as the language of a 'global village'. The effects of globalisation and technologically advances in society have shown the importance of students being able to communicate in English. Since the majority of the world's population do not speak it as a first language, the need for teaching and learning it as a second language is becoming more urgent. Policy on language in South Africa is that the second language should be taught only after the learner have mastered the basics of the home language, however, certain challenges arise in terms of academic performance when a learner switches to English as a medium of instruction.

Although there are many misconceptions on how English is acquired as a second language, it is important to note that the acquisition of English as a second language is achievable and manageable. In South Africa, the GDE, JET and Read have tried to improve the state of literacy in Gauteng schools, however research (PIRLS) has shown no improvement in the poor reading and writing of learners. A programme that has shown success with ESL in the USA is the SIOP model, and the CIPP model of evaluation is being used a tool to determine its effectiveness in the South African context.

This research is evaluating the SIOP model and the following chapter looks at the methodologies used to conduct that research.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Research designs are the specific procedures involved in the research process of data collection, data analysis and report writing (Creswell, 2005). This chapter discusses pragmatism as a research paradigm as it is best suited in mixed methods research. Section 3.3 explores the CIPP model of evaluation used in the research and mixed methods as a research design is further discussed in section 3.3.2. The methodology is explored in section 3.4, focussing on the sample and the instruments used in both qualitative and quantitative phase. Section 3.5 discusses the data analysis, while 3.6 looks at methodological norms and a conclusion is drawn in section 3.7.3.2. However, this research is not an experiment, but merely an analysis of the quantitative data in order to generate comparisons.

3.2 RESEARCH PARADIGM

A worldview and paradigm are used synonymously to explain how the world is viewed (Creswell & Plano Clark, 2007). Each paradigm contains a basic set of beliefs or assumptions that guide inquiries as a philosophy that is deeply rooted in personal experiences, culture and history. Paradigms can change during the course of lives and be shaped by new experiences and thoughts, but are important as all research needs a foundation for its inquiry, particularly as inquirers need to be aware of the implicit worldviews they bring to their studies (Creswell & Plano Clark, 2007).

Although there are other methods that could be utilised in this research, I have used mixed methods, i.e., both quantitative and qualitative methods, to answer the research question. Mixed methods are used to fit together the insights provided by qualitative and quantitative research into a workable solution (Johnson & Onwuegbuzie, 2004), and therefore make use of the pragmatic method as a system of philosophy. Several authors (Patton, 1997) suggest that pragmatism is the best paradigm in using mixed methods research, since its logic of inquiry includes the use

of induction, deduction and abduction (Collins, Onwuegbuzie & Jiao, 2006; Johnson & Onwuegbuzie, 2004). In order to find a workable solution it looks at finding a middle ground between philosophical dogmatism and scepticism, but rejects traditional dualism in preference to more moderate versions of philosophical dualism based on how well they work in solving problems.

Pragmatism recognises the importance of the natural or physical world as well as the developing social and psychological world that includes language, culture, human institutions and subjective thoughts. It places a high value on the reality of and influence of the inner world of human experience in action, as human inquiry is seen as being analogous to experimental and scientific inquiry. Knowledge is considered both constructed and based on the reality of the world as experienced and lived in. Pragmatism endorses strong and practical empiricism as the path to determine what works as well as practical theory and shared values. It helps to shed light on how research approaches can be mixed fruitfully to offer the best opportunities for answering important research questions (Johnson & Onwuegbuzie, 2004).

Pragmatism can be labelled 'eclectic', as multiple quantitative and qualitative techniques are used to select methods and designs that best fit the research question (Onwuegbuzie & Johnson, 2006). The focus is thus on the consequences of the research, and the primary importance of the question asked, rather than the methods (Teddlie & Tashakkori, 2003). Thus, since multiple methods are used, it is pluralistic and leaning toward what works in practice (Creswell & Plano Clark, 2007). The pragmatic rule states that the current meaning of an expression is to be determined by the experiences of belief in the world, a rule that can be applied through thinking about what will happen if one does something, observing what happens in experiences when one does it and trying to formulate a rule of the consequences or outcomes of what one did (Johnson & Onwuegbuzie, 2004). Finally, pragmatism rejects the forced choice between post-positivism and constructivism with regard to logic, epistemology, and so avoids the use of metaphysical concepts. It therefore presents a very practical and applied research philosophy (Teddlie & Tashakkori, 2003), and one applicable to this study.

3.3 RESEARCH DESIGN

The research design involves the procedures for conducting the research study, including when, from whom, and under what circumstances the data were collected. It indicates how the research is carried out, what happens to the subjects and what methods of data collection are utilized (McMillan & Schumacher, 2001). In this research design the CIPP Model of Evaluation was used to determine the effectiveness of the SIOP model used in the South African context.

Programme evaluation was used in this study, evaluation being defined by Guba and Stufflebeam (1971) as the process of obtaining and providing useful information for making educational decisions. Programme evaluation can be more fully defined as the systematic collection of information about the activities, characteristics and outcomes of a programme. These outcomes are used to make judgements about the programme, improve effectiveness and/or inform decisions about future programming (Patton, 1997).

Evaluations are conducted to find areas for improvement and/or to generate an assessment of overall quality or value. For any given evaluation, a range of possible approaches is available to the researcher, the most common of which is whether the evaluation should be conducted independently or whether the programme or product designers or staff should be involved in the process. If the primary purpose of the evaluation is for accountability it is often important to have an independent evaluation conducted. If, however, the purpose of the evaluation is for organisational learning capacity, then there should be a degree of stakeholder participation (Davidson, 2005).

When determining the overall quality or value of a programme it is referred to as 'summative evaluation', which involves reporting and decision-making purposes other than improvement. Evaluations carried out for the purpose of improvement are often called 'formative evaluations', which are useful to help a relatively new product service or programme or to find ways of improving a product or programme that is in existence already (Davidson, 2005).

Within the framework of the CIPP model and in programme evaluation theory more broadly, mixed methods are used to address the identified research questions. Although it is possible that the researcher might have one primary interest, be it qualitative or quantitative (Onwuegbuzie & Leech, 2006), using mixed methods avoids the extreme versions associated with purely qualitative or pure quantitative forms (Johnson & Turner, 2003), instead acquiring breadth and depth of understanding and corroboration (Johnson, Onwuegbuzie & Turner, 2007).

This is an improvement on pure qualitative and quantitative designs as the strengths of each design is complemented and the weaknesses strengthened. The combining of methods that have complementary strengths and non-overlapping weaknesses is the fundamental principle of mixed methods research (Johnson & Turner, 2003). Pure qualitative research is defined as exploratory, inductive, unstructured, open-ended, naturalistic and free-flowing research, and results in qualitative data, whereas pure quantitative research is viewed as confirmatory, deductive, structured, closed-ended, controlled and linear research, and results in quantitative data. There are six major methods of data collection, namely questionnaires, interviews, focus groups, tests, observation, and secondary data appropriate for mixed methods data collection. These six methods are categorised into *intramethods*, the mixing of which can be concurrent or sequential, including both qualitative and quantitative components; or as *intermethod* mixing, which involves concurrently or sequentially mixing two or more methods within a single piece of research. The former is also known as 'data triangulation' and the latter as 'method triangulation' (Johnson & Turner, 2003). This research project used intermethod mixing as it involves mixing both qualitative and quantitative data collection methods.

The abovementioned designs can be represented as a function of three dimensions, *the level of mixing*, which refers to whether the design is partially or fully mixed; *the time orientation*, that is whether the qualitative and quantitative phases of the research study occur at similar times in the study (concurrent) or whether they occur one after the other (sequential), and *the emphasis on approaches*, which looks at whether both qualitative and quantitative phases of the study have similar emphasis with regards to addressing the research question, or whether one component has

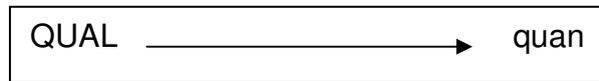
higher priority than the other (dominant status). This results in a number of possible typologies (Leech & Onwuegbuzie, 2009).

The above typologies yield eight types of mixed research status designs, namely: (a) partially mixed concurrent equal; (b) partially mixed concurrent dominant; (c) partially mixed sequential equal; (d) partially mixed sequential dominant; (e) fully mixed concurrent equal; (f) fully mixed concurrent dominant; (g) fully mixed sequential equal; and (h) fully mixed sequential dominant. This research project will fall into the partially mixed sequential dominant status design (Leech & Onwuegbuzie, 2009), as it involves conducting a study with two phases that occur sequentially, and in this study the qualitative phase of the research has more emphasis.

Creswell, Plano Clark, Gutman & Hanson (2003) classify mixed methods designs into four major perspectives, namely, implementation, priority, integration and theoretical. Within a sequential exploratory design, this study is conducted in two phases, with the priority given to the first phase of qualitatively data collection and analysis, followed by the quantitative phase. The findings of these two phases are then integrated during the interpretation phase. The purpose of this design are to use quantitative data and the results to assist in the interpretation of the qualitative findings (Creswell et al., 2003). Mixed methods research in which the quantitative aspect is included to support the qualitative data is known as the qualitative dominant mixed methods research, and relies on a qualitative view of the research process, while recognizing that the addition of the quantitative data and approaches are likely to benefit the project (Johnson, Onwuegbuzie & Turner, 2007).

In order to answer the research question, I interviewed teachers implementing the SIOP model, made classroom observations of the teachers interviewed to gather rich in-depth data on SIOP in action and did document analysis of the teachers preparation files and learner books. However, in order to ascertain whether SIOP actually improves ESL academic performance, quantitative data were also collected, in this case to determine the scores of the learners in the research project. Data collected through the SAMP project (discussed in Chapter 5.) is analysed to determine whether there was an effect on teaching ESL learners implementing the SIOP model.

Since the data collection occurred with the qualitative data being first collected, although the baseline assessment took place first, followed by the analysis of the secondary data (SAMP project), the notation system can be depicted as:



The terms *quantitative* and *qualitative* have been shortened as both approaches are legitimate and of equal stature in the research. Lower case letters indicate less emphasis, whereas those in upper case indicate more importance in that approach to the research. The arrow indicates that one form of data collection is followed by another, and not concurrently (Creswell et al, 2003).

Mixed methods studies have the following general purposes:

- a. triangulation (i.e. seeking convergence and corroboration of findings)
- b. complementarity (i.e. seeking elaboration, clarification of the findings)
- c. development (i.e. using the findings from one method to help inform the other method)
- d. initiation (i.e. discovering paradoxes and contradictions)
- e. expansion (i.e. seeking to expand the breadth by using different methods) (Onwuegbuzie & Leech, 2004).

In summary, the purpose of using mixed methods in this research was for development, where the findings from the qualitative method helped to inform the quantitative methods. Including quantitative data can help compensate for the fact that qualitative data usually cannot be generalised.

3.4 METHODOLOGY

This section describes sampling and participation in the study in 3.4.1, the instruments that were used in 3.4.2 and the data collection in 3.4.3. The data analysis is discussed in 3.4.5 and the methodological norms in 3.5. Section 3.6 pays attention to the ethical considerations.

3.4.1 Sample

Sampling designs comprise two major components, the sampling scheme, which shows the strategies used to select units, and the sample size, which indicates the number of units selected for the study. In mixed methods research, the researcher must make sampling scheme and sample size considerations for both qualitative and quantitative phases of the study.

3.4.1.1 Quantitative Phase

Currently, 22 schools are participating in the SAMP project but this research makes use of the data obtained from only one school, as it is the only school in the sample that is implementing SIOp. Thus, a purposeful sample was undertaken, with the following criteria to select the target school:

- It had to be implementing SIOp everyday in their classrooms
- It had to be a school participating in the SAMP project
- It had to be close to Pretoria due to cost and time constraints.

The comparison school also purposefully selected based on the following criteria:

- The learner population was similar to the target school
- The schools were in a close proximity to each other
- Both schools had teachers who spoke only English, but taught ESL learners
- It had to be a school participating in the SAMP project.

3.4.1.2 Qualitative Phase

For the qualitative phase, the teachers of the schools that were selected for the SAMP research were to be used as the sample for the interview and observation process. Two teachers in the Foundation Phase (Grade 1 class) were selected for the interview process and their respective classes used for observations.

Criteria used to select teachers for the interviews:

- The teacher had to have attended the training for SIOP
- The teacher had to be implementing SIOP with the class that was participating in the SAMP project.

Those same teachers had their files and learner books analysed.

3.4.2 Instruments

In this study two different instruments were designed to collect data from the respondents, namely the observation protocol (Refer to Appendix B) and the interview protocol (Refer to Appendix C). Data sources included were observation of teachers implementing SIOP in their classrooms, semi-structured interviews conducted with teachers observed and document analysis which included the documentation from the SAMP project, teacher files, learner books and curriculum documents that were analysed. Document analysis is a systematic examination of instructional documents where the focus is on critical examination of the document (<http://www.utexas.edu/academic/ctl/assessment/iar/teaching/plan/method/doc-analysis.php>). In this section both phases in the research are discussed separately.

3.4.2.1 Quantitative Phase

The SAMP project uses the PIPS assessment instrument which was developed by the CEM Centre at the University of Durham, England, to monitor learner performance. However, this instrument was adapted for the South African context, can be administered in English, Afrikaans and Sepedi, and learners are assessed in the LoLT of the school that they attend (Archer, Scherman, Mokoena & Howie, 2009).

The translation of the instruments was executed by registered translators then submitted to a process of back-translation to check appropriate translation (PIPS). The instrument consists of a scale comprising a number of subtests, which have proved to be accurate in predicting learners' future skills. All the subtests in the

assessment cover the objectives of and are in line with the RNCS for Grades R and Grade 1. The scales in the instrument are Early Phonics, Early Reading, Mathematics and Handwriting (the last of which was not part of the total score) was not part of the total score). Under each scale, the subsets for Early Phonics include repeating words and rhyming words; in the Early Reading Scale, the subsets include vocabulary, ideas about reading, letters and words. The subtests for the Mathematics scale were sizes, counting, sums A and numbers (Archer, Scherman & Strauss, n.d.).

3.4.2.2 Qualitative Phase

During the interview process the instruments used were an interview protocol (Refer to Appendix C), which is a form designed by the researcher that contains instructions for the process of the interview, the questions to be asked and space to take notes of responses from the interviewee (Creswell, 2005). Interview protocols or scripts are field-tested to identify the placement and wording of probes necessary to adjust topics to the variation in individuals' responses. This allows the researcher to use for cues and probes with the respondents (McMillan & Schumacher, 2001).

In order for the observation process to be conducted effectively, an observation protocol (Refer to Appendix B) is required, that is a form designed by the researcher before data is collected and used for taking field-notes during an observation. Researchers record a chronology of events, including detailed portrait of the individuals observed, pictures, and maps. The design and development of observational protocols will ensure an organised means for recording and keeping observational field-notes (Creswell, 2005).

Table 3.1: Table of Instruments to be used to address the Research Question

<i>To what extent does the Sheltered Instruction Observation Protocol (SIOP) model assist teachers in teaching ESL learners in primary schools?</i>		
Research Question	Instrument Used	CIPP component
To what extent does SIOP differ from	Interview Observation	Input

traditional teaching methods?		
How does SIOP affect teachers' planning and instruction in the classroom?	Interview Observation	Process
To what extent do the learners understand the content when the teachers are implementing SIOP?	Interview Observation Document Analysis	Product
To what extent does SIOP improve the academic performance of English second language learners in content areas?	SAMP Assessment	Product

3.4.3 Data Collection

Options for collection of data can consist of gathering data information at the same time (concurrently) or in phases over a period of time (sequentially). As noted in Section 3.3.1, data collection can be introduced first either qualitatively or quantitatively in a mixed methods study. When qualitative data collection precedes quantitative data collection, the purpose is to first explore the problem under study then follow up on this exploration with quantitative data. Alternatively, when quantitative data is followed by qualitative data, the intent is to explore with a large sample first to test variables and then to explore in more detail with a few cases during the qualitative phase (Creswell et al., 2003).

This research project makes use of the intermethod mixing of data as qualitative data will initially be collected and, secondly, quantitatively data collected through the

SAMP project will be analysed. As the two sets of data collected were analysed separately and neither followed up on the other during the process, parallel mixed method analysis occurred (Teddlie & Tashakkori, 2009). Both designs were independently collected throughout the research and were only brought together in the reporting of the results.

3.4.3.1 Quantitative Data Collection

Quantitative data which has been collected through SAMP was used with permission from the CEA at the University of Pretoria to obtain data. The data collection was undertaken at the beginning and end of 2010, with a pre-test post-test design followed. Data collection took place over a period of two consecutive days, with the assistance of a team of fieldworkers from the University of Pretoria. Data was collected in February and March for two days per month at a particular school and again in September and October. The fieldworkers were training in the procedures as one-on-one assessments were undertaken. It took approximately 20 minutes per learner to undertake the assessment. Answers were recorded on optical mark readers which were electronically marked. The data was cleaned and prepared for further analyses.

3.4.3.2 Qualitative Data Collection

The qualitative part of the research process involved interviews that were general, with open-ended questions, designed to optimise participants' expression of their experiences (Creswell 2005) and provide sufficient evidence to answer the research questions. During the interview phase the interviewer establishes a rapport with the interviewee before asking a series of questions, taking care to remain non-judgemental of the responses and so reduce bias. The interviewee is allowed to probe the interviewer for clarity or for more detailed information when needed (Johnson & Turner, 2003). An interview allows for detailed descriptions and personal experiences from the participants (Creswell, 2005), as opposed to structured interviews. The one-on-one interviews, in which the researcher asked questions and recorded answers from only one participant at a time, were ideal for participants who

were articulate and who can share ideas comfortably (Creswell, 2005). The interviews conducted lasted for approximately one hour (60 minutes) each.

The researcher also observed the teachers who were interviewed, taking note of how SIOP was being implemented in their classrooms, as a non-participant. As a process of gathering open-ended information by observing people and places at a research site, observation allows the researcher to record information as it occurs. However, it does limit the researcher to those sites and situations where information can be obtained, and in those sites the researcher may experience difficulty in developing a rapport with individuals (Creswell, 2005). Observation took place on one day for two periods (literacy and numeracy) per teacher.

3.4.4 Data Analysis

When analyzing quantitative and qualitative data within a mixed methods framework, researchers undergo at least some of the following seven stages: (a) data reduction, which involves reducing the features of the qualitative and quantitative data; (b) data display, which involves describing data pictorially; (c) data transformation, which implies converting quantitative data into narrative data that can be analyzed qualitatively, and/or converting qualitative data into numerical codes that can be represented statistically; (d) data correlation, which involves quantitative data being correlated with quantized data or qualitative data being correlated with quantized data; (e) data consolidation, whereby both qualitative and quantitative data are combined to create new or consolidated variables or data; (f) data comparison, which involves comparing data from qualitative and quantitative data sources; and (g) data integration, whereby both quantitative and qualitative data are integrated into either a coherent whole or two separate sets (Onwuegbuzie & Teddlie, 2003).

This project makes use of data reduction as discussed in the qualitative data analysis section, as well as data comparison and data integration. The final aspect of the seven-stage model is data integration, whereby the data obtained from the quantitative and qualitative data sources are integrated into a coherent whole.

3.4.4.1 Quantitative Data Analysis

As data from the SAMP project is used for the quantitative aspect, a secondary analysis of the results collected from the project was conducted as the data was not collected by the researcher, but observation of the process was done by the researcher as a non-participant observer. Secondary data analysis can be defined as a second analysis of the data or information that was either gathered by someone else for some else or for some other purpose than the one currently being researched, or sometimes a combination of the two (PHLS, 1998). Conducting a secondary analysis has many merits in research such as the data collected could come from a well-funded study that offers high quality data sourced for investigators (Sales, Lichtenwalter & Fevola, 2006).

The type of data used in this secondary analysis can be categorised as longitudinal surveys (multiwave studies of a single sample) and the data analysed for the purpose of this research is from 2010 academic year. It was important to include the previous year's data (2009 pre- and post-data) for the purpose of comparison and to assist in analysing and providing sufficient data to make inferences. Descriptive statistics were used to transform the numbers from the pre- and post-data into indices that described the data for ease of interpretation while inferential statistics were used to make inferences about the similarity of a sample to the population from which the sample is drawn, and are thus used in the reporting of results (McMillan & Schumacher, 2001). Inferential statistics help generate conclusions and provide a measure of the uncertainty accompanying the conclusions (Wilson & MacLean, 2011).

Like any analysis, secondary analysis has its strengths and weakness. The strengths include the high quality of data (Sales, Lichtenwalter & Fevola, 2006), which can be conducted with limited time, money and resources. As is the case of this research, human subjects are a concern due to ethical considerations (Sales, Lichtenwalter & Fevola, 2006). Weaknesses of secondary analysis included weak operationalization of variables, inadequate documentation, missing data, un-standardized data categories, false expectations regarding ease and speed of implementation, legal

technicalities, older data, limits to researcher creativity and over-abundance of data Sales, Lichtenwalter & Fevola, 2006).

Analysing the data involved implementing a t-test, which is used to discover whether there are statistically significant differences between the means of two groups, using parametric data drawn from random samples with a normal distribution. The t-test has two variants, the t-test for independent samples and the t-test for related or paired samples (Cohen, Manion & Morrison, 2007). The paired t-test is only appropriate when there is just one observation for each combination of the nominal values (<http://udel.edu/~mcdonald/statpaired.html>).

For the purpose of this research the paired t-test was used as the same sample group was used but tested at different times. The numerical analysis (Refer to Appendix G) used the Statistical Package for Social Sciences (SPSS), whereby statistical formulae were applied and computations were carried out (Cohen, Manion & Morrison, 2007).

Although no experiment was undertaken for this research, the research shows that the null hypothesis (H_0) indicates that there is no significant difference between the scores of the baseline assessments and the follow-up assessment. The alternative hypothesis (H_1) would therefore be that there is a statistical difference in the results between the baseline assessment and the follow-up assessment. The significant level used for rejecting the null hypothesis is typically the 0.5 or the 0.01 level. For the purpose of this research the 0.5 significant level was used. The paired t-test assumes that the differences between the pairs are normally distributed (<http://udel.edu/~mcdonald/statpaired.html>).

The effect size was also calculated to find out about the importance of the results. Effect size measures informs us about the magnitude of a treatment or the strength of a relationship between two variables. They are standardized and they do not depend on the sample size (Wilson & MacLean, 2011), which means that the effect size can be compared across different studies that have measure different variables, or have used different scales of measurement (Field, 2005).

Effect sizes are useful because they provide an objective measure of the importance of an effect. By calculating the effect size, the importance of our effect can be

assessed (Field, 2005). An effect size calculated from the data is a descriptive statistics that conveys the estimated magnitude of a relationship without making any statement about whether the apparent relationship in the data reflects a true relationship in the population. In that way, effect size complement inferential statistics such as p-values (http://en.wikipedia.org/wiki/Effect_size). Effect sizes are useful because they provide objective measure of the importance of an objective measure or the importance of an effect. The measurement used in this research was between 0.2 and 0.5 indicated a small effect size. Between 0.5 and 0.8 indicated a medium effect size and <0.8 indicated a large effect size (Wilson & MacLean, 2011). The most common measures of effect size is Cohen's d, and Pearson's correlation coefficient, r. The formula for calculating Cohen's d for paired-samples t-test is explained in Chapter 5, Section 5.5 and the calculations are tabulated in Chapter 5, Table 5.4.

Although this research is not an experiment, the effect size can still be calculated, described as a measure of the size of a treatment effect or strength of association, unaffected by sample size. In an experimental research, the effect size measure indicates the degree of the effect that the independent variable has on the dependent variable (Wilson & MacLean, 2011). Table 5.4 (above) provides a summary of the effect sizes as calculated by the formula. The results indicated that the mean follow-up assessment scale for the total (M=42.21, SD=12.808) was significantly higher than the mean baseline assessment (M=57.12, SD=15.099, $t=-10.694$), $p=.000$. Cohen's D = 1,2, indicating a large effect size. For the phonics scale the mean follow-up assessment scale for the total Phonics (M=40.19, SD=21.604) was significantly higher than the mean baseline assessment (M=40.19, SD=16.218, $t=-6,694$), $p=.000$. Cohen's D = 0,76, indicating a medium effect size.

The mean follow-up assessment scale for the total Reading (M=42.96, SD=21.915) was significantly higher than the mean baseline assessment (M=23.15, SD=14.033, $t=-11.336$), $p=.000$. Cohen's D = 1,3, indicating a large effect size. Meanwhile, the mean follow-up assessment scale for the total Mathematics (M=63,36, SD=17,296) was significantly higher than the mean baseline assessment (M=68,77, SD=13,474, $t=-5.413$), $p=.000$. Cohen's D = 0,44, which indicates a small effect size.

3.4.4.2 Qualitative Data Analysis

Qualitative data analysis involves organising, accounting for and explaining the data. Further, qualitative data analysis relies on interpretation (Cohen, Manion & Morrison, 2007). Initial preparation of the data required organising the vast amount of information, transferring it from spoken or written words and making decisions about whether to analyze it by hand or by computer (Creswell & Plano Clark, 2007). For the purpose of this research, the qualitative data were analysed by hand as there was only two interviews conducted.

The large amount of data collected through interviews, observations and document analysis of teachers files, learners books and curriculum documents were organised by the type of material collected, i.e. the records of all interviews (Refer to Appendix D) were kept separately from observations, before being transcribed from audio tapes into word documents. Thereafter, the word document was used to code the data. The codes obtained were then combined to form themes that were used to answer the research questions. During observations, written field notes (Refer to Appendix E) was collected and converted into a document for analysis and further reading.

Qualitative data uses content analysis as one of the main forms of data analysis, whereby the words of texts are classified into many fewer categories. The definition is a process of summarizing and reporting written data which begins with a sample of texts, defines the units of analysis and the categories to be used for analysis, reviews the texts in order to code them and place them into categories, then counts and logs the occurrences of words, codes and categories. From this point, statistical analysis and quantitative methods are applied, leading to an interpretation of the results. Content analysis involves coding, categorizing, comparing and concluding from the text (Cohen, Manion & Morrison, 2007). Although there are computer programmes which can be utilized to support qualitative research, for the purpose of this research the researcher preferred to analyse the data by hand as there was not many interviews to analyse and code.

3.5 METHODOLOGICAL NORMS

Validity differs in quantitative and qualitative research, but in both approaches it serves the purpose of checking on the quality of the data and the results. In quantitative research, reliability means that scores received from participants are consistent and stable over time, while validity means that the researcher can draw meaningful inferences from the results to apply to a wider population, (Creswell & Plano Clark, 2007). The fundamental principal of mixed research (Johnson & Turner, 2003) states that the research should involve approaches and concepts that have corresponding strengths and non-overlapping weaknesses. Thus, a term that is more acceptable for validity is *legitimation* (Onwuegbuzie & Johnson, 2006), which is an ongoing process and not an outcome.

Legitimation checks should occur at each stage in the mixed research process. The two models Quantitative Legitimation Model (Onwuegbuzie, 2003) and the Qualitative Legitimation Model (Onwuegbuzie & Leech, 2006) can be used for assessing legitimation of the quantitative and qualitative components of the study. Member checking and peer debriefing was used to ensure legitimation of the data. However, there is a need to identify specific legitimation issues that are associated with neither quantitative nor qualitative designs. The typology of legitimation types in mixed methods is considered and discussed as appropriate to the research project. *Inside-outside legitimation* is the degree to which the researcher accurately presents and utilises the insider's view and the observer's view.

A strategy for obtaining a justified observer's analysis of the data is to use peer review, that is, the researcher can have another researcher examine the interpretations being made, the conceptualisations and the relationship between the data and the conclusions. To obtain a justified insider's viewpoint, the researcher can employ the strategy of member checking, where group members assess the researcher's interpretations. The purpose of mixed methods research is to find a balance between the two viewpoints discussed above (Onwuegbuzie & Johnson, 2006). As mentioned in the previous paragraph, member checking and peer debriefing was used.

Although the quantitative component will essentially take place first, as the baseline assessment in the schools, I only explored the scores from the baseline assessment and conducted a t-test once the post-test had been undertaken. As part of the project, the reliability of the data is checked and that the content validity has been established. The qualitative component, which is the interviews and observations, took place after the baseline assessment and before the post-test undertaken by SAMP, therefore the *sequential legitimation* was more effective. In sequential mixed research, it is possible that the meta-inferences are largely affected by the sequence itself, therefore, by oscillating the qualitative and quantitative data collection, legitimation is increased (Onweugbuzie & Johnson, 2006).

Data quality in mixed research is determined by the standards of quality in the qualitative and quantitative components. Thus, the qualitative component data is credible and valid if the mixed methods research has high data-quality. In order to achieve trustworthiness, member checks could be used as a strategy in determining trustworthiness in the QUAL strand. Member checks involve asking members of the scene to verify the investigator's representation of events, behaviour or phenomena. This is one of the most important strategies for determining the credibility of the researcher's interpretation of the participants' perceptions (Teddlie & Tashakkori, 2009).

3.6 ETHICAL CONSIDERATIONS

Ethics is generally concerned with the belief about what is right or wrong, proper or improper, good or bad. Evaluations should not be conducted so as to restrict discretion and judgement (Cohen, Manion & Morrison, 2008). To ensure ethical standards were adhered to in this research, permission was obtained from the Faculty of Education at the University of Pretoria, DoE; Principals of the schools (Refer to Appendix F) involved in the research, parents of the learners (as they were minors) and teachers. Permission was also obtained from the CEA at the University of Pretoria in order to analyse and interpret the results obtained from SAMP.

It was also the researchers' duty to plan the research in a way that protected the rights and welfare of the subjects. The researcher informed the participants of all aspects of the research that might influence willingness to participate and answer all

questions that may have adverse effects or consequences. The researcher endeavoured to be as open and honest as possible with the subjects, disclosing the purpose of the research and [protecting participants from physical and mental discomfort, harm or danger. Informed consent was necessary, with participants provided with a full explanation of the research and an opportunity to terminate their participation at any time, without recrimination. Consent is usually obtained by asking subjects (or parents of minors) to sign a form that indicates understanding of the research and consent to participate (Refer to Appendix F). Public schools require consent from the parents as well as school district and principal's permission. Information obtained must be confidential and subjects have to be informed of their anonymity. (McMillan & Schumacher, 2001). Peer debriefing was used with regards to interview schedules and observation protocol as well as with the Masters group that was formed.

Two further principles identified were the principle of benefit maximization and the principle of equal respect. The former holds that the best decision is the one that results in the greatest benefit for most people, while the latter demands that the researcher respects the equal worth of all people.

In an evaluation, the following should be adhered to:

- *Due process*: evaluative procedures must ensure that judgements are reasonable
- *Privacy*: the right to control information about oneself and have protection from unwarranted interferences
- *Equality*: in the context of evaluation this can be understood as a prohibition from making decisions on irrelevant grounds
- *Public perspicuity*: openness to the public concerning evaluative procedures, their purposes and their results
- *Client benefit*: evaluative decisions are made in a way that respects the interests of all parties

- *Academic Freedom*: an atmosphere of intellectual openness is maintained in the classroom for both teachers and learners. Evaluation should not be conducted in a way that is uncomfortable for all involved
- *Respect for autonomy*: teachers are entitled to a reasonable judgement about their work.

3.7 CONCLUSION

This chapter has focussed on the research design and methodology used. The aim of this project was to investigate the implementation of a successful programme in the South African context. Pragmatism was used as it is the best paradigm in using mixed methods research, as stated in Section 3.2. Mixed Methods research was explored and the specific typology explained, based on the level of mixing of methods, timing and approaches. A mixed method approach is best suited for the research because both qualitative and quantitative data answers the research questions effectively.

Further, the methodology section (Section 3.4) discussed the sampling and instruments used in both methods of the research. In both qualitative and quantitative methods, the sample selected participated in the SAMP project and was trained in SIOP. Several instruments, including those developed by the CEM and by the researcher were used to collect data. The instruments used to address the research question were depicted in Table 3.1.

Data collection strategies as well as data analyses strategies were discussed. The data analyses included descriptive statistics, interviews and observations. The discussions regarding the results can be found in Chapters 4 for qualitative results and Chapter 5 for quantitative results. The chapter concludes with a discussion on the methodological norms as well as the ethical considerations.

CHAPTER 4

PRESENTATION AND DISCUSSION OF QUALITATIVE FINDINGS

4.1 INTRODUCTION

The purpose of this chapter is to present the findings from the analysis of the qualitative data. It focuses on the results of the qualitative data collected through interviews conducted with two educators and observations of the interviewed educators' class. Interviews, which were conducted first, were held on the same day as the observations at the school. The interviews conducted were recorded on a Dictaphone and transcribed by the researcher. The transcriptions were then coded and clustered to form themes. Content analysis, which involves coding the data, categorizing, comparing and concluding from the text, was used to analyse the data. These themes were reviewed by the supervisor so as to ensure trustworthiness of the data collected through peer debriefing. Appropriate protocols were followed in the observations of the lessons, as discussed in this chapter.

The description of the school and the participants chosen for the research is discussed in Section 4.2, while Section 4.3 looks at the themes emerging from the data, and the chapter concludes in Section 4.4

4.2 THE SCHOOL AND PARTICIPANTS

The school was selected purposively, firstly, as it was one of the schools participating in the SAMP project being conducted by the CEA; secondly, because its teachers received SIOP training; and thirdly, they were currently implementing the programme (Chapter 3.4.1). Previously a House of Delegates school, it has a majority learner population from the outskirts of Laudium, thus largely comprising ESL learners.

The general observation of the school was that it was well maintained, with a solid structure and several sports facilities such as a netball court, a soccer field, a

volleyball court and a covered courtyard for assemblies. There was also a lapa with cement benches that could be used as an outdoor classroom. The school had a functioning and well stocked library, managed by a full-time librarian and a well equipped science laboratory used as an additional classroom. Attendance was good, with an additional 'mobile' classroom catering for an additional Grade 3 class, and it was clear that the teachers were maintaining discipline.

Each class had approximately 38 to 42 learners, with two learners sharing a table and each having his or her own chair. There was a teacher's desk and a small carpeted area for learners to sit on for group work with a chalkboard. Each Foundation Phase class had shelves for storage of books, files and resources. There was a lockable cupboard which could also be used for storage. In addition to the library, each Foundation Phase class had a reading corner, with age-appropriate books selected from 35 to 40 by the teacher for learners to read during class time, mostly related to the specific themes covered during the term.

The two classes that I observed were well kept and tidy. Both classes had charts clearly displayed on the walls with basic requirements for the Foundations for Learning Campaign requirements. In keeping with *Government Gazette* No. 30880, which clearly indicates the resources necessary for the walls in the Foundation Phase, there was an alphabet frieze, alphabet chart, birthday chart, weather chart, numbers word chart, colour word chart, and vocabulary charts with words and pictures (*Government Gazette*, 2008). Most had been made by the teachers and were colourful, attractive and written or typed in a large font that could easily be read by all learners in the class. All charts displayed were also age appropriate and clearly related to the content being taught in the classes. Each item in the class was labelled, so ultimately leading to incidental reading from the learners. For example, the door was labelled and the cupboard was labelled. The one class teacher went as far as putting bright red tablecloths on each table with the learners' pencil cases neatly packed at the end. Another displayed flags of the countries participating in the 2010 World Cup, with the name of the country next to it. Learners participated in the excitement of the 2010 World Cup as their work of making flags was also clearly displayed in the class. This extra effort displayed by the teachers encouraged learners to maintain a neat and tidy environment, evident in their books., and most

significantly, in both classes it was evident that the teachers did their utmost to create an environment conducive to teaching and learning.

The majority of learners in both classes were ESL learners. Of the 36 in one class, only five were English first language speakers (Indian), with the rest being African learners. Not all had come through the school's Grade R, as some only started formal schooling in that year, therefore, even though the LoLT of the Foundation Phase was English, not all were familiar with it. Nor were the majority even fully conversant with their mother tongue. As indicated in Chapter 2.4, it is important when learning a second language to be familiar with the mother tongue and to have developed the necessary BICS for that language (Cummins, 2009). Both teachers observed were Indian, and not conversant with any African Language, therefore, the only language learners were being taught in was in English. Both teachers chosen had attended a one-week training course on SIOP during the July school holidays in 2008. As the school was selected as a pilot school for the SIOP project by *Pearson Education*, this particular school received some support from the SIOP facilitator. Teachers were observed at least twice a term by various representatives from SIOP and received one-on-one personal support sessions on planning. Therefore, the teachers selected for this research were familiar with SIOP and efficient in its implementation.

Two teachers were interviewed and observed, with pseudonyms used here for the purpose of anonymity. "Sam", a 38 year old Indian female living in the community in which the school was based, had 17 years of teaching experience that included the first eight years in a different province and the following nine 9 at this school, both in the Foundation Phase. She has experience in teaching ESL learners from Grade 1 up to Grade 3, an M+4 Teachers Diploma from The Transvaal College of Education in Laudium, and a Further Diploma in Education in Remedial Education from the College of Education of South Africa (CESA). At the time of her observation she was completing a BEd Honours degree from the University of Pretoria.

"Kelly" was a 43 year old Indian female in her 20th year of teaching. She had taught for one year in Rustenburg at a Secondary school, where she served as a supervisor in a hostel. She moved to the community in which she was residing and taught primary school ranging from Grades 1 to 7 for the next 15 years. She had a break in

service for a year for personal reasons and re-applied to the DoE for the position she was currently holding. She had taught for the past three years in the Foundation Phase in the current school. Kelly had an M+4 Teachers Diploma from the Transvaal College of Education and, even though she had 20 years teaching experience, only 10 of the 20 years involved teaching ESL learners.

4.3 EMERGING THEMES

During the process of coding the transcripts, five themes emerged from the data, namely (i) language focus; (ii) difference between SIOP and the traditional methods of teaching; (iii) planning and assessment; (iv) learner attitude towards SIOP; and (v) Grade R influence. The field notes of the observations (See Appendix E) are integrated into the themes that emerged in an attempt to further elaborate on each.

4.3.1 Language Focus

The first and most prominent theme that emerged from the data was that the SIOP programme was very language-focussed. Throughout the implementation of SIOP during the lesson, all skills of language played a pivotal role, namely listening, speaking, reading, and writing. During the observation of lessons it was noted that two or three of the language aspects were integrated, as evident in the objectives clearly written out on the chart paper:

With the language objective being to read vocabulary, write numbers and names of objects, discuss ways of coming to school, and count with their partners, it was evident that language skills were being used. This meant that learners had more than one opportunity to engage in using a language aspect through listening, speaking, reading and writing even in a numeracy lesson, not specifically a language lesson (Personal Observation, September 9, 2010).

The following opinion was voiced by Kelly in an interview:

... with SIOP let's say, it's more language orientated, you know where there is a lot of repetition of words... (Kelly, interview, September 9, 2010).

For example, in a SIOP lesson, new vocabulary is emphasised through repetition throughout the lesson. The learner not only hears the word for the first time, he/she reads it, writes it out, and uses it in sentences, and therefore is ultimately able to converse using it:

during the week or the lesson we keep repeating those words to the child. We leave it on the wall, the child keeps on looking at the, er, words. So if we are maybe constructing sentences if the child wants the word, now house, the child looks at the word wall and he finds the word there (Kelly, interview, September 9, 2010).

In the observation of a life skills lesson in Grade 1, the new vocabulary was placed on the chalkboard for the learners to view, and the teacher read out each word for the learners to repeat. The teacher then asked learners to match the words from the vocabulary to the object through a game, which they enjoyed playing:

Learners played the *inner circle / outer circle* game wherein the former had a set of vocabulary cards and the latter had the matching object. The outer circle had to move around the inner circle until they found their match, then stood behind their partner. Example: toothbrush written on a flashcard and a toothbrush as an object. This required both the inner and outer circle to read the words on the vocabulary cards and discuss with their partners whether they were a match or not. Thereafter, they had to hold up their cards with the object, read out what was on the flashcards, and the rest of the class had to also read the card and say if they were correct or not (Personal Observation, September 9, 2010)

This newly acquired vocabulary was not forgotten after the lesson, but put up on a word wall where learners could review the words during the course of the week. As a result, these words become incidental reading. As lessons in the Foundation Phase were integrated, the words become more relevant as they could be used by the learners for other lessons:

Ok, in our... during our lesson if there is a new word that we introduce they normally, er, its normally written on flashcards which are then, er, kept for the duration of that lesson or maybe for the week or two weeks on a word wall. So whenever we make reference the children and referred to those words all the time. Not just during like, um, the morning drill work (Sam interview, September 9, 2010)

Some of the vocabulary also formed part of the sight-words or breakthrough words which learners were required to memorise, while those words that were not among the sight-words were additional vocabulary for the learner to establish in the SIOP lesson. During the observation it was also evident that vocabulary from previous lessons was displayed on the word wall, next to the chalkboard, making it easily accessible and visible for all learners:

There was a word wall where previous lessons vocabulary were placed and left for learners to refer to. (Personal Observation, September 9, 2010).

Thus, the lessons were not teacher-focussed, but rather learner-centred, calling for their active involvement through listening and discussing, reading and writing. Teacher's used the newly acquired vocabulary originating from the content of the lesson on flashcards, and through repetition:

Key vocabulary was reviewed through the game played - inner/outer circle. Key vocabulary was read out aloud by the teacher and learners read them out aloud as well. Key vocabulary was left on the word wall, where learners could make reference to it throughout the lesson (Personal Observation, September 9, 2010).

This vocabulary-building is an important facet of SIOP as newly introduced words are used for display words, words to read, writing sentences and topics for discussion. Initially, new words in the vocabulary list were associated with a visual cue, such as a picture, model or sign, so the learner could identify with the word and thus found it more meaningful. In the observation lesson, the content was on personal hygiene, so vocabulary from the lesson included words such as 'shower', 'soap', 'facecloth', 'bath', 'toothbrush' and 'toothpaste'. The actual item was brought into the classroom to assist the learners to identify it by matching it to the relevant

word, which was then added to the personal hygiene vocabulary on the word wall. It was interesting to observe that many items known to learners were not associated with the correct terminology, for example the toothpaste, which all of the African learners identified as 'Colgate'. In African languages, many Western commodities have no generic names, so the brand names are used. Therefore, words that learners acquire through conversations at home had to be corrected by the teacher explained. Vocabulary that is unfamiliar to ESL learners becomes more relevant, and English a more global form of communication:

Learners automatically talked about using 'Colgate' instead of toothpaste, 'Sunlight' instead of soap (Personal Observation, September 9, 2010).

Not only is vocabulary emphasised during the literacy periods, it is also relevant and equally important in other learning areas, such as life skills and numeracy. Teachers of SIOP find that they are now paying more attention to vocabulary in the other learning areas.

So there is a lot of language here orientated in SIOP even in numeracy; we are developing the child's language also. Where as previously in numeracy if we told the child 'two' we expect the child to know what is 'two'. You know now we using the words we using pictures as well to show the child there is two balls, you know, and if we using the word 'plus' we show the child the word 'plus'. First we used to say addition or plus and the child had to associate it with the plus sign. But now we have the sign, we have the word and we keep drilling it in every lesson we do er on numeracy (Kelly, interview, September 9, 2010).

Teachers are able to enhance learner vocabulary by incorporating language in all learning areas. Concepts that are relevant to the understanding the learning area are now understood by the learners, who are therefore able to apply and assimilate them. Currently, the FFLC assess Grades 3 and 6 in the LoLT of the school, with many of the questions in the question paper being contextual, and so requiring conceptual vocabulary from the learner. SIOP allows for the teaching of these concepts, improving understanding the question for the learner.

Learning a new language requires more than just a large number of lexical items that have to be mastered. The learner has to know and understand the meaning of the items and then be able to use the words associated with them in various contexts. Hugo (2008) states that learning vocabulary is part of mastering a second language, therefore the teachers should be acquainted with various teaching approaches and methodologies, and know when to implement intentional reading, which involves deliberately committing to memory thousands of words along with grammatical words, and incidental reading, which is learning by 'picking up' structures of a language through engagement with a variety of communicative activities, namely reading and listening, while the learner's attention is focused on the form but on the meaning (Alemi & Tayebi, 2011, p.82). The first few thousand most common words occur through extensive reading, with learners guessing the meaning of unknown ones. This process is incidental learning of vocabulary for the acquisition of new words and is the by-product of reading (Huckin & Coady, 1999).

With the new vocabulary that emerges from the SIOP lesson, the words are placed on the word wall, where the learners are able to read them, whether or not they have the intention of using them at that time. The significance lies in their having some exposure to the word, and therefore unintentionally reading it, or trying to make meaning of it in sight. Additionally, there is also a need for explicit vocabulary instruction in order to be able to read successfully at high school levels. Learners require a working knowledge of academic vocabulary, and this is developed by reading. Intervention at an early stage is essential to develop learners' vocabulary size and depth, and so allow them to cope with their high school textbooks. Teachers should view vocabulary and reading development as vitally important, making learners conscious of the value of words as the building blocks of language. Teachers must be made aware that learners need repeated exposure to words in order for them to become part of their productive vocabulary (Scheepers, 2008):

You know, SIOP is really helping us in that aspect, where we develop the child's language. Usually the child doesn't speak a word, but we keep repeating, they keep seeing it. Children, you know, while they are talking in the classroom, they talk to each other, say there's the word, show me where's the word, show me where's that word. (Kelly, interview, September 9, 2010).

Intentional reading was implemented in both classrooms, with objects in the classes being labelled, such as the door, cupboard, windows, floor, walls, ceiling, and chalkboard. The learners thus had an opportunity to read the words through looking around and not been asked to read by the teacher.

Intentional reading was carried out with emphasis placed on language highlighted through charts, which clearly indicated the objectives of the lesson. Made by the teacher, the charts were placed on the board for the learners to see. Not only did this give the learners direction as to what is expected of them during the lesson, but they could now start to engage in the language facet by reading the outcomes aloud and explaining to the teacher what was expected of them. The content outcome was directly linked to the assessment standards for the particular learning area:

Both content and language objectives were written on a chart paper and read out to the learners. They were explained to the learners in a clear and concise manner. Learners then read out what the objectives were and individual learners were called to explain what they meant. Three learners were called out so that the teacher could determine whether the learners understood what was expected of them (Personal Observation, September 9, 2010).

Once the language objectives had been explained to the learners, the difficulty lay in ensuring that all language aspects were incorporated in all lessons. However, research has indicated that literacy in most townships schools is viewed as a separate learning area, not as something integrated in all areas and aspects of learning (Scheepers, 2008).

During an observation lesson, the teacher was able to incorporate all aspects of language. Learners had the opportunity to talk in groups and with peers, read from the worksheet and flashcards, write down words on their worksheets and listen to the teacher and fellow peers. This allowed for a more activity-based lesson than traditional teacher-centred ones. SIOP, like OBE, encourages group work, and therefore discussion between peers is evident. One would find much more communication taking place in a SIOP class, as it encourages learners from talking in the LoLT. However, some teachers did encourage group discussion in mother tongue in order to promote diversity between learners:

we allow them to converse in their mother tongue because that's what they comfortable with and we have to acknowledge diversity... (Sam, interview, September 9, 2010).

Others were more comfortable with code-switching in the class. One participant preferred learners to communicate in English:

We make sure that they communicate in English. You know, because usually when one child speaks Sotho, we tell them 'What are we suppose to speak?' And the others will remind the child, 'No, no Sotho in the class, we speak English (Kelly, interview, September 9, 2010).

This particular teacher encouraged code-switching between learners so that they had an opportunity to take part in discussions in class. In the South African context, classroom code switching is an important topic and is widespread, especially in schools where the majority of teachers and learners use other languages alongside English (Van der Walt, 2009):

Even if the child speaks in broken English, at least he has a few words coming in there. And he understands those few words. But we try to, you know, sometimes the child just doesn't comprehend, so we try to bring in a Sotho word you know and er compare it now to an English word, translate (Kelly, interview, September 9, 2010).

An important element when incorporating language in the SIOP lesson is to review the language objectives at the end of lesson, so that learners know what they have achieved and to assist the teacher in terms of planning. In both observed lesson, this important element is taught at the end of the lesson.

The teacher did review the objectives after the lesson with the learners, asking them whether or not they had achieved the objectives or not. All objectives were reviewed at the end of the lesson, when the teacher asked learners:

1. *Did we talk about personal hygiene today?*
2. *Did we read our words from the word wall?*

The learners replied in the affirmative, saying they played a game with the words from the wall. All language and content objectives were read out and the teacher asked learners whether they completed it them as a class. All objectives had been covered in the lesson (Personal Observation, September 9, 2010).

4.3.2 Difference between traditional methods and SIOP

As noted above, SIOP is language-orientated and learner-centred., as teachers confirmed by emphasising that the teacher does not take it for granted that the learner knows anything. Each individual enters the class with their own background and knowledge, and the teacher assume they are “*blank slates*” (Kelly, Personal interview, September 2010). Therefore, all knowledge, skills, values and attitudes are imparted with the assumption that the learner does not know anything:

... and we don't take for granted that they know. That's the one thing with SIOP, you never ever take for granted that the children know (Sam, interview, September 9, 2010).

This assumption is relevant to ESL learners as teachers often assume that they understand certain concepts, words, phrases, but this might not be the case. All vocabulary is explained, not only content concepts, but also terminology such as ‘explain’, ‘describe’, ‘identify’:

You always, even if you talk about the three little pigs, you show them what a pig looks like because we take it for granted that everybody knows what a pig is, which isn't the case (Sam, interview, September 9, 2010).

Such concepts not only make the tasks more understandable to the learners, but importantly they allow for the development of skills, values and attitudes. In the traditional methods, no emphasis was placed on values or attitudes, and thus no emphasis was placed on explaining to the learner the reasons for them or what was expected of learners in the lesson:

Some children don't have a television in their house. Right, so now what we do is we bring all these words into the child's mind now and associate it with a picture or maybe the object (Kelly, interview, September 9, 2010).

In a recent study conducted by Hugo on the LoLT in African countries, it was found that in classrooms where learners are not taught in their mother tongue, only the teacher speaks. The children remain quiet because they do not understand what the teacher is saying (Hugo, 2008). The implications of this study is that because children do not understand what the teacher is saying, the teachers are forced to use traditional teaching methods, such as repetition of words or rhymes and memorisation. Such lessons thus become teacher-centred.

In the traditional methods we normally do a lot of drill work (Sam, interview, September 9, 2010).

In the traditional teacher-centred model, the focus has been on inputs, the topics to be presented or the sequencing of presentations, whereas the learner-centred approach focuses on the outputs, what knowledge the students have acquired and what abilities they have actually developed (Dreyer, 2004).

During our lesson if there is a new word that we introduce they normally, its normally written on flashcards which are then kept for the duration of that lesson or maybe for the week or two weeks on a word wall. So whenever we make reference the children are referred to those words all the time. So they are reinforced most of the time, not just during, like, the morning drill work (Sam, interview, September 9, 2010).

So if we are maybe constructing sentences, if the child wants the word... 'house', the child looks at the word wall and he finds the word there (Kelly, interview, September 9, 2010).

Vocabulary now becomes more accessible to the ESL learner, another difference between SIOP and the traditional methods was that the ESL learner is exposed to an extensive vocabulary from the first day;

They become part of the sight words and they, most of the times they are not (Kelly, interview, September 9, 2010).

BY contrast, in the traditional methods learners are only exposed to the prescribed sight words that are usually learnt through rote learning:

As the learners were talking about the modes of transport they use to come to school, the key vocabulary was put up on the chalkboard with *Prestick*. Example: car, bus, taxi, walk, bicycle, drive, transport. These words formed the key vocabulary on the board (Personal Observation, September 9, 2010).

With core words, the words do, that are in our core words like 'mom', 'dad', 'brother', 'sister'. So those words the children are exposed to but maybe the words like 'uncle', 'aunt' and 'nephew' and 'niece' are not. So when we do the SIOP lesson we introduce those extended vocabulary as well (Sam, interview, September 9, 2010).

This limits the learners' vocabulary and exposes them to words that might not be relevant to the ESL learner at that stage. When learners have a restricted vocabulary, it makes it very difficult for them to express themselves.

Vocabulary learning in both a first and second language involves systematic processes and rules in about word construction, which is a process that has to be learnt systematically (Hugo, 2008). As the new vocabulary is reinforced by placement on the word wall in the classes, this ultimately leads to incidental reading, which also improves the ESL reading and increases the learners' vocabulary.:

But what happens is, in SIOP, whatever we talk about, the children are exposed to that vocabulary. So that becomes incidental reading (Sam, interview, September 9,2010)

The assumption that learners enter the class not knowing anything encourages the teacher to be creative in terms of planning and preparation, which leads to many more activities per lesson, and more resources.

So they were, and I find there is more activity-based now. We have maybe three or four activities whereas in the old methods we just had, er, one lesson and that was it (Kelly, interview, September 9, 2010).

From observations of a literacy SIOP lesson, the topic of which was ‘matching words to pictures’, pictures of all the items that had to be matched were placed on the chalkboard with the words so that learners could visually match them. At the same time, the words were also phonetically sounded out for learners to be able to read out, so reinforcing reading in the class. Some learners were then chosen to pick out words from the chalkboard and explain what they meant, encouraging discussion in the class. Selected learners were called out to the front of the class to match the word with the picture, thereby modelling the activity. Learners were then expected to match the words with the pictures, allowing learners to write and read in a SIOP lesson:

... previously... my lessons were quiet flat because I didn't have, you know, so many aids to my lesson... here now with SIOP it's more the learner is learning and you know, also through handling the objects, to be working with the friends... the different activities that we do even to reach our goal. It really assists the learner (Kelly, interview, September 9, 2010).

4.3.3 Planning and Assessment

A challenge that emerged from the interviews was the planning and preparation expected for SIOP, which are time-consuming, even though the participants admitted that it was their duty:

Look the SIOP methods is a lot of work. It works at the end of the day but you have to put a lot of effort in (Sam, interview, September 9, 2010).

According to the Employment of Educators Act 76 of 1998, a core duty and responsibility of a teacher is to “prepare lessons taking into account orientation, regional courses, new approaches, techniques, evaluation, aids. in their field.” (Employment of Educators Act 76, 1998).

... being a teacher I know that it's my duty and I try to do it as best as I can'
(Kelly, interview, September 9, 2010).

Planning involves taking into account all resources needed for the lesson as well as additional information the teacher needs to gather for a particular lesson. Added to the time factor were the number of lessons to plan for per day, which in the Foundation Phase to cover three learning areas, namely Numeracy, Literacy and Life Skills. These should provide for the holistic development of the learner through interpretation of the assessment standards, planning for knowledge acquisition, skill development and formation of values and attitudes; assessing, recording and reporting on learner achievement and, lastly, illustrating learners' progression across the phase (DoE, 2003).

Ok, with SIOP, I must say it takes a very long time just to plan one lesson. You know it takes, er, it's difficult for the teacher because you got to get so much information, you know, do so much, get so much material together just for that lesson. Right, so it's very time-consuming which sometimes gets to me (Kelly, interview, September 9, 2010).

While conducting a document analysis on the teacher's preparation files, it was clear that planning a SIOP lesson would mean three detailed lessons preparation plans per day. For each, provision has to be made for a language outcome, and for reading, writing, talking and listening activities to take place in the lesson. Preparations require the teacher to write out detailed activities for each of the language outcomes, and ensure that the content outcomes are also covered in the lesson. SIOP lesson preparations also include writing out the language outcomes, content outcomes, strategies used in the lesson, vocabulary, supplementary materials used, background knowledge, and detailed steps in the meaningful activities for both content outcomes and language outcomes. Once the detailed lesson plan is written out, the language outcomes and content outcomes have to be written out so that teachers can put them on the chalkboard for learners to read and explain. The worksheets, flashcards and additional resources needed for the implementation of the lesson needs to be gathered and prepared; and the assessment needs to be drawn up. Together with planning, are the assessments, in

a process of collecting, analysing and interpreting information to assist teachers and other stakeholders in making decisions about the progress of the learner:

... the learners are tested. Sometimes they are tested orally, practically and you know while walking around, while they are doing a worksheet or whatever, we walk past and we have a look at whether the child has understood (Kelly, interview, September 9, 2010).

The National Curriculum Statement (NCS) provides a framework for assessments in Grades R-12 which is based on the principles of OBE. Classroom assessments should provide an indication of learner achievement in the most effective and efficient method by ensuring that adequate evidence of achievement is collected using various forms of assessment. These forms of assessment should be appropriate to the age and the developmental level of the learners in the phase (*Government Gazette*, 2006).

Although the teachers used various forms of assessments in their classes, they felt that practical demonstration was the most suitable for ESL learners. They preferred to assess learners individually through practical demonstrations:

... if they work individually you have a better understanding you know, during the, er, writing a worksheet or filling in an answer or during practicals, you call them out one at a time (Kelly, interview, September 9, 2010).

The use of question-and-answer forms of assessments had more limitations for the ESL learners as they lacked the vocabulary and reading skills to read and answer questions at this level, added to which they were too young to be exposed to a question paper. However, towards the end of the school year, the level of the ESL learners' reading had increased greatly, as they were able to read questions and answer questions independently. Evidence of this was the increase in the SAMP results in 2009, the 20101 results (further discussed in Chapter 5), and the satisfactory ANA results:

...in terms of what levels they were when they came and what levels they were when they wrote the ANAs, was a big difference (Sam, interview, September 9, 2010).

Even though practical demonstration was advocated as the best method by the teachers in this research, it also has challenges which teachers have to face, including high noise levels, especially in group work. In the class I observed were 36 Grade 1 learners doing group work, which was very challenging for the learners as they could not control their excitement. Although the noise level was quite high, it was constructive noise, but the teacher had to ensure that learners were doing the task that was planned, and that learners were able to talk in a voice that was tolerable:

They enjoyed the lesson, showed enthusiasm by taking part in the activities and at one stage, becoming a bit loud in the class (Personal Observation, September 9, 2010)

The teacher had to walk around continuously and monitor discussions between learners. Another challenge in group work is to guard against the learner who is able to work independently, taking over the task and not giving everybody a fair and equal chance of attempting the given task. There are many ways to overcome this challenge, such as assigning various roles and responsibilities to different members of the group, and so ensuring that each member has a different role in completing the task. However, this entails more planning and preparation by the teacher, and for three lessons a day increases the time spent in preparation.

4.3.4 Learner Attitude towards SIOP

Learners are having more fun in the classroom and are enjoying the lessons more, with teachers giving learners the opportunity to explore on their own and at their own pace. Learners are also given a chance to communicate with their peers more in the class and are thus breaking down cultural and communication barriers. Learners in a SIOP class are much more excited during lessons as they want to do the various forms of activities, with tasks that are not mundane. Learners display eagerness and willingness to learn, as evident in their demeanour in the class:

... I would say a typical SIOP lesson is you know, breaking up these walls (Kelly, interview, September 9, 2010).

Learners were actively engaged in all activities in the lesson. They firstly had practical tools for counting (yogurt cups), which they really enjoyed. It took the boredom out of counting. Secondly, they were involved in constant discussion in the lesson (Personal Observation, September 9, 2010)

Learners were constantly engaged in the lesson. Firstly, by role-play, where they had to role-play cleaning a baby doll. Secondly, in the inner-circle / outer-circle game, and lastly in the individual activity they were doing by writing. The teacher ensured that the lesson was fun, exciting and like a game for the learners. They enjoyed the lesson, showed enthusiasm by taking part in the activities and at one stage, becoming bit loud in the class (Personal Observation, September 9, 2010).

In my observation of the classes, I found that learners were continually engaged, reading from the chalkboard, being called out individually to explain certain words, counting cups in pairs, and writing or counting individually. There was constant learner participation and it was clear that the lesson was learner-centred.

With SIOP, I think learners are actually talking for themselves. You know they become more aware, more alert (Kelly, interview, September 9, 2010).

To ensure that all learners were given an equal opportunity and the process was carried out fairly, the teacher made use of a 'magic cup', which held ice-cream sticks with all their names written on individual ones. The teacher would randomly ask a learner to pick out a stick and read the name on it. This ensured that every child had a fair chance of answering a question or giving an explanation, and kept the learners alert at all times, as they were not sure if their names would be called out. This strategy employed through the SIOP programme gave the shy learner an opportunity to express himself/herself in English and it allowed for random selection of learners by the teacher.

The teacher used a 'magic cup' where all the learners in the class had their names written on an ice-cream stick. This 'magic cup' was used to call out names randomly ensuring that all learners were given an equal opportunity to talk/discuss. (Personal Observation, September 9, 2010).

Learners learning a second language often have a low self-esteem, associated with the level of second language proficiency. The assumption is that learners with a high self-esteem are less likely to feel threatened when communicating in a second language, while those with limited proficiency often lack self-confidence to speak in English and consequently appear shy (Hugo, 2008):

Any learner who was not actively involved was roped into the lesson by being made to answer questions and come up the front of the class to point out a picture, word, etc. (Personal Observation, September 9, 2010).

SIOP gives learners with low self-esteem an opportunity to converse orally in the classroom through visual cues, displayed at all times for the ESL learner to make use of:

... they look around all over the classroom and they use words from the walls, that you know we haven't used as yet (Kelly, interview, September 9, 2010).

During the practical demonstration of a lesson observed, learners were asked to show how they would brush their teeth, clean the ears and wash their bodies. This role-playing in the class really motivated learners and encouraged them, as they were then able to match the word with the action. The learners were thoroughly enjoying the role-play and it was evident in their enthusiasm and exhilaration. To review the concepts and vocabulary taught in that lesson, the teacher divided the class in two groups. Group 1 was called the inner circle and Group 2 the outer circle. Group 1 had the vocabulary on flashcards and made a circle, while group 2 had the object that they had to match with the vocabulary and made a circle on the outside of Group 1. The outer circle then had to rotate clockwise until they matched their object with the vocabulary. All the learners were involved and excited with this activity. When all had matched the object with the word, each pair held up their word with the object and read it aloud to the class.

Teachers also found that learners who are exposed to the SIOP programme were more competent in Grade 2. There was less repetition of Grade 1 work and the learners had an expanded vocabulary in Grade 2:

... the teachers find there is an improvement, especially in the literacy. Compared to the previous time, they don't have to really go back much into Grade One and into the grade phonics and flash words because children have covered it. They know much more... teachers are basically happy with what's going on in the Grade One (Sam, interview, September 9, 2010).

Hugo (2008) states that language skills such as listening, writing and speaking cause many barriers to the ESL learner in the classroom. Poor listening skills could be attributed to the young learner having been bombarded with oral information, which results in their ignoring important discussions in the classroom. As a result, they choose to pay little attention in class due to lack of understanding of what is being said. Regarded as the first language skill, listening is receptive and a prerequisite for other skills. ESL learners tend to become frustrated when they do not understand what is being said in English, and this could lead to poor interest and low commitment to learning the second language (Hugo, 2008).

4.3.5 Grade R influence

With the influx of ESL learners in many schools, it is common for teachers to find an ESL learner with no knowledge of the LoLT. Thus, they are entering schools with no Grade R or pre-school exposure, resulting in learners who have no BICS when entering Grade 1.

Because if you look at the children coming into Grade One, they don't speak, they don't understand English, whereas three years ago, they could at least understand you. So when they come into Grade One, they come with basically nothing (Sam, interview, September 9, 2010).

This can become problematic for ESL teachers, as many learners do not speak any English in the class. Through implementing SIOP, vocabulary becomes more accessible at all the times for learners through the word wall, and this encourages the ESL learner to start using the vocabulary posted there:

You know, they start opening up to us and they start understanding what all these words mean. So it helps us because of the language... where we develop the child's language (Kelly, interview, September 9, 2010).

In an observation class, a particular learner who displayed signs of being physically handicapped had very limited language, not talking any English and seldom speaking to peers in the class. He was the second twin born and had suffered a lack of oxygen during the birth process, leaving his command of both home language and LoLT limited. He also walked with a slight limp. As a result, he was not exposed to Grade R and came into Grade 1 with limited language. The teacher had to ensure that that he received additional support all the time, due to his disabilities and because he had not received pre-school training. Generally unaware of teaching and learning in the classroom, he needed support on all aspects of work and was often found trying to walk in a straight line on the tiles or on the number line drawn on the tiles. Had he had exposure to Grade R with the rules and regulations regarding a classroom, he would have been more prepared for Grade 1, and emotionally more prepared for formal schooling. Using SIOP in the class enabled the teacher to concentrate on vocabulary acquisition, practical activities and intervention with which the learner could cope, without placing the other learners in the class at a disadvantage.

There was one learner who had a physical disability and he enjoyed walking on the number line in the front of the class. He, however, needed support from the teacher all the time as he was unable to cope with the work (Personal Observation, September 9, 2010).

Research has shown that increased interest in prenatal and infant health, as well as in high-quality pre-school education programmes, will improve children's life chances and generate benefits to society (Duncan, Ludwig & Magnuson, 2007). Benefits that are advantageous for children who receive pre-school education are particularly important for low-income families. Mediocre centre-based day-care can have negative developmental consequences, and studies have shown that the years before the age of 5 are critical (Desimone, Payne, Fedoravicius, Henrich & Finn-Stevenson, 2004). In a study conducted by Barnett, it was found that compensatory pre-school education has important effects on long-term school success, which was

again validated by the Perry Pre-school Project, which began in 1962 in Michigan. The aim of the project was to learn if a pre-school education programme could improve the school success of children in low-income black community who historically did not fare well in the school system (Barnett, 1992). The findings from the programme were that the group who had received intervention at age 4 had shown improvements in their achievement test scores. At age 14 the group was ahead by 1.2 grade equivalents on language and maths, and at age 19 scored higher on the adult level, an achievement test designed to measure the skills and knowledge needed for educational and occupational success. The data obtained from this study also indicated that the pre-school group had snowballing effects on school success, as they spent less time in special educational classes, were less likely to be classified as mentally challenged, and were more likely to graduate from school (Barnett, 1992).

Besides the cognitive and social benefits formal pre-school has had on children, another important aspect is the role of language in a Grade R classroom. The language policy formulated by the DoE states that children in the Foundation Phase be taught in their mother tongue. When learners have to make the transition from their home language to an additional language, this stage needs careful planning (DoE, 2002). As the Grade R class is the lowest level of the Foundation Phase, learners are to be taught in mother tongue. However, South Africa has eleven official languages, nine of which are African. The intention of the language policy is that learners from all language groups be taught in their home language (de Witt, Lessing & Lenyai, 2008), however, most parents oppose this. The challenge is that the child's literacy development depends on how language was presented at home, on the child's language proficiency, learning style and attitude. Language skills of disadvantaged learners are generally poor, which has had a negative effect of their ability to learn. Poor environments are not conducive to fostering language development (Jackman, 2001).

Most children experience a second language for the first time when they enter nursery, pre-school or school. When they begin conversing in a second language they usually have to acquire the first or home language. This transfer of learning takes place more easily when the child is exposed to the same experiences through

which the first language was learned (Brumfit, 1997). If not exposed to a formal Grade R class the second language learner is not exposed to the language experiences that would enable him/her to improve literacy levels, which in turn could hinder second language development:

They were at a formal Grade R, although Grade R is suppose to be compulsory, a lot of them go to nursery schools and they don't do much. So when they come to Grade One, they come with basically nothing (Sam, interview, September 9, 2010).

4.4 Conclusion

This chapter focused on the results of the qualitative data analysis through interviews and observations. A description of the sample was given in terms of the selected school, learner population and educators who participated in the study. The five themes that emerged from the data were discussed, the main aim being to address the research questions as to what extent SIOP differs from traditional teaching methods; how it affects teacher's planning and instruction in the classroom, and the extent to which learners understand the content when the teachers are implementing SIOP.

Relevant findings were that SIOP is a programme geared towards language. The teachers emphasised that the integration of language in any learning area was important and necessary. These language aspects, particularly reading, writing, talking and listening, are also written out so that learners become aware of the objectives that they have to fulfil in the lesson. Further, emphasis on new vocabulary also played an important part in a SIOP lesson. By placing vocabulary words on a 'word wall', learners could use these in other learning areas and read them, reinforcing what they had learnt in the lessons. This emphasis placed on vocabulary resolved issues such as Western words used in African languages. The importance of placing emphasis on vocabulary to increase the learners' vocabulary makes reading easier, which is necessary for the annual ANA test, in which ANA items are mostly contextualised questions.

It was also evident that there was once again an emphasis on language integration, whereas the traditional methods viewed language as a separate learning area. The teachers interviewed and observed found that when implementing a SIOP lesson, nothing should be taken for granted and it was assumed that learners in the class had little or no background knowledge. Therefore, all instructional or old and new vocabulary was explained to the learners and placed on the word wall. This is important in classes where English is not the mother-tongue, where children keep quiet due to lack of understanding of what the teacher is saying (Hugo, 2008).

Although interviews and observation were the dominant data collection strategies, document analysis was also conducted on the teachers' lesson preparation files. Evidence from the document analysis showed much preparation is necessary for the effective implementation of the SIOP programme. Each lesson needs to be meticulously planned, with the vocabulary words written out on flashcards, and the language objectives and content objectives written out on chart paper. Worksheets need to be prepared as well as assessment tasks, according to the assessment plan. The teachers interviewed felt that for the Foundation Phase, this meant planning three lesson plans per day, one for each learning area. Assessment of learners focussed primarily on practical demonstrations, especially for ESL learners. The use of question-and-answers had more limitations as it required the learners to have an extensive vocabulary, making the SIOP programme more realistic for such schools. However, there are challenges with practical demonstrations as a means of assessing, such as the high level of noise associated with group work.

Nevertheless, though classes could become very loud, learners expressed enjoyment and excitement in a SIOP lesson. From the observation field notes, they enjoyed playing games that focussed on vocabulary emphasis, and were given a fair opportunity to discuss and talk in the class through the use of the 'magic cup'. They showed enthusiasm during the lessons, and were actively involved rather than passive listeners. They were given an opportunity to engage in all language aspects and evidence from interviews conducted showed that there was a marked improvement in the learners' discussions. They were now 'talking for themselves', which instilled a greater level of confidence in ESL learners, who might otherwise

lack self-confidence to speak in English (Hugo, 2008). The word wall assisted in sentence construction and communication.

Interestingly, the influence of pre-schooling on an ESL learner emerged from the data as a revelation. Learners who had exposure to Grade R fared better in acquisition of new vocabulary and communicated better with the teacher in English. It was also evident that those who needed additional support benefited more from the SIOP programme, as they received the necessary support with regards to language and understanding English. As noted above, learners who do not have pre-schooling exposure come into Grade 1 without the basic communication skills: "*they come with basically nothing*" (Sam, interview, September 9, 2010). Therefore, the need for ESL learners having pre-school exposure is evidently important for learning in a second language.

The following chapter elaborates the research question on the extent to which SIOP improves academic performance in ESL learners. The focus is on analysing quantitative data collected by the University of Pretoria.

CHAPTER 5

PRESENTATION AND FINDINGS OF QUANTITATIVE DATA

5.1 INTRODUCTION

The focus of this chapter is on the analysis of data collected quantitatively by fieldworkers working at the Centre for Evaluation and Assessment, University of Pretoria, and a secondary analysis of the data as it addresses the research topic, namely: “The extent to which SIOPI improves the academic performance in primary schools where the LoLT is different to the mother tongue”. In order to find whether there had been an increase in academic performance, statistical tests were carried out on descriptive and inferential statistics. The former were specifically used to transform a set of numbers into indices that describe the data, and were useful as the data is summarised for ease of interpretation. However, because they deal with samples, there is always a degree of uncertainty. (Wilson & MacLean, 2011). Thereafter, inferential statistics are used to make inferences about the similarity of a sample to the population from which the sample is drawn, and are thus used in the reporting of results (McMillan & Schumacher, 2001). Inferential statistics help generate conclusions and provide a measure of the uncertainty accompanying the conclusions (Wilson & MacLean, 2011).

5.2 Description of Sample

The target school for this research was selected because it was part of the SAMP project and because this school was implementing the SIOPI programme in 2010. However, a comparison school was used to provide a broader description, but not analysis, of the research and further information regarding the research. It must be noted that this research is not an experiment between the target school and the comparison school, but the description is included to provide additional information. In keeping with the research question, the aim here is to determine academic gains

obtained in the target school, therefore a description of the comparison school and whole sample is included.

5.2.1 Target School

The target school that participated in the study was purposefully selected because the teachers were implementing the SIOP programme and had already been selected by the CEA as part of the SAMP project. Those same teachers were therefore used for the observations and interviews. The numbers of participants in the baseline assessment were 39 boys (49%) and 41 girls (51%) in Grade 1, and in the follow-up assessment 35 (47%) boys and 39 (53%) girls . The learners who participated in the baseline assessment but not in the follow-up assessment were excluded from the analysis of the data.

5.2.2 Comparison School

The comparison school was purposefully selected in that it was the only school that was similar in terms of demographics and location. Similar to the target school, the comparison had a majority of African learners, with teachers who did not speak any African language. The LoLT was English, which makes the learner population of the schools ESL learners. The total numbers of learners who participated in the SAMP project for the comparison school were 79 in 2009 and 76 in 2010.

5.2.3 Whole Sample

There were 22 schools participating in the study, selected for maximum variation based on language of instruction and geographic area. Multi-phase sampling took place as they were initially stratified according to language of instruction. Seven schools were selected (two Afrikaans, three English and three Sepedi medium). A total of 1,700 learners took part in the 2009 baseline and follow-up assessment, while a similar number of learners took part in 2010.

Although the purpose of this research is to determine increased academic performance and not gender differences, the gender differences is included in this chapter for descriptive purposes:

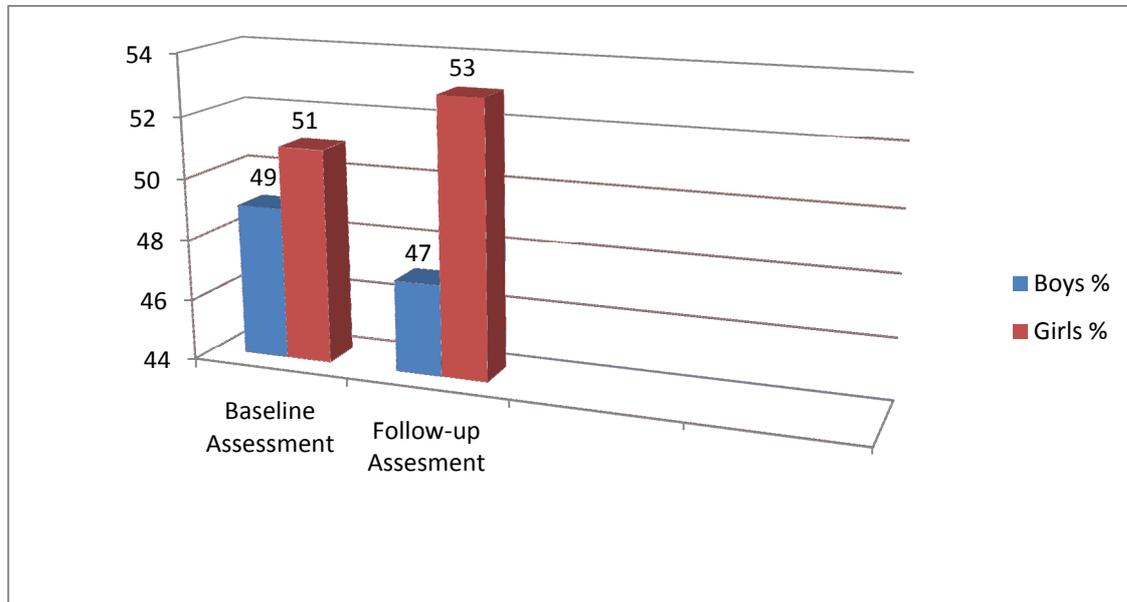


Figure 5.1: Differences in gender between baseline and follow-up assessment.

5.3 RESULTS

This section explores the descriptive statistics found in the research, with attention paid to each subtest taken during the testing phase.

5.3.1 Descriptive Statistics

Descriptive statistics describe and present data in terms of summary frequencies, which include mode, mean, median, minimum and maximum scores, range, the variance, standard deviation, standard errors, skewness and kurtosis (Cohen, Manion & Morrison, 2005). Measures of central tendency are summary numbers that represent a single value in a distribution of scores and are expressed as an average score or the mean, the middle set of scores or the median, and the most frequently occurring score or mode (Creswell, 2005). A measure of central tendency provides

information about the score around which the data tends to centre, describing an entire group score as a whole or average (Wilson & MacLean, 2011).

5.3.1.1 Total Assessment Results

The following graph indicates average performance of the baseline assessment of the target school, the comparison school and the whole sample for the baseline assessment that took place during 2009 and 2010):

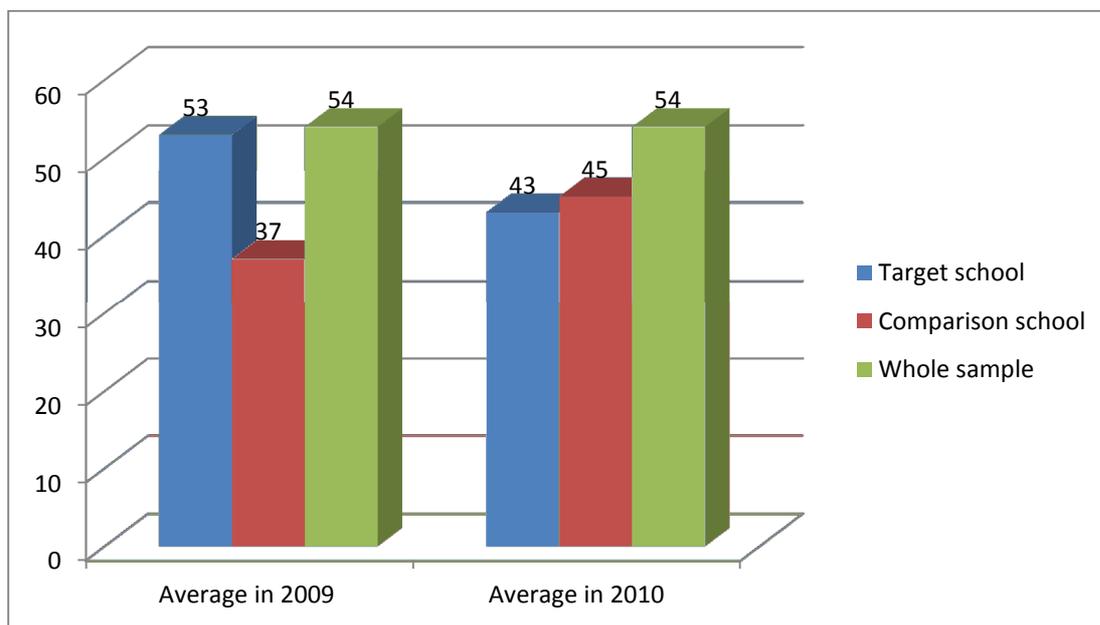


Figure 5.2: Total average of baseline assessment between 2009 and 2010.

In 2009, the target school achieved an average of 53%, which is very similar to the average of the whole sample (54%). The comparison school achieved an average of 37%, which is lower than the whole sample and target school. In 2010, the target school achievement was not as high as in the 2009 baseline total results or the whole sample. The comparison school did however achieve a higher average than in 2009.

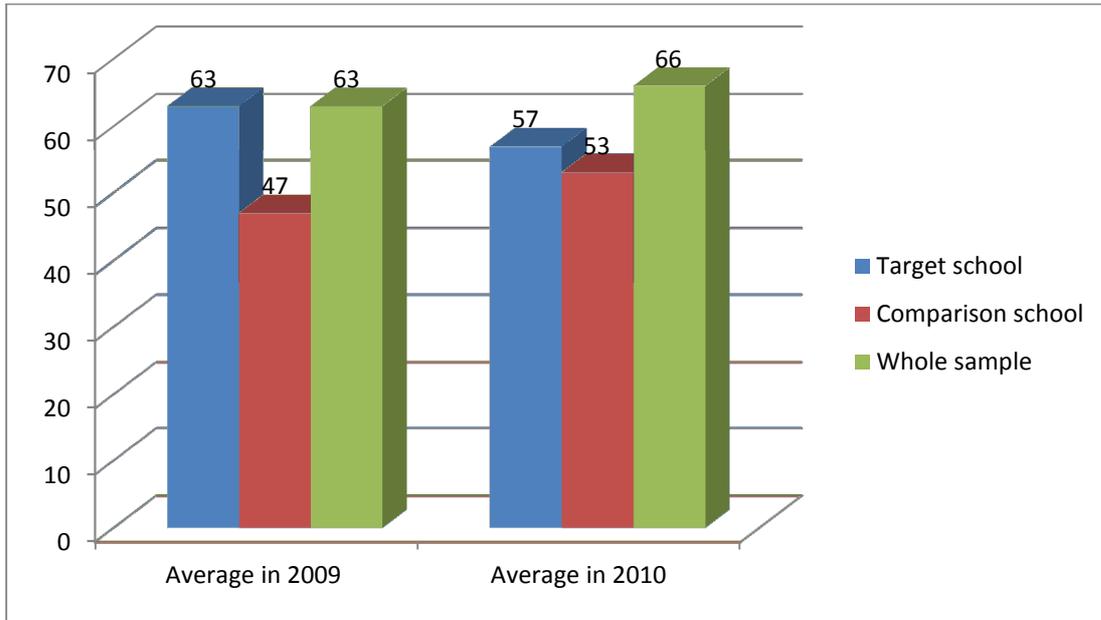


Figure 5.3: Total average of follow-assessment between 2009 and 2010.

Figure 5.3 (above) indicates the follow-up assessment of the target school, the comparison school and the whole sample. The total average for the baseline assessment of the target school in 2010 was 43%, while the follow-up for the target school in 2010 was 57%. A 14% gain was achieved in the overall assessment in 2010. The comparison school only made a 6% gain from the baseline to the follow-up in 2010, while the whole sample only had a 12% increase in 2010.

5.3.1.2 Phonics Results

In terms of phonics, the target school achieved an average similar to the whole sample, while the comparison school achieved a lower percentage in the baseline assessments for 2009. The averages obtained in the baseline in 2010 indicate a low percentage in the target school compared to the similar averages obtained by the comparison school and the whole sample, as can be seen in Figure 5.4:

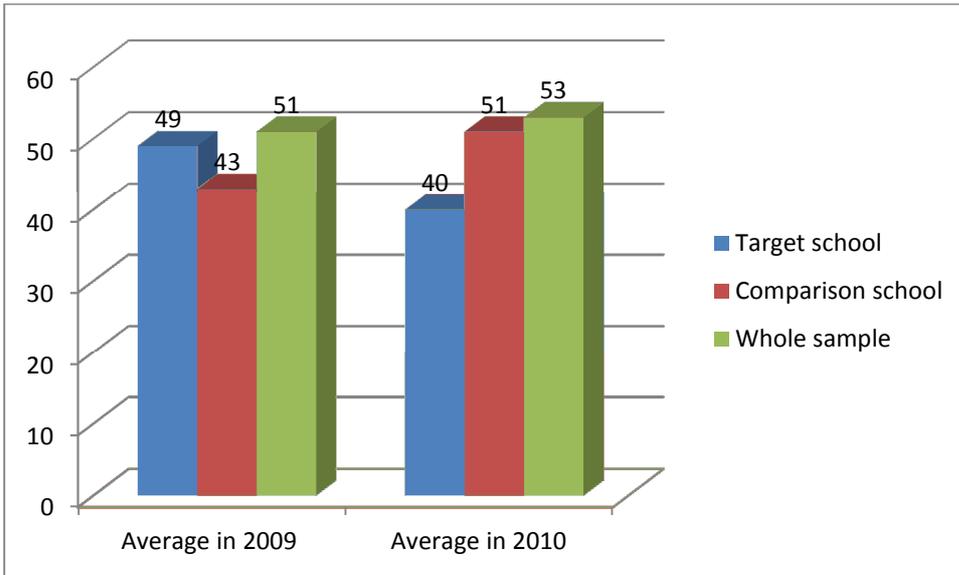


Figure 5.4: Phonics Averages obtained in the baseline assessment in 2009 and 2010.

Figure 5.5 (below) shows the gains made in the follow-up assessments in the phonics subtest in 2009 and 2010. The results for 2009 indicates that the comparison school had a lower percentage than both the target school and the whole sample, whereas in 2010, the percentage was not as low:

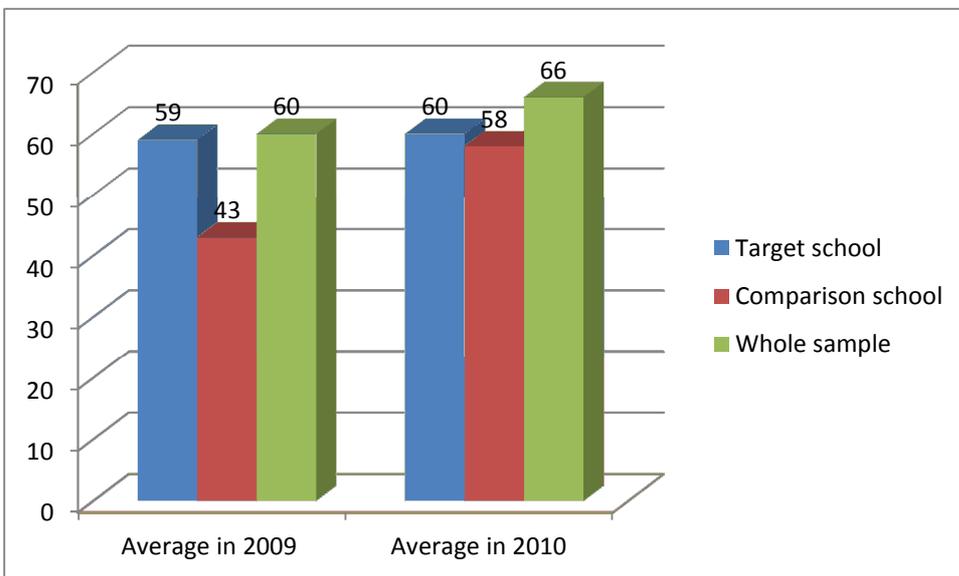


Figure 5.5: Phonics Average obtained in the follow-up assessment in 2009 and 2010.

However, when comparing Figures 5.4 and 5.5, the average for the baseline assessments for the target school in 2009 was 49% in 2009 and 59% in 2010, indicating an increase between the baseline assessment and follow-up of 10%. The target school did achieve an average of 20% increase between the baseline assessment in 2010 and follow-up assessments in 2010. There was no difference in the comparison school between the 2009 baseline and follow-up assessment and a slight difference of 8% in 2010, but the whole sample increased by 9% in 2009 and by 13% in 2010.

5.3.1.3 Mathematics Results

The following graphs indicate the Mathematics Results obtained from the data analysed.

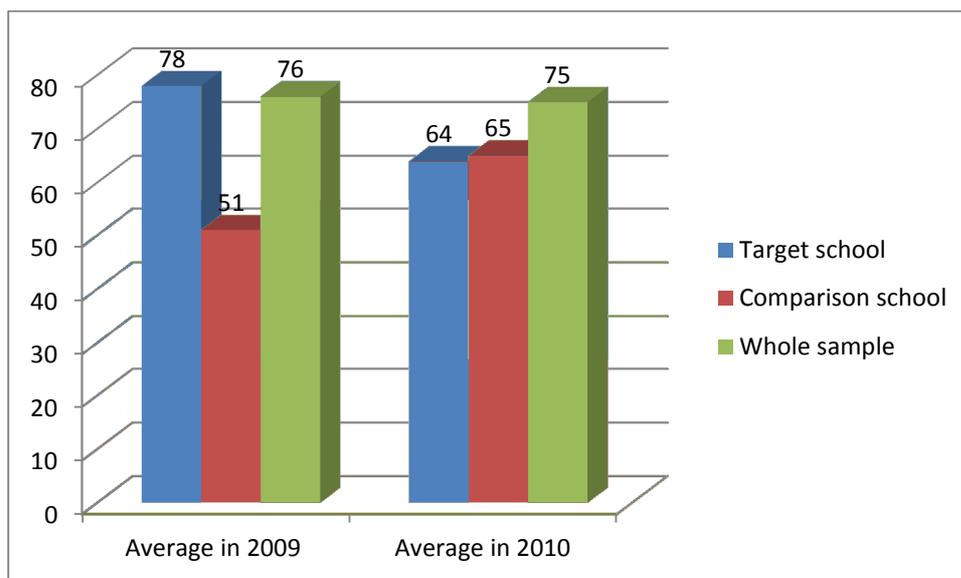


Figure 5.6: Baseline averages for Mathematics in 2009 and 2010.

As Figure 5.6. (above) shows, the baseline assessment shows a high percentage in 2009, higher than both the comparison school and the whole sample (51% and 76% respectively) . The comparison school showed a low percentage average compared to the whole sample. However, in 2010, the target school showed a lower average than in 2009 and 1% lower than the target school, which could possibly be attributed to the calibre of learner population that came into the school in 2010. Both target

school and comparison school performed below the whole sample average in 2010. The baseline assessment also showed that both the target school and comparison school achieved lower than the whole sample.

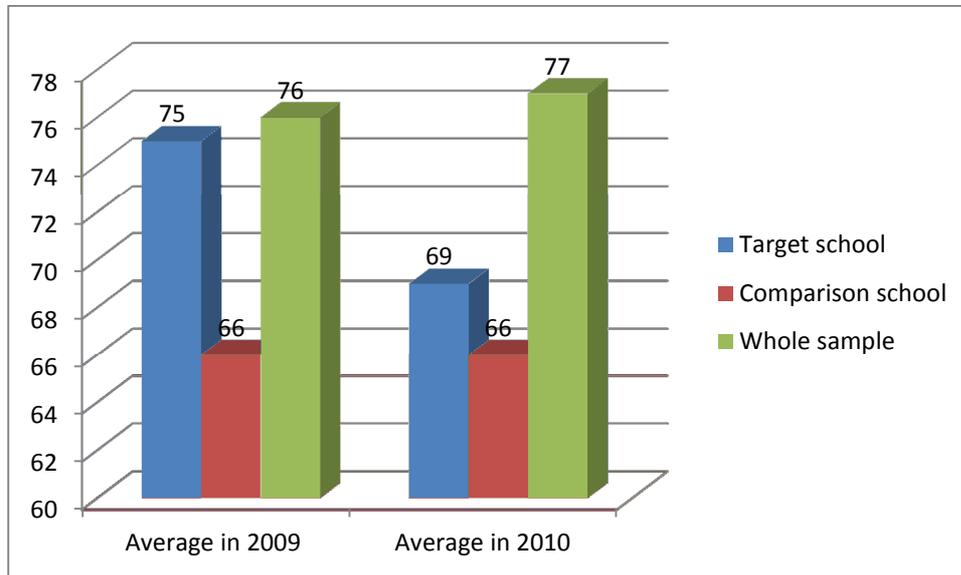


Figure 5.7: Follow-up averages for Mathematics in 2009 and 2010.

In the follow-up assessments (Figure 5.7, above) the target school showed no improvement in 2009 and the percentage actually dropped by 3%. However, it showed an increase in achievement of 5% in 2010, while both the comparison school and the whole sample decreased in their averages in that year.

5.3.1.4 Reading

Generally, reading fared the lowest of the tests. Figure 5.8 (below) shows that in 2009 both the target school and the comparison schools showed a lower average compared to the whole sample. Nor did the whole sample achieve high averages compared to the other tests (phonics (51%) and mathematics (76%), taken in 2009 (Figures 5.4 and 5.6, above). However, the target school did achieve a higher average than the comparison school, with a difference of 13%. The baseline average in 2010 showed a decrease in achievement from the target school from 2009 to 2010, but with a higher achievement than the comparison school.

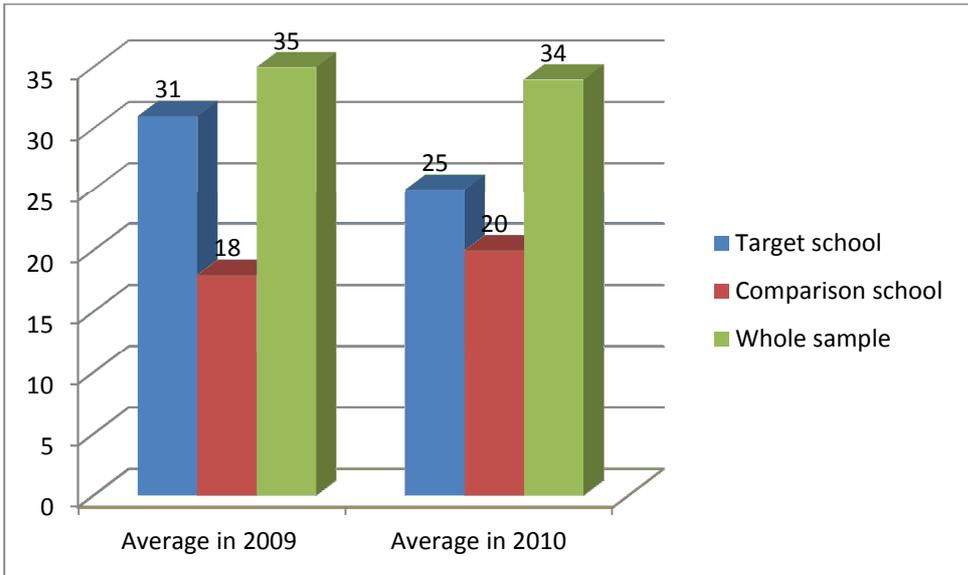


Figure 5.8: Baseline averages in Reading in 2009 and 2010

However, the average for the follow-up assessment of the target school in 2009 was higher than both the comparison school and the whole sample (Figure 5.9, below). While the average for the target school in 2010 was higher than the comparison school, it was lower than the whole sample. When comparing averages in reading from 2010 baseline assessment to 2010 follow-up (Figures 5.8 and 5.9) there was an increase of 18% in the target school, 15% in the comparison school and 21% in the whole sample.

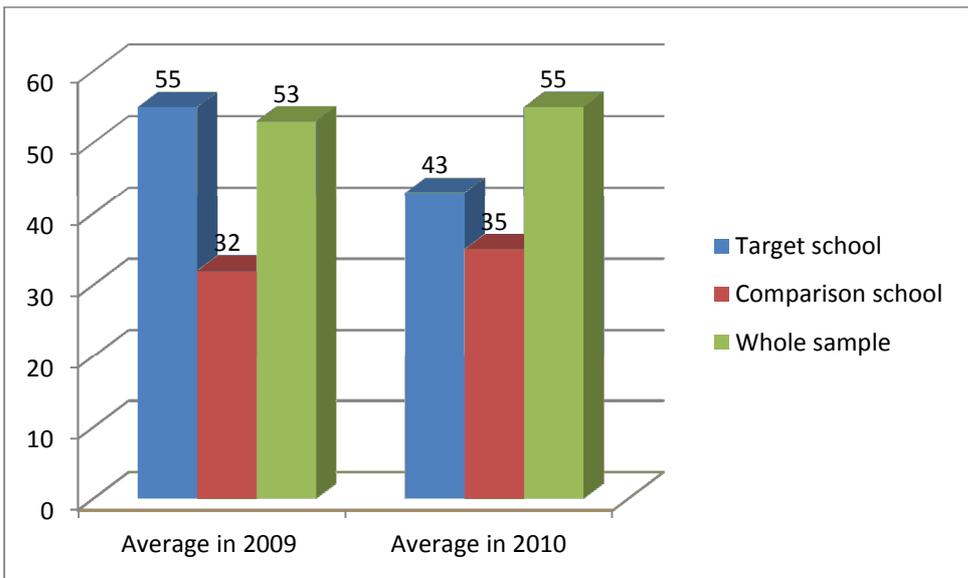


Figure 5.9: Follow-Up averages in Reading in 2009 and 2010.

5.3.1.5 Gains achieved overall in 2009 and 2010

The difference in performance from baseline to follow-up was illustrated in Figure 5.10. The target school showed a greater gain in 2010 (22%) than in 2009 (18%). Although no research for the effectiveness of SIOP was conducted during 2009, the main purpose is to illustrate the difference between the overall gains achieved in 2010 compared to 2009, where no SIOP was being implemented.

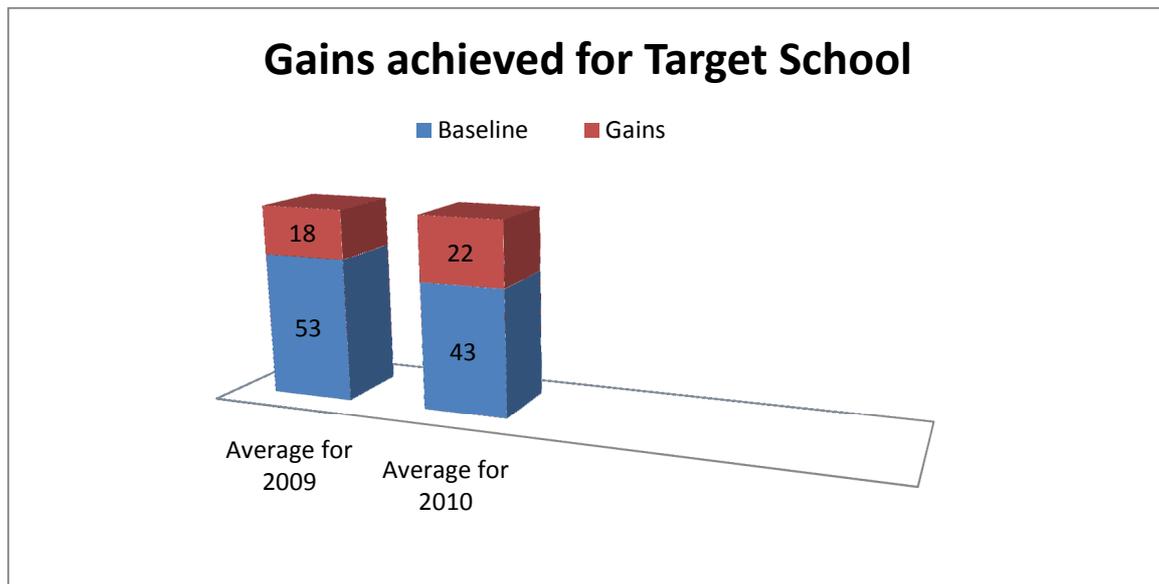


Figure 5.10: Illustration of gains achieved by Target School in 2009 and 2010.

Figure 5.11 (below) illustrates the gains made by the comparison schools in 2009 and 2010. 2010 shows an increase of only 8% compared to the Figure 5.10 which showed an increase of 22% in the target school.

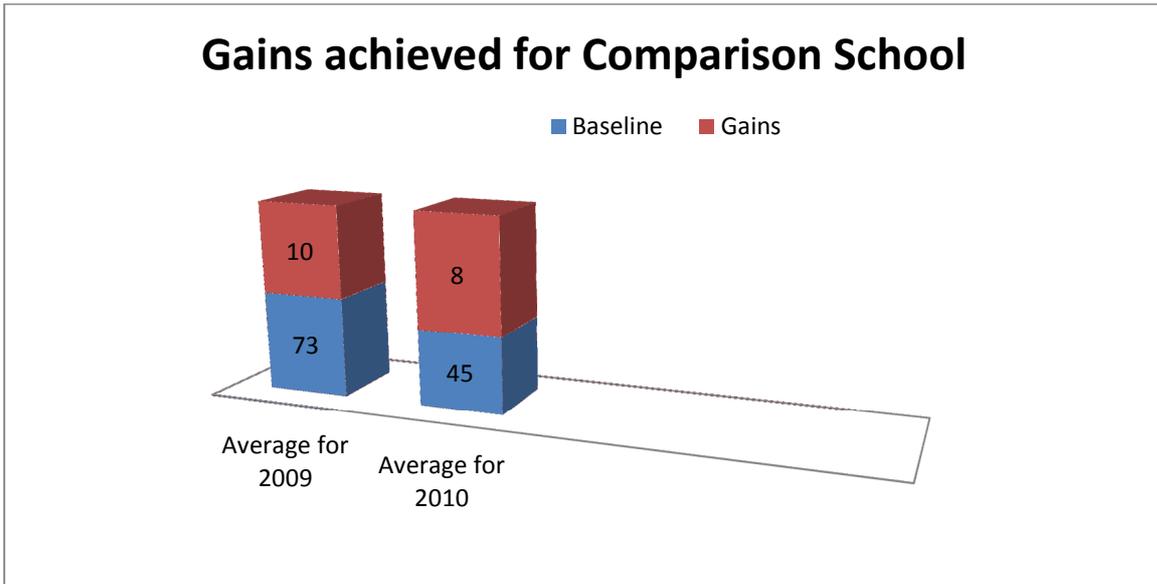


Figure 5.11: Illustration of gains achieved by Comparison School in 2009 and 2010.

Figure 5.12 shows the gains achieved in 2009 and 2010 by the whole sample. 2009 shows an increase of 9% while 2010 shows an increase of 12%.

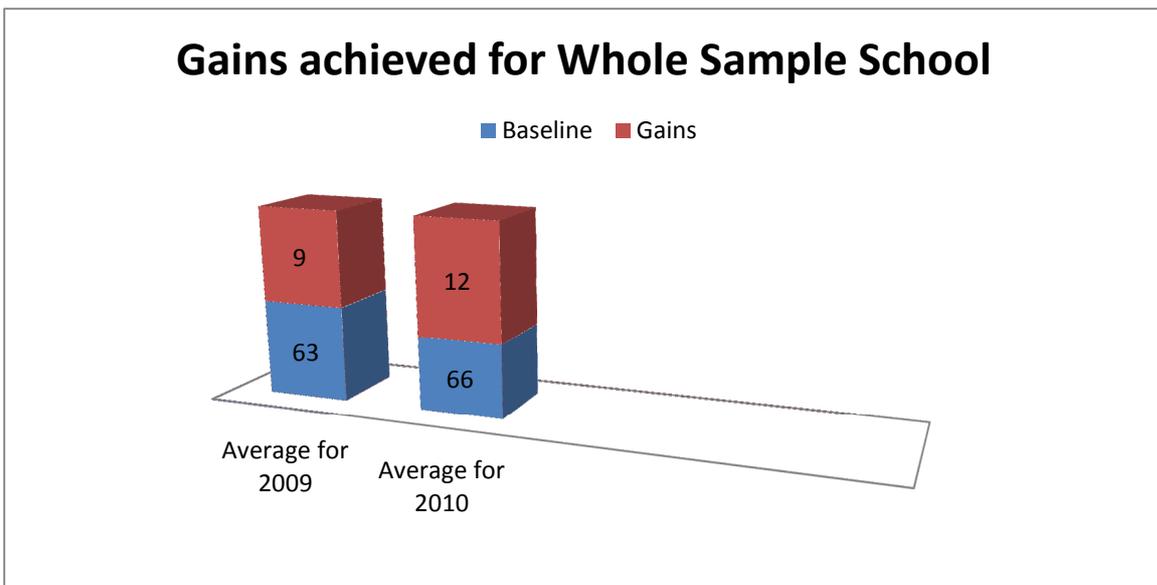


Figure 5.12: Illustration of gains achieved by whole sample in 2009 and 2010.

5.5 PAIRED-SAMPLES T-TEST

A paired-samples t-test is used when comparing two means, baseline and follow-up from the target school which are not independent but related in some way. This means that the same people have taken part in both conditions, therefore comparison is being made of the scores of one group of people under one condition, with the scores under another condition (Wilson & MacLean, 2011). The purpose of the t-test is to test a hypothesis that the researcher may have, to test the viability of the null hypothesis in light of the data available, therefore the hypothesis for this research is as follows:

H_0 = there is no significant difference between the scores of the baseline assessments and the follow up assessment

H_1 = there is a statistical difference between in the results between the baseline assessment and the follow up assessment

In the case of the t-test, the null hypothesis is that there will be no difference between the means; the alternative hypothesis is that there will be a difference between the means. Therefore, if the t-value is in the extreme 5% of the distribution, it would imply that the result was highly unlikely if the null hypothesis was true. The null hypothesis would therefore be rejected and the alternative hypothesis would be the best available explanation (Wilson & MacLean, 2011).

Although no experiment was undertaken for this research, the research shows that the null hypothesis (H_0) indicates that there is no significant difference between the scores of the baseline assessments and the follow-up assessment. The alternative hypothesis (H_1) would therefore be that there is a statistical difference between in the results between the baseline assessment and the follow-up assessment. The significant level used for rejecting the null hypothesis is typically the 0.5 or the 0.01 level. For the purpose of this research the 0.5 significant level was used. The paired t-test assumes that the differences between the pairs are normally distributed (<http://udel.edu/~mcdonald/statpaired.html>).

The table below (Table 5.1) illustrates the percentages of the baseline assessment and the follow-up assessments in each of the sub-tests.

Table 5.1: Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Baseline scale% English	42.1	75	12.808	1.479
Follow-up Total Scale English%	57.12	75	15.09	1.743
Baseline Scale Phonics%	40.19	75	16.218	1.873
Follow-up Phonics Scale %	59.87	75	21.604	2.495
Baseline Reading Scale %	23.15	75	14.033	1.620
Follow-up English Reading Scale %	42.96	75	21.915	2.531
Baseline Mathematics Scale %	63.36	75	17.296	1.997
Follow-up Mathematics Scale %	68.77	75	13.474	1.556

The above data indicates that the greatest difference in mean score was in the phonics and reading scale (19%), while the lowest difference was found in the mathematics scale.

Table 5.3: T-values, degrees of freedom and the Significant values

	t	df	Sig. (2-tailed)
Total scale%- follow-up Total scale English	-10.694	74	.000
Phonics Scale%- Follow-up Phonics Scale%	-6.603	74	.000
Reading Scale%- Follow-up English Reading Scale%	-11.336	74	.000
Mathematics Scale%-Follow-up Mathematics Scale%	-3.834	74	.000

From Table 5.3 (above), the p-value is less than .05, so the null hypothesis stating that there is no statistical significance between the baseline and the follow-up assessment can be rejected. This implies that because there is a statistical difference between the baseline and follow-up assessments, it can tentatively be stated that the possibility exists that the implementation of SIOP could have contributed to the gain, although other variable such as the trajectory development could have also influenced the results.

As part of the analysis, effect sizes were also calculated, that is the measure of the size of a treatment effect or strength of association; unaffected by the sample size (see Chapter 3 section 3.4.4.2)

The formula for calculating Cohen's d for paired-samples t-test is as follows:

$$d = \frac{t}{\sqrt{N}}$$

Thus, the effect size would be:

Table 5.4: Table indicating effect size

	D	Effect size
Total	1,2	Large effect
Phonics	0,76	Medium effect
Reading	1,3	Large effect
Mathematics	0,44	Small effect

The discussion of the effect size is discussed in Chapter 3, Section 3.4.4.1

5.5 CONCLUSION

The aim of this chapter was to address the specific research question **to what extent does SIOP contribute to the teaching of ESL learners in a primary school?** Data collected through the SAMP project was analysed by comparing the baseline and follow-up assessment. A comparison was also made between the target group, comparison group and whole sample for descriptive purposes. The comparison group, tested by the University of Pretoria, was similar in learner population and teacher characteristics. Lastly, a comparison was made between the target group, comparison group and the whole sample. The comparisons included looking at the total average scores obtained from the entire test as well as the sub-tests to which the learners were exposed. These included early reading, early phonics and mathematics. This comparison was purely descriptive, to give an idea of performance relative to the whole sample and to the comparison school.

Descriptive statistics were presented as well as inferential statistics, whereby the means of the pre-test and post-test was compared, as well as the significant level discussed. Although the data indicates that there was a difference between the baseline assessment and the follow-up assessment in 2009 and 2010, of importance in this research is the degree of difference between the two years. For instance, 2009 showed only a 18% increase, while 2010 showed a 22% increase. Although 2009 was not analysed statistically for the purpose of this research, the increase in gains can be tentatively be attributed to 2010 being the year SIOP was implemented in the classes.

The final chapter of this research elaborates on the findings of the research as well as making commendations. Further discussions based on the limitations will also be presented in the following chapter.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

With the new Constitution in South Africa and the changes in democracy, the right to choose the language of instruction rests with the individual (Act 108 of 1996, section 29{1}). Parents are exercising their rights and enrolling their children in English medium schools, resulting in many learners being taught a second language and sometimes in a third language. Schools have therefore had to adapt to meet the requirements of teaching linguistically diverse learners while maintaining educationally acceptable standards (McKay & Hornberger, 1996). As a consequence, a 'sheltered instruction protocol' was developed as an approach to give second language learners additional time to engage with the curriculum. From the SI approach, the 'Sheltered Instruction Observation Protocol (SIOP)' was developed as a model, catering specifically for ESL learners' language development. The purpose of this inquiry is to investigate whether SIOP assisted in the teaching of ESL learners. In this section an overview of the research inquiry will be presented, and the findings summarised according to the research questions and the implications of the study discussed. A reflection of the literature and conceptual framework, as well as of the methodology will be examined, where after recommendations resulting from the findings and discussions will be made.

6.2 SUMMARY OF THE RESEARCH DESIGN

A pragmatic paradigm allowed the researcher to avoid the use of metaphysical concepts and therefore present a practical and applied research philosophy (Teddlie & Tashakkori, 2003), whilst following a mixed-methods research design led to a more comprehensive understanding of the phenomena being investigated. Pragmatism. Of the various typologies identified under mixed methods, a partially mixed sequential dominant status design was adhered to, with each method of

collecting data completed at various stages of the research. In this case the research was qualitative but used quantitative data to supplement the findings.

Sampling was purposeful since the school selected was taking part in the SAMP project and implementing the SIOP model in its daily teaching. The teachers who were selected for interviews and observations were trained in SIOP and received support from the relevant stakeholders. An interview schedule and observation protocol were designed and piloted to collect data from the respondents. Documents were analysed in the form of teacher's preparation files and learner's books. The tests that were used by the learners to collect quantitative data were designed by the CEM Centre at the University of Durham, England and adapted for the South African context. The PIPS assessment instruments were developed to monitor learner performance. However, this instrument was adapted for the South African context and could be administered in English, Afrikaans and Sepedi. Learners were assessed in the LoLT of the school.

Data collection occurred independently with inter-method mixing of data as the baseline assessments were first collected, followed by the interviews and observations and lastly, the follow-up assessments were conducted. The sets of data were analysed separately, and neither followed up on the other during the process. Therefore, parallel mixed methods analysis occurred throughout the project. Data collected quantitatively by the University of Pretoria was conducted with a pre-test and post-test design. The computer programme SPSS was used to clean the data and prepare it for further analysis. Thereafter, a paired t-test was conducted to analyse the difference in mean scores of the pre-test and post-test. Data collection was undertaken solely through the University of Pretoria, the researcher's role was to conduct a secondary analysis of the data presented. Data was collected qualitatively through interviews was firstly transcribed then coded according to themes that emerged. The coded items were placed in categories and used for analysis.

6.3 RESULTS ACCORDING TO RESEARCH QUESTION

Specific research questions posed by this research were:

- **To what extent does SIOP differ from traditional teaching methods?** (Refer to Chapter 4, Section 4.3.1, and 4.3.2)

Teaching a second language can be described along a continuum of approaches from content-based to language-based. Although learning content in a specialised area is considered important, learners are also required to focus on the grammatical and structural properties of a second language to ensure linguistic accuracy (Short, 1997; Swain, 1996). This implies that mainstream teachers integrate classroom needs to address both language learning and content learning as an integrated approach (Swain, 1996).

With the above statement in mind, one of the most prominent differences between SIOP and the traditional methods of teaching is that the former is very language-focussed, with aspects of language including reading, writing, listening and talking, of which there have to be at least two per lesson. These become an important language objective that learners have to achieve by the end of the lesson, with both language and content objectives clearly written out for learners to be able to read and explain. Another feature of a SIOP lesson includes comprehensible input, the strategies for which ensure learners understands the teacher's written or oral communication, and include students providing a behavioural response to the request (Alberta Learning, 1996). Learners are thus required to write, read, talk as a response to the teacher's request.

In traditional methods of teaching, sight words for the learners to memorize through rote learning become the only vocabulary words to which they were exposed. With SIOP, all words that are unfamiliar to the learner become vocabulary, which is emphasised in the class using one of the language aspects of reading, writing, listening and speaking. More emphasis is placed on vocabulary acquisition and the word wall, which increases the ESL learner's confidence to converse in class. Not

only does the ESL learner improve in English, but he or she is also exposed to the correct terminology used by African people, as 'borrowed' from English trade names. Traditionally, teaching methodology was more teacher-centred, but with SIOP the lessons learner-centred, with more activities for learners, either in pairs or in small groups. This emphasises the outputs, whereas the traditional methods focussed on inputs. Highly interactive classes that emphasise problem-solving through thematic experience provide the social setting for language acquisition and academic development (Thomas & Collier, 1997), therefore, cooperative learning has been found to be effective for promoting the academic achievement, language acquisition, and social development of English as a second language (Calderon & Slavin, 1990).

- **How does SIOP affect teachers' planning and instruction in the classroom?** (Refer to Chapter 4, Section 4.3.3)

Planning becomes more challenging and time consuming when implementing the SIOP model, as it requires a detailed lesson plan with Foundation Phase teachers taking three learning areas per day. SIOP methods require additional resources such as the language objectives, content objectives, and vocabulary needs to be prepared on a daily basis, and the need to assess the learner requires preparation and work. In research conducted by Short and Echevarria (1999), teachers trained to implement SIOP in the USA found that it was a long, arduous and time-consuming process, and that the planning would be 'impossible' for all the learning areas (Echervarria & Short, 1999).

Through document analysis of the teachers' preparation files (See Chapter 4, Section, 4.3.3) it was evident that the teacher had to plan three detailed lessons per day, writing out details regarding the language objectives, content objectives and key vocabulary to display on the word wall for each learning area. Teachers interviewed indicated that this type of planning was too time-consuming and that although they previously planned meticulously per day, their personal way of planning was less complicated than the SIOP way of planning. Evidence that the teacher has prepared the lesson appropriately should be seen in the presentation of separate language and content objectives, linked to the curriculum and taught systematically (Short, 2000).

Since teacher instruction in the classroom has become more learner-centred and more focus is placed on giving the ESL learner the opportunity to talk, write, listen and read in the class, teachers have to become more creative in their instruction by focussing more on concrete objects and visual stimulation. SIOP's provision for strategies that allow learner participation has shown to be successful in class ('magic cup'). Well-prepared SIOP lessons include meaningful activities that integrate concepts with language practice and supplementary materials that support the academic text. These supplementary materials can enhance learner understanding of key concepts and can be useful in a classroom of learners with varying levels of proficiency in English (Short, 2000).

- **To what extent do the learners understand the content when the teachers implement SIOP?** (See Chapter 4, Section 4.3.3, and Chapter 5, Section 5.3.1.1)

Through the assessment of learners, the teachers who were interviewed felt that learners understood the content more easily with SIOP. Accomplished SIOP teachers modulate their rate of speech, their choice of words and the complexity of their sentence structure, according to the English-proficiency level of their learners (Short, 2000).

Assessment usually takes the form of paper-and-pencil worksheets, but with ESL learners, practical demonstrations are preferred. In this way, learners who have a limited vocabulary are able to demonstrate a skill and thus be assessed by the teacher. Competence in practical demonstrations indicates the learners' understanding of the lesson or topic. Furthermore, teachers interviewed felt that with the implementation of SIOP, learners were coping better with reading questions on a worksheet and showing a greater understanding of the written word.

An important presumption of SIOP is that learners have very little background knowledge about the lesson. ESL learners often have gaps in their knowledge base, making it imperative that SIOP trained teachers make connections between new concepts, learners' past learning and personal experiences. These connections help learners organise new information as part of their cognitive processing (Short, 2000).

Therefore, when teaching in a SIOP method, the teacher has to ensure that all instructions are thoroughly explained, all concepts clarified using concrete objects or visual clues, and all vocabulary displayed for learners to read and write. Not only does the teaching of the specific vocabulary occur during that lesson, but also these concepts are left on the word wall where learners have access to them for the week. Words are also integrated with other learning areas. Teachers implementing SIOP must therefore explicitly teach and emphasise the key vocabulary of the concepts and provide opportunities for ESL learners to use it in meaningful ways (Short, 2000).

Quantitative results

- **To what extent does SIOP improve academic performance of English second language learners in content areas?** (Refer to Chapter 5, Section 5.3).

The quantitative data show that although gains were made from the baseline assessment to the follow-up assessment between the comparison school (8% increase) and the whole sample in 2010 (12%), the target group increased by 14% on average. The following important points need to be taken into consideration when comparing the target group, comparison group and whole sample:

- The comparison group comes from a fairly disadvantaged area in terms of socio-economic background
- The comparison sample group comprised English Medium Schools, Afrikaans Mediums Schools and Sepedi Medium Schools
- All tests undertaken by the University of Pretoria were conducted in the LoLT of the school
- Learners whose mother tongue is the same as the LoLT of the school were therefore tested in their home language (majority of the schools)
- Both target school and comparison school have a majority of ESL learners in their school population

- Both the target group and the comparison group were tested in the LoLT of the school, but it was not necessarily the home language of the learner.

A significant increase in the average of the target school was evident in the difference between baseline and follow-up assessment in the phonics subtest. A total of 20% increase was observed, whereas a marginal difference of 7% was evident in the comparison school and 13% in the whole sample. However, taking the above information into account, although this is not an experiment and many variables were not controlled for, it is possible that this difference could be attributed to the implementation of SIOP.

For Mathematics, a marginal increase of 5% was found in the target school, while a decrease of 1% was found in the comparison group. The whole sample had a minimal increase of only 2% between the baseline assessment and the follow-up assessment. These scores indicate a poor score in Mathematics overall, and emphasise the need for improving the Numeracy levels in schools.

Reading scores indicate a phenomenal increase of 18% in the target school, 15% in the comparison schools and 21% in the whole sample.

However, with regards to the phonics subtest, the average for the baseline assessments for the target school in 2009 was 49% in 2009 and 59% in 2010, indicating an increase between the baseline assessment and follow-up of 10%. The target school did achieve an average of 20% increase between the baseline assessment and follow-up assessments in 2010. There was no difference in the comparison school between the 2009 baseline and follow-up assessment and a slight difference of 8% in 2010, but the whole sample increased by 9% in 2009 and by 13% in 2010.

The main research question was posed as follows:

To what extent does the Sheltered Instruction Observation Protocol model improve academic performance of ESL learners in primary schools where the mother tongue is different to the Language of Teaching and Instruction?

Qualitative data suggest that learners who enter Grade 1 with no BICS gain more from the SIOP model of teaching. Many learners who enter schools have no pre-schooling experience and are therefore not fully conversant with their mother tongue. However, because SIOP is language-focussed, the learner is exposed to one or more aspect of language during the lesson, exposing him or her to opportunities to engage in the second language.

According to the results obtained from the quantitative aspect of this research, there is a statistically significant difference between the scores obtained from the baseline assessments and the follow-up assessments. Although it is possible that the maturity of the learners, good teaching practices, and developmental growth of the child could have contributes to the gains, the main concern is the amount of gains achieved compared to other schools that have been part of the SAMP project. The quantitative results, in conjunction with the qualitative results, support this assertion.

ESL learners face further frustration as they are also required to learn content in specialised areas in the second language. Content concepts become increasingly difficult if the basics of the language are not taught, and because ESL learners do not have the necessary BICS, they are unable to progress to the CALP. Through the continuous implementation of SIOP, vocabulary is emphasised and learners are regularly exposed to the written word, spoken word and the meaning of the word.

6.4 REFLECTION OF LITERATURE AND CONCEPTUAL FRAMEWORK

This research relies on literature based on learning a second language. Through the development of international communication, the need for a global language is increasing, therefore parents are making informed choices to send their children to English-speaking schools, where they can become more proficient in English (Nihalani, 2010). This desire has resulted in many learners in South African schools learning in their second or third language. The language policy in South Africa, based on the National Education Policy Act (Act 27, 1996), has provided clear guidelines on the inclusion of languages in the South African curriculum. The

curriculum is designed so that ESL learners develop their home language before they transfer their developed literacy to other languages.

However, there are misconceptions regarding how learners learn a second language. McLaughlin (1992) exposed myths surrounding learning a second language (Chapter 2, Section 2.4), such as children learning a second language faster than adults, and the younger the children the better they learn a language (Krashen, Long & Scarcella, 1979). Such myths and misconceptions have serious implications for teachers with ESL learners in their classroom. Challenges include providing quality education for all learners in the classroom, diverse background of learners, educational profiles of learners and family support in learning a second language (Nel & Theron, 2008). Additionally, teachers have little knowledge about the teaching and acquisition of English as a second language and are burdened with large number of learners in class.

A possible solution to some of the challenges faced was the introduction of OBE, which requires teachers to change from their traditional way of teaching and move towards a learner-centred approach, as endorsed by the SIOP model of teaching. Therefore, implementing SIOP in the classrooms would supposedly be less intimidating for OBE trained teachers, as it is merely a realignment of what is already known and mastered for the teachers. This requires a paradigm shift for teachers who are currently in the profession, however, this would require knowledge of how learners learn a second language.

Theories discussed in this research are based on Cummins' theory on how to learn a second language where the use of language in an informal situation, known as BICS, differs from the CALP, which is academic language. According to Cummins (Cummins, 2008), BICS is developed through social interaction from birth but is differentiated from CALP after the early stages of schooling, to reflect the language that children acquire in school. Cummins also states that any programme aimed at ESL should be planned with reading and writing in English and home language (Cummins, 2009). As in association with SIOP, this statement fits well with the SIOP components and the underlying theory in SIOP.

However, research also needs to be undertaken to determine the effectiveness of the SIOP model. A seven-year project undertaken by CREDE included a study on the sheltered instruction in the USA, with significant differences being found between the groups of teachers who were trained using SIOP and those who received no training in SIOP (Echevarria, Short & Powers, 2006). Hongisfeld and Cohen (1996) showed that the incorporation of the SIOP model with current approaches was more effective in in-service training and that the SIOP model would greatly enhance teaching and learning focussed on ESL learners (Hongisfeld & Cohen, 1996). However, this is the first research conducted in South Africa on the effectiveness of the SIOP model.

Although other programmes (JET, READ) have been developed with a view to improve academic performance in South African schools, no intervention programme have been implemented long enough for further research to determine its effectiveness. Studies conducted abroad (Hafiz & Tudor, 1989, Cheng et al., 2010, Stern, 1983, Carder, 2006) emphasise the importance of a learning a programme to improve academic performance in a second language. However, while there is evidence to support improving reading and writing in classrooms, the extent to which these programmes can improve the academic performance of the ESL learner in other specialised subjects is unknown.

Therefore, research of this nature is crucial to the development of the literacy and numeracy levels in South Africa. In order to determine the effectiveness of the SIOP model, the CIPP Model of evaluation was used.

The following table provides a summary of the implementation of the CIPP programme and the results obtained.

Table 6.1: Summary of the Implementation of SIOP using the CIPP model of evaluation

	CONTEXT	INPUT	PROCESS	PRODUCT
Objectives	ESL learners learning in a second/third	Programme content	Implementation of SIOP	Increase in academic performance of

	language			ESL learners
Method/Data sources	Secondary analysis of quantitative data.	Document Analysis of Teachers Preparation Files	Observations and Interviews of teachers implementing SIOP	Secondary analysis of quantitative data.
Results	Poor academic performance of ESL learners in schools where English is the LoLT of the school	Qualified teachers who are able to plan and prepare according to the SIOPI model	Effective teaching and learning taking place through using components of SIOPI	Statistically significant difference between baseline assessment and follow-up assessments in overall testing and subtests.

In this section the findings of the study in relation with the conceptual framework will be discussed.

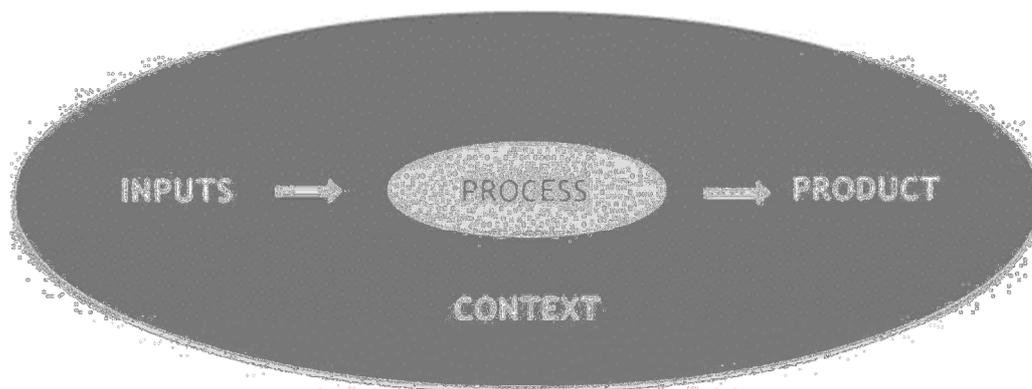


Figure 6.1: The CIPP Model (The CIPP evaluation model).

During the evaluation of the programme a relationship was found between the context, input, process and product of the programme. As depicted in Figure 6.2 (above), *Contextual factors* include the needs of the ESL learner, English as a

second or third language, geographical context, school context and school support. *Input* includes programme content, teacher biographical information, and the characteristics of the teacher. The *process* includes the implementation of SIOP in the classroom as well as barriers to implementation. The *outcomes* include increase in academic performance in ESL learners, good teaching practices, encouraging language across the curriculum and programme effectiveness.

The *needs of the ESL* should be taken into account when implementing the SIOP programme as many of the ESL learners who are in English medium schools do not have pre-school exposure. Together with this, many hail from poorer socio-economic backgrounds, with little parental support. Reflecting on the *geographical context* and *school context*, the sample schools selected from the population were in close proximity and had similar learner population characteristics. However, as the personal interviews conducted indicated, *teacher support* was lacking and needed more attention. The *programme content* would have been more effective had teachers received more support from relevant service providers. Implementation of the programme being evaluated requires thorough training of the programme content in order for teacher to fully understand and implement it. The *teacher biographical information* and *characteristics of teachers* are directly linked to the geographical context of the school as teachers interviewed reside in close proximity to the school. Finally, the *product process* of the evaluation explores the *academic performance of ESL learners*. Although no formal experiment was conducted to determine academic performance, the secondary analysis conducted (See Section 4,3) explores the data obtained from testing conducted by the University of Pretoria, which tentatively shows effect of SIOP on ESL learners' academic performance. The implementation of SIOP is linked to *good teaching practices*, which allows for integrating language across the curriculum.

6.5 REFLECTION ON METHODOLOGY

To facilitate the evaluation of the SIOP model, the CIPP model of evaluation was applied to this study, focusing on the evaluation of the context, input, process and product of a programme (See Section 2.10 in Chapter 2).

A mixed methods design was used to obtain data by using semi-structured interviews and observations for qualitative purposes and tests conducted by the University of Pretoria was analysed for statistical information. Two teachers were interviewed for approximately one hour each. On reflection, it would have been more advisable to interview three or four teachers who were currently implementing SIOP at the same target school. Interviews could have also been conducted throughout the year at different times of the school year to gather data on teachers' perceptions and feelings on SIOP. However, there were only two teachers in the Grade 1 class that was part of the SAMP project. The researcher could also have interviewed teachers who were part of the whole sample of SAMP but not implementing SIOP, to gain a deeper insight into teaching methodologies used on English second language learners.

Document analysis and observations produced valuable data, although more observations at different times of the year could have been conducted. It would also have been prolific if observations were carried out on teachers who have predominantly ESL learners in the classes, with no SIOP intervention. Ideally, it would have been more favourable to have more than one interview with different teachers, various schools, extended time in a school to gain a broader understanding, however, the target school was the only school who was effectively implementing SIOP and they were selected through the University of Pretoria for the SAMP research project.

As mixed methods were used in an attempt to answer the research questions, perhaps a more structured experimental design could have been explored to determine effectiveness of SIOP. An experimental method would allow the researcher to test the hypothesis in a controlled way and manipulate the independent variable to observe the effect to rule out any unwanted influences.

6.6 RECOMMENDATIONS

Based on the results of the study, it was found that the programme needed some revisions to make better use of the existing opportunities. The following recommendations and suggestions might contribute to the improvements and/or revisions in the improvement of academic performance of ESL learners:

Recommendation 1: An experiment design should be explored to ascertain the actual contribution SIOP can make in an ESL class while controlling for other variables. Therefore, an in-depth research would be conducted utilizing more methods in the experiment. Thus a more informed decision can be made regarding the implementation of the SIOP model on a nation wide implementation.

Recommendation 2: SIOP should be implemented as a teacher development programme and possibly as a module for teacher training at university level.

Recommendation 3: For SIOP to be effective, resources are to be made readily available for teachers to use. Much time and effort goes into making these resources and planning for lessons, resulting in teachers being unable to manage their time effectively. Therefore, readymade resources with vocabulary words, objectives and possibly lesson plans would be useful.

Recommendation 4: As much time is required for planning and preparation, a recommendation would be for teachers to form planning teams with other teachers to share good practices and cut down on planning time. These planning teams or clusters would effectively meet regularly to plan collaboratively, share resources and provide a support structure for teachers.

Recommendation 5: Adequate support is needed for the implementation of SIOP from the Department of Education. However, the DoE needs to accept the programme and undergo training in order to support teachers who are implementing it.

6.7 CONCLUSION

The importance of this study is that it provides insight into and understanding of the role of implementing an intervention programme to improve academic performance of ESL learners. It also sheds light on the need for an intervention programme and the extent to which the programme can improve academic performance of ESL learners.

The main contribution of this study to the body of knowledge was its insight into and understanding of a number of factors, categorised as inputs, process and outcomes, that had an effect of the implementation of the SIOP programme. The development of the conceptual framework was applied by the CIPP evaluation model, as a framework that illustrated the relationships and outcomes of the SIOP programme that had previously not been done. This study thus emphasises the importance of intensive research and proper planning of intervention programmes.

The aim of this inquiry was to determine the effectiveness of a model of teaching that was developed in the USA. Throughout the research, the findings presented indicated that the Sheltered Instruction Observation Protocol would be a functional model to employ in South Africa's education system and, if implemented correctly, would yield positive results. Therefore, this study was an initial step towards implementing a programme that would improve academic performance in schools, where the LoLT is different from the mother tongue. Although some valuable information was obtained, there is much scope for further research on how to evaluate the effects of SIOP on academic performance of ESL learners.

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APPENDIX A: CLEARANCE CERTIFICATE

APPENDIX B: OBSERVATION PROTOCOL

Observation Protocol	
Observer: M.Pillay Grade: One Role of Observer: Non-participant observer Length of observation:	Teacher: School: Topic: Time:
Content Objective supported by lesson delivery	
Language objectives supported by lesson delivery	
Learners engaged	
Review of key vocabulary	
Review of Content concepts	
Regular Feedback Provided	
Objectives stated for learners	
Key words emphasised	
Language Integrated in lesson	
Other	

APPENDIX C: INTERVIEW PROTOCOL

INTERVIEW PROTOCOL

PROJECT: To determine the effectiveness of SIOP in the South African Context

Time of Interview:..... Date:..... Venue:..... Interviewer:..... Interviewee:..... Position of the Interviewee:.....

The main aim of this project is to evaluate the SIOP model in a South African class and to explore whether the implementation of SIOP will impact on the performance of the learners. Results from the SAMP project will be analysed as well as the interviews conducted. Data collected through interviews will be treated with the utmost confidentiality and no names will be divulged. The interview will last approximately 1 hour (60 min).

Questions

1. To what extent does SIOP differ from traditional teaching methods?
2. Have you found that from the time that you have been using SIOP that your teaching has changed? Could you perhaps provide examples?
3. How does SIOP affect your planning and instruction in the classroom? (Prompt does it take more time or less time? How are the lessons structured and affected?)
4. To what extent do the learners understand the content when the teachers are implementing SIOP? (Prompt how do you test for understanding? Do you use many answer and question sessions etc?)
5. How would you describe the performance of learners before you started to use SIOP? (could you provide examples)
6. How would you describe performance of learners now? (could you provide examples)
7. To what extent do you think SIOP impact performance in standardised testing (FFLC)?

The researcher wishes to thank the participant for participating in the interview. All information collected will be treated confidentially. The interviewee has the opportunity to ask any questions at this stage.

Signatures:

1. Interviewee:.....
2. Interviewer:.....

APPENDIX D :TRANSCRIPTS OF INTERVIEWS

Interview A:

Codes	Interview	Themes
	<p>MN Good afternoon, I'm going to be interviewing you for the purpose of my research project. The main aim of this project is to evaluate the SIOP model in the South African class and to explore whether the implantation of SIOP will impact on the performance of the learners. Please note that this interview will be treated with the utmost confidentiality, so nothing will be disclosed and your name will be withheld for the process.</p> <p>NK No problem</p> <p>MN You also um, entitled to leave the research at any time that you not happy with.</p> <p>NK Ok</p> <p>MN (laugh) so you not forced to stay here by any chance...</p> <p>NK No problem, I am willing</p> <p>MN Thank You. So the first question I am going to ask you is, can you tell me in what way does SIOP differ from your traditional ways of teaching?</p> <p>NK Ok, um with SIOP lets say, its more language orientated, you know where there is a lot of repetition of words and learners are not, er, we don't take it for granted know what er, er a word means. Like let's say the word, er house. Most of the children maybe live in a shack and that's the way they call it a house, you know they refer to it as a house. But let's talk about different houses now. You know where we show them a picture and we show them that's that the word, the word house now. U know first we took it for granted the old methods when we said house or we said er, er, a pool the child just knew</p>	

	<p>what it was. But now we associate the meaning of that word with the er, the meaning let's say of object or you know er, a scenery or whatever we associate it now with a word. Where we show them the word actually. So in that way the child...in that way the child....(interruptions)</p> <p>When we say a house we show the child a word we show the child a picture. Previously we just said house and we expected the child to know what a house is all about. Right and then er, we do er, lot of reinforcement of the words. You know where language, we make the child repeat the word. The child says it the child looks at it. Previously we didn't associate so many words to our lessons. So they were, and I find there is more activity based now. We have maybe three or four activities were as in the old methods we just had, er, one lesson and that was it.</p> <p>MN With one activity</p> <p>NK With one activity.</p> <p>MN Ok, you have spoken a bit about the reinforcement of words what words are these that you talking about?</p> <p>NK These are the words, ok, and even the child's em, let's say background knowledge. A child comes from maybe a home and say, there is not much exposure to er, er materials like. Let's say er, let me give you an example, um let's say tv, television.</p> <p>MN Um</p> <p>NK Some children don't have a television in their house. Right so now what we do is we bring all these words into the child's mind now. And associate it with a picture or maybe the object also to show the child that that is a television. And when the child looks at the word the child remembers the word. You see all the time. And when it comes to our breakthrough words also these also appear in</p>	
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	<p>them so its repetition all the time. Whatever we do in our lesson we associate it with language.</p> <p>MN So these words are not part of your sight words or breakthrough words.</p> <p>NK No sometimes, they become part of the sight words and sometimes they, most of the times they are not.</p> <p>MN They additional words</p> <p>NK Ja, they additional words. Which enhances the child's vocabulary? You see so the child sees it all the time.</p> <p>MN So where..How does the child see it all the time? How do you reinforce these words?</p> <p>NK Usually what...we have like a word wall</p> <p>MN Ja</p> <p>NK Where we place these words on the wall all the time. And during the week or the lesson we keep repeating those words to the child. We leave it on the wall, the child keeps on looking at the er words. So if we are maybe constructing sentences if the child wants the word now house, the child looks at the word wall and he find the word there.</p> <p>MN Ja</p> <p>NK So it's reinforcement for the child. He has identified a word; he has associated it with what a house is all about. So there is a lot of language here orientated in SIOP even in numeracy, we are developing the child's language also. Where as previously in numeracy if we told the child 2 we expected the child to know what is 'two'. You know now we using the words we using pictures as well to show the child there is two balls, you</p>	
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know, and if we are using 'plus' we show the child the word plus. First we used to say addition or plus and the child had to associate it with the plus sign. But now we have the sign, we have the word and we keep drilling it every lesson we do er on numeracy. Addition of like, plus, more, we have different words associated with plus. Like more, you know, bigger, you know words like that. So in SIOP we bring a lot of words into our lesson.

MN

So you expanding on the vocabulary?

NK

Vocab all the time.

MN

And when you em use more words you also using synonyms for those words you are teaching that to the learner

KN

All the time

MN

So the learner doesn't learn only one word its two or three concepts

NK

Yes, yes. There is a lot of language that is happening?

MN

So that is the word that is going up on the word wall. So is that the only language that is going on in the classroom?

NK

[pause] You mean the words?

MN

Ja

NK

No, no, they also orally. They verbalise with us as well.

MN

Right

MN

Like you know because we are in a...we in a school where we get a lot of learners that do

	<p>not speak English, it becomes very difficult so when these children see these words all the time, you know they sort of now start speaking. You know they start opening up to us and they start er, understanding what all these words mean. So em, it helps us because of the language now. You now SIOP is really helping us in that aspect, where we develop the child's language. Usually the child just doesn't speak a word, but we keep repeating, they keep seeing it. Children, you know while they talking in the classroom, they talk to each other, say there's the word, show me where's this word, show me where's that word.</p> <p>MN Um</p> <p>NK You know then they identify they understand what it means also. So, um in that way it's really helping us to develop this child and the children's language.</p> <p>MN And this is now learners who have come in that are not first English language.</p> <p>NK Yes and its majority of them. We in the beginning of the year we like sit with 70% of them and you know now it's already going into er ending the second term</p> <p>MN Um</p> <p>NK And most of them are actually so fluent in speaking to us as well as reading and writing.</p> <p>MN So language concerns the reading, the writing, the talking, all of the aspects?</p> <p>NK Yes, all the aspects. You know building the child holistically.</p> <p>MN Ja, have you found that from the time you have started using SIOP that your teaching has changed.</p>	
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	<p>NK Yes. I you know have...er...previously I've just, you know my lessons were quite flat because I didn't have you know, so many aids to my lesson.</p> <p>MN Ja</p> <p>NK You know because I expected children to know, but as I said the children coming with the....not knowing English so well. SIOP really assists me there where I bring in a lot of different activities. U know and lots...lots of words, lots of pictures, lots of concrete aids just to explain what I'm trying to convey to these learners.</p> <p>MN Ja, would you give me an example of how you would do it in a classroom?</p> <p>NK Ok, um, let me take one of my lessons. [pause] Um...ok, I have given a lesson about um, is it ok if I tell you about the same lesson...?</p> <p>MN No, its fine</p> <p>NK A lesson on the car, now we had to, er, the children had to cut of picture with parts of the car and construct the entire car by pasting all the different parts. Now at the...most of the kids...ok they see a car but most of them parents don't have a car. So what I did was I um, had firstly all the words made up of each part of the car. Right, now because kids don't know the learners that are not have cars they don't know what is a bonnet, they don't know what's an engine, what's the difference between a wheel and a tyre,</p> <p>MN Um</p> <p>NK Right, so now what I did I brought models of cars in the classroom. And it was given to each child. So that each child could have a look these cars and see what the cars are</p>	
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	<p>made up of. Even though maybe they just pointed and said it is made up of this.....</p> <p>MN Ja</p> <p>NK So you know in that way we brought out the word. Right, and then I had pictures on board as well, after the children handled the car and showed me different parts we had words where they took it and they pasted it on the picture to identify the different parts. And then i gave them a worksheet in the end where they had to cut out now the different parts of the car and paste it together to make a whole.....</p> <p>MN A car</p> <p>NK Ja, right so in that way they learnt the different words and in that way they had to label as well. So what I did with the flash words, I mixed the order and they had to identify which part was the bonnet, you know which word was bonnet, and write it on the bonnet. So now, after the whole lesson I realized that most children they didn't know what was a bonnet, what was a boot. Actually knew what it was but looking at the object, looking at the word and identifying it in the picture as well. So it was good lesson you know and things like this we never did in the past. We just put a picture of the car and said that a car this is the bonnet you know it was likethe teacher doing all the work. Here now with SIOP its more the learner is learning and you know ...er...also through handling the objects to be working with the friends, you know and er...I find...that the different activites that we do even to reach our goal. It really assists the learners.</p> <p>MN How does SIOP affect your planning and instruction in the classroom?</p> <p>NK Ok, with SIOP I must say it takes a very long time just to plan one lesson. You know it takes er, it's difficult for the teacher because you got to get so much information, you know do so much...get so much material</p>	
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	<p>together just for that lesson. Right, so it's very time consuming which sometimes gets to me.</p> <p>MN mmmm....</p> <p>NK But, er, being a teacher I know that it's my duty and i try to do it as best as i can, but its very time consuming, every lesson. I mean there's three lessons in the day: numeracy, literacy and life skills and imaging if one lesson takes me one hour to plan it's like three hours in the day that I'm, you know maybe more than three hours...</p> <p>MN And you've got to plan for one day...</p> <p>NK Ja,</p> <p>MN You have got to plan for every single day.</p> <p>NK Every single day, just the preparation because there is a variety of activities which you need different aids for you know and different...like the flash words, you know and the pictures.</p> <p>MN Ja</p> <p>NK So it's er, very time consuming but er it's very effective in the classroom.</p> <p>MN And how does it affect your instruction in the classroom, the way you teach the learners?</p> <p>NK Er, with SIOP I have noticed the learners really understand what you er, what your' aim. You know what they need to achieve in that lesson. You know because er, you put your ...outcomes on the board and you read it to them right, then afterwards what you've achieved you tell them, ok this is what we have done. Did we achieve this goal? And they say, yes madam we did it now. So it gives you directions it gives me direction and</p>	
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	<p>the learners know what they have to look for and what they have to achieve in the end.</p> <p>MN You've just spoken now about outcomes. What outcomes are you referring to?</p> <p>NK [Pause] ok, I'm talking about the language outcomes and the language outcomes. I have here worksheets like for today's lesson, the children have to ...the language outcome, the children have to read doubling and halving on a worksheet, right, so what they have to do..They have to do this now. So when the lesson was done they actually read the doubling and halving to me on the worksheet.</p> <p>MN Right</p> <p>NK Right, and then they have to explain to me what has to be done now, in doubling what we have to do. Right, so here the learners told me, madam now what we have to do whatever is on this side we have to put the same amount on the other side. So they did that.</p> <p>MN Right</p> <p>NK And then they had to write in the answers now. Where they had to work it out themselves and place in the answer. So they knew that had to be achieved.</p> <p>MN But what outcomes are these? Are these your assessment standards? These here [pointing to the chard showing content outcomes].</p> <p>NK No, it is actually assessment standards, but its look er...according to our er... assessments right this is part of the assessment but we are working towards it. You see we er...language outcomes</p> <p>MN [Pointing to language outcomes] this is what you needed to do for language?</p>	
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	<p>NK Yes</p> <p>MN Which is different from you traditional where you didn't have to do language outcomes?</p> <p>NK We didn't have to, ja.</p> <p>MN So for every lesson you need language outcomes?</p> <p>NK Ja, you've got to</p> <p>MN And in these outcomes on this page [pointing to the content outcomes]</p> <p>NK The content outcomes</p> <p>MN Which are linked to the assessment standards?</p> <p>NK Yes, right, so here they had to use the counters, they basically...what they had to do to show us. They had to use the counters to show doubling and we did that with er, some cups, you know we collected Dineno cups and we did that. And they had to use counters to show how it was halved.</p> <p>MN Ok</p> <p>NK Right, in that way they understood the concept.</p> <p>MN So when you teaching in your class you have got to firstly explain to them what they doing...</p> <p>NK Yes</p> <p>MN And then they do it practically.</p>	
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	<p>NK Yes, they learn this way.</p> <p>MN Could you please tell me how does SIOP, ok, we have discussed how does SIOP affect your planning and instruction in the classroom. How do you think the learners understand what you are saying, do you think that the content comes across more easily for the learners?</p> <p>NK Ok, I think so it does because, er, why we are...er...the learners are tested. Sometimes they are tested er orally, practically and you know while walking around while they are doing a worksheet or whatever we walk past and we have a look at whether the child has understood. And er, we have realised that doing this, that the learners do understand. Its only, my problem is only during the group work, you know I find that er, its, er maybe the brighter ones that do most of the work.</p> <p>MN Ja</p> <p>NK And the weaker ones they sit you know, and they just try to listen to what the brighter one has to say. So i find in the group it becomes a bit difficult for us to assess whether the child has understood. But by walking past we can sort of, you know, notice whether the child knows what's happening and who's the child that is talking the most, you know and who's the child that's lost. Group work really, er...I feel, I don't know, according to my feelings, group work is a bit, you know, er a bit disrupts the lesson. You know to er, to identify whether the child has understood because sometimes if you are busy with the first group, maybe the last group has completed and when you go there, you don't know whether this child has understood what you've done for the lesson.</p> <p>MN Ja</p> <p>NK You see, now that's the only problem but if they work individually you have a better understanding you know during</p>	
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	<p>the...er.writing a worksheet or filling in an answer or during practicals you call them out one at a time. You ask them, ok, show me what is the...er...four cups plus three cups is how many cups. Then you can understand you know, then you can understand you know the child understood or not. But sometimes group work is not so effective, you know in my class room.</p> <p>MN And any other ways of assessing besides group work?</p> <p>NK Er, um we do, er individual testing.</p> <p>MN And how do you think the children do in individual testing?</p> <p>NK They do, er, ok. Maybe in the class room there is, let's say 90% do very well. And the 10%that a little struggle along.</p> <p>MN And when you say individual testing, how do you do individual testing? What forms of assessment do you use?</p> <p>NK Ok, we er um, er [pause] the child is called to the table. And the child, er...lets say if we doing something practical now, um, lets say er, shapes...</p> <p>MN Right</p> <p>NK We asking the learner, ok, try to er, er, ok, can you put all the same shapes together? You know, and colours of shapes as well. Let's say if all the circles are red, all the triangles are blue. Then you ask them, you mix them all up and you tell them, ok, now er put all the colours that are the same together. You know you ...</p> <p>MN Ja, ja NK You test them individually like that</p>	
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	<p>MN Do they many erm, question and answer sessions?</p> <p>NK We do that mostly orally.</p> <p>MN Not a lot of written work in terms of assessment. You see if it comes to like er, body parts, initially the child cannot read, she cannot write. So we call the child's and ask the child, can you show me where is your eyes, where is your ears. Now as the months go by the child is able to identify the words because you drilling you working with it all the time. And later we do test them, written, you know, we write there: we have a body and we put lines there and the child says that's the eyes or whatever. That comes at a later stage. But initially in grade 1 we really struggle so we do practical and oral. Most of the time.</p> <p>MN How would you des...how would you describe the performance of learners before you started implementing SIOP in the classroom?</p> <p>NK Ok, um, [pause] before SIOP I think the learners wer...they were like um, robots. You know we didn't have to um...you were the teacher and you just imparted the knowledge, they just swolled and they just gave you the answers. With SIOP I think learners are actually talking for themselves. You know they become more aware, more alert. You know, when I like give a story writing i say ok, right a story on er, er dogs. Right now we have done lots of words on like dogs like colours or whatever, but children actually look at the word wall, they look around all over the classroom and they use words from the walls, that you know we haven't used as yet.</p> <p>MN Ja</p> <p>NK Because it is now associated with the word and the picture. Like maybe r spotted is on the wall, the child writes my dog is spotted or</p>	
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	<p>I have a spotted dog, his colours are brown and white.</p> <p>MN Ja</p> <p>NK You know they become more alert, the thinking i think is more, you know, er wider.</p> <p>MN So do you think that the learners perform better? IF you use SIOP in your classroom?</p> <p>NK I...I think so, you know because if I compare we started SIOP maybe in 2008 we were very shaky by then. We were not sure of SIOP ourselves we were just getting use to it and by 2009 you know we did it so religiously we did it from day 1 when the learners entered. And you know, according now we now taking part in that SAMP project, the learners are tested as well. And er, we have realised that because last year we did it so religiously, that learners performed so well. The results were well, you know in the beginning of the year they didn't perform because they just came into school not knowing anything. But towards the second testing they did so well because of all those words all the SIOP methods us drilling, the language all the times, the activity based most of the time. They performed very well you know and um, to be honest this year we didn't...we haven't er... really drilled it that much. You know because of the time factor and we've realised that learners came in, majority of them haven't been to a priest school so we were really struggling with that. And we, we haven't been doing it so rigidly, so I er...just spoke recently to one of the teachers and I asked that teacher, what is going on in our class rooms? Because we find that the children are just not er, understanding concepts that well. And then it struck me and i said, you know what, you know last year we did SIOP so well. You know and that's the results we got. The children were so alert, so advanced and that's the reason why we not getting there.</p> <p>MN In performing?</p>	
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	<p>NK Ja, and I've realised that that's maybe the problem we not doing it so well as we ...</p> <p>MN ...last year. Do you think that even though you have done it, em, you are doing SIOP?</p> <p>NK Yes</p> <p>MN Partially</p> <p>NK yes</p> <p>MN Not fully like last year?</p> <p>NK Yes</p> <p>MN But do you see a difference from the beginning of the year to now even with a partial implementation of it.</p> <p>NK Ja, but a very little difference You know I feel guilty not doing it so religiously. You know me...</p> <p>MN Because you know the performance of last year...</p> <p>NK Ja, so I have compared and I have tried to figure out why am I not getting through to these learners although we are trying our best.</p> <p>MN Ja</p> <p>NK But I've realised that because of the time factor we trying to get so much done that we have to integrate and by integrating we lose that er...efforts of you know putting the language outcome you know? Because we are integrating, we don't know what to really</p>	
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write there. So we trying to get so much done in such short time. And maybe that's really throwing us off track. So I did speak to another teacher and I said that we really do it rigidly next term. You know because we need to see that improvement in our learners. Because I really realise and I do feel guilty, you know, that I am doing it but not as ...

MN

..Well as last year.

NK

Doing my best

MN

Ja, we have discussed a bit about this in the previous question, how would describe the performance of your learners right now? The way they are at this level right now?

NK

Ok, em, if I had to give it a rating now from 1 to 10 I would say...six. You know because em, I'm really happy that er, they really performing up to their standards. It's because I think I've been neglected as I said.

MN

Ja, it's just been implanting it properly in your classrooms.

NK

Ja,

MN

and comparatively to last year?

NK

Last year I think they were outstanding. Our learners at this stage they were reading, they were writing they were doing everything.

MN

But do find, that if you can think back, the way you use to teach and the way SIOP has taught you, at this stage how did the learners fair in the traditional methods?

NK

[pause]

MN

Would they be able to do what they doing now?

	<p>NK No, the learners now?</p> <p>MN Yes</p> <p>NK No because then times were different</p> <p>MN Ja</p> <p>NK You can't compare those times because learners coming now with a different. That learners had to go to a priest school</p> <p>MN Ja,</p> <p>NK Now learners just go to a day care and that's it.</p> <p>MN But I'm not talking about a long time ago; I am talking about just before SIOP, maybe in 2007. Were you teaching in 2007?</p> <p>NK Yes</p> <p>MN You had grade 1 as well?</p> <p>NK Yes</p> <p>MN Can they do what they doing now? Now that you started SIOP and in 2007?</p> <p>NK Yes, yes and</p> <p>MN ..reading and writing words</p> <p>NK Yes, yes...but you see the calibre of learners were different. And what I'm trying to say there were others that could speak English even though they were a black child. Coming from maybe a black culture, that child could speak English. It was maybe the elite child</p>	
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that came now...so now we are getting children that haven't been to a priest school maybe a daycare even maybe from home that comes in with no background at all. You know no co-ordination you know and er, we start them from priest school level in grade 1.

MN

And do you think SIOP will help those learners?

NK

Definitely, the em, you know language plays a big part of SIOP. And this is what's lacking in the learners. So definitely will be depending now on the educator.

MN

Ja and how they implement it in the class [laughs]. Em, to what extend do you think SIOP has impacted performance on standardised testing em; I'm referring to the ANA and foundations for learning.

NK

Ok, er um, i think er, we have integrated most of what's expected in these, er, er tests. We do it in the classroom all the time. The children see it they dealt with most of the aspects already and when they perform in these tests er they do quite well, although mostly haven't been doing that well for the past year. But according to our teachers, we believe the learners are doing well because we don't assist them at all. .

MN

Yes

NK

And most of them have made it through those examinations, most of them. You get maybe those that really need support those are the ones that will always not make it. Maybe at those tests, but they do very well.

MN

In your foundations or learning, em assessments which we call the ANA tests. Is it a lot of language or is it just pictures?

NK

It's a lot of language especially em like even numeracy it's a lot of language where the children need to understand. You know, ok,

	<p>er, my mum had 12 cakes she put 2 candles of each cake, i mean that is language. The child needs to understand it and in grade 1 that is what's expected of these learners. In the numeracy assessments, there is a lot of language.</p> <p>MN How does SIOP influence this?</p> <p>NK Er, it's um look as I said; I'm going to keep on harp on the language. .</p> <p>MN You do that, that's what it's about.</p> <p>NK That's what we doing in the classroom, you know developing that language of the learner and the .because they do it the entire year you know the ANA is usually the last or third term of fourth term. Learners are already geared up for with through all the SIOP lessons we had to do in the classroom. They are...they are geared up for this tests</p> <p>MN Because SIOP has encouraged language</p> <p>NK And you see we integrate it, we, our lessons are so integrated you know with all the different aspects. Even our milestones you know we have brought all into our lessons and it's now...we actually know now whats expected and we work towards it you know with our learners.</p> <p>MN How would you say is a typical SIOP class that you have with your grade 1's?</p> <p>NK A typical</p> <p>MN Ja</p> <p>NK I think its er, [pause]</p> <p>MN Can you just describe what's a typical SIOP</p>	
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	<p>lesson for me?</p> <p>NK Em i would say a typical SIOP lesson is you know breaking up these walls. You breaking up these walls and leaving the children...giving them...giving them a little bit of an idea and letting them work from there, you know and um giving them er, er the opportunity to explore on their own.</p> <p>MN Ja</p> <p>NK To be free. To ask questions and to make noise, i would say and to communicate a lot. You know and to em, i would say that.</p> <p>MN And when learners are communicating and talking in the classroom, what language do they communicate in?</p> <p>NK We make sure that they communicate in English. You know because usually y when then one child speaks Sotho we tell them what are we suppose to speak. And the others will remind the child, no, no Sotho in the class we speak English. Even if the child speaks broken English at least he have a few words coming in there. And he understands those few words. But we try to you know, sometimes the child just doesn't comprehend, so we try to bring em a Sotho word you know and er compare it now to an English word, translate.</p> <p>MN Ja and you translate</p> <p>NK You know one child is good and she does all the work for us. She just translates all the time.</p> <p>MN And how do you find the learners um reaction to SIOP in the class, how do they come across</p> <p>NK Oh they excited, you know...</p>	
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	<p>MN Better or worse than the traditional methods</p> <p>NK I think it's better because children are more eager. They want to know, they want to learn, they want to even do the activities. When previously we never did so many activities or to just to get through to what we had to do, you know you had maybe one activity and that was it. But we try to have two three different activities, and these children are very eager. They feel excited you know and they want to learn in that way. You know usually you coming and picking up a chart there, black and white, you know, just one, two words, it doesn't relate to the child, it's not exciting for the child, the child learns nothing. But to bring a lot of ideas into the classroom, I think the child learns from at least 10 items the child learns maybe 5 ideas in that head of his...which is an achievement.</p> <p>MN And in terms of their discipline and behaviour. Do you find there is a difference</p> <p>NK I think they very, er, SIOP I think they more, er loud, more noisy. But that's what's expected because you are developing language, not that they jumping on the tables, they shouting: madam I want to do this, madam no like this, madam this one is not doing that it shows the excitement, you know the wanting to learn</p> <p>MN So it's more like constructive noise in the class.</p> <p>NK Its constructive noise in the class</p> <p>MN Because they talking all the time and they discussing</p> <p>NK But you get now and then the handful you know...</p> <p>MN</p>	
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	<p>That are really very naughty [laugh]</p> <p>NK Ja, you do get them in every class, so you got to bring them back in to reality and say hey boy this is what you have to do.</p> <p>MN Ja</p> <p>NK You know that...</p> <p>MN SIOP is concerned with improving academic performance in learners, particularly English second language learners. Do you think that this has worked in your classrooms when you have been implementing it?</p> <p>NK Definitely, definitely because you know when er, like I've started sentence construction, I've just given them a word and i tell them you know what go make 5 sentences for me. And really the learners go and make the words and they know exactly what they are reading. Because they understand what they are writing. So it's working for me.</p> <p>MN And for those learners, in a class you have learners who need additional support and you have learners that cope, how does SIOP affect those learners who are achieving now? Who don't need additional support, you are not second language?</p> <p>NK How do they cope?</p> <p>MN Ja, well how does it affect them? I mean, do they get bored in the classrooms?</p> <p>NK No, i think SIOP is something different for them as well, so they don't.....i got some high-flyers in the classroom as well and when I do my SIOP they quite excited also.</p> <p>MN So they don't get bored by the fact that you put the words up on the board that they know</p>	
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	<p>already?</p> <p>NK</p> <p>No, you don't get bored, its more reinforcement for them but what we do with the high-flyers we try to give them additional work as well. Maybe a worksheet or other activities on the board for them to do. And they are busy with that, were they cannot reach that stage, will not do it. So they are occupied all the time. So we don't really leave them to get bored. You know there is always something else to keep them...</p> <p>MN</p> <p>Ja, so SIOP basically covers all levels?</p> <p>NK</p> <p>All levels.</p> <p>MN</p> <p>And in terms of planning, does SIOP, does SIOP um, do you plan for different levels or just one SIOP lesson.</p> <p>NK</p> <p>Um, you plan for one SIOP lesson but in that lesson, you do have different levels. You know we er, we er, maybe approach a learner who is weaker and ask him maybe a simpler question then one who is brighter and you would ask him a question where he really needs now to use his intelligence. You understand, it's the way you bring out the different questions to the learners. You've got to work according to their ability as well. You cannot give the child who just needs support where he's got no idea how to even answer it. Even an activity, you cannot give him an activity where you tell him, Ok, er, there the (inaudible) try to construct a house for me.</p> <p>MN</p> <p>Ja</p> <p>NK</p> <p>You know, maybe with that child you can give him er, let's say a puzzle where you tell him, ok go fit the pieces together for me....a 4 piece or 3 piece puzzle. Then you say now that's the house now. You know you have got to work with different ability levels I mean, er even previously you have got to</p>	
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	<p>consider the learners abilities.</p> <p>MN Ja</p> <p>NK In SIOP you have to do the same thing as in the traditional methods</p> <p>MN Is there any other major differences that you find between SIOP and traditional</p> <p>NK Ok, the one was activity right? Language is now the key, maybe planning. The planning was just maybe 30minutes and that what it. Planning with SIOP takes some time and then um, performance of learners I would say they are doing quite well with SIOP. I have seen the results speak for themselves. Like as I said, last year we did it so well so I can see now you know we need to do it better because we haven't been doing as well? I suppose last year we got more visits you know so teachers were on their toes all the time. I suppose we more relaxed and more comfortable in our classrooms.</p> <p>MN Visits from whom?</p> <p>NK Um, like Sujata was coming in from Pearsons, like people...</p> <p>MN So you don't get much support, so you think that has had an impact on your teaching in the class?</p> <p>NK I think so, i think so because you were more expectant someone would walk into you class and you were on your toes all the time.</p> <p>MN Prepared?</p> <p>NK And sometimes that also has a negative effect on teachers, because they feel that they being bugged all the time, you know? And you as a teacher you know how to cope in your class</p>	
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	<p>room with what use to work, you know? But now and again it's ok to come in but not now all the time, it's like you being guarded all the time. Because once they have imparted the knowledge to us it is left up to the teacher to implement the programme</p> <p>MN Ok i think i have covered most of the questions that i wanted to ask. I wanted to thank you for taking part in my research project</p> <p>NK You welcome</p> <p>MN Just a reminder that all information will be treated confidential and this is the opportunity to ask any questions you want to.</p> <p>NK With regards to SIOP?</p> <p>MN With regards to anything.</p> <p>NK I don't think so, I am quite satisfied. I just hope that i answered you questions</p> <p>MN You did a fabulous job. Thank you so much.</p> <p>NK I am not much of a speak, but in a classroom you know what you are doing, what you get achieved what your aims are, but when you speak to someone after a while it comes to you; or I should have told you that, i should have said that...</p> <p>MN It comes to you later?</p> <p>NK For so many years I am teaching you know and you compare them years now to SIOP, but SIOP has been a real challenge for us, and I think , we don't realise it, but i think it's really working. I think what bothers us more is the amount of work and effort we have to put in.</p> <p>MN</p>	
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	<p>Ja</p> <p>NK The teachers that's why they feel writing every outcome is too much and the teachers feel why must they write it out in grade 1 when the children don't even understand what it. But i mean the teacher needs to explain to the child, you break up the sentence and explain to the child what is expected of them.</p> <p>MN Just out of the top of my head, if we had to make it any easier for you to implement SIOP in the class, what would you like us to do? If somebody had to say, how can i make you job easier for you to implement SIOP?</p> <p>NK You know what i don't think it will make it any easier giving you something like this will make it any easier, because i suppose SIOP is a programme where you have to work hard. Maybe, like you develop the preps for us?</p> <p>MN Ja</p> <p>NK Ok, the prepping takes quite a bit of time, you've got to think you've got to plan you know, you've got to think about your learners also, if they get to that activity too difficult, they take too long or whatever. Um, if i say give us a lesson then we would be quite happy but like with us we plan in advance. So it makes it easier for us it doesn't really burden us. But you know every year as the learners come in, that's another thing here in this school, but the plans are already there for you like for next year. But i always have something against it knowing that learners come from different abilities every year and we cannot use that same prep for maybe those learners.</p> <p>MN Ja and each teacher is also an individual.</p> <p>NK Like what i might be thinking and I'm filling in that prep, the next teacher might think of something better or they might not know what i have written there, you see, like that i</p>	
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	<p>think we should leave it up to every individual to formulate their own prep.</p> <p>MN Ja</p> <p>NK But em, but we have a rule that everybody works at the same level, which is so unrealistic because i might have high-flyers in my class and the next class might have learners that are really struggling or we cannot be at the same...er... concept nor do it the same way. So SIOP actually gives us a little bit of ...er...freedom. You know to assist our learners the way we feel that they would cope.</p> <p>MN Because each teacher plans individually, not two or three grade 3 teachers together</p> <p>NK We do, that's what we do in this school. We plan as a grade together and then we work through the prep or whatever and like we say we have the prep already and if a new comer comes to our school, now that new comer will be totally lost. Because she has an idea of what to follow but you know sometimes us...or two or maybe the way we have written it, she doesn't understand what needs to be done. Sometimes you want to formulate a lesson, you do it according to the way you feel and your thoughts cannot be the same as another person. So i think there maybe we have a little disadvantage. You know our system with this SIOP planning. And then i was thinking of something about this SIOP [laughs]</p> <p>MN [laughs] it will come to you now,</p> <p>NK I'm sure it will come to you again, but you'll see me again.</p> <p>MN But once again, thank you for taking the time for me to interview you.</p> <p>NK No problem any time</p>	
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Interview B:

Interview transcripts

CODES	INTERVIEW	THEMES
	<p>MN Good afternoon Sadia, I would like to interview you for the purpose of my research. The aim of this project is to evaluate the SIOP model in the South African class and to explore whether the impact of SIOP will impact on the performance of the learners. Please note that whatever we say in this interview will be strictly confidential and your autonomy will be held as well so nobody needs to know your name and any information as well. You are free to withdraw from this research at any point...um...so you are not obligated to stay in this research. Are you alright with it?</p> <p>SC Yes I understand.</p> <p>MN Please just speak from the heart and speak openly and honestly, ok?</p> <p>SC Ok</p> <p>MN There is nothing to be scared about. Can you please tell me before we start, what grades do you teach?</p> <p>SC Um I teach grade 1</p> <p>MN And how long have you been teaching?</p> <p>SC Um this is my 17th year</p> <p>MN Have you always taught in this school?</p> <p>SC No I was in um Brits in Central Secondary for eight years before I was um appointed here.</p>	

	<p>MN But you only taught foundation phase?</p> <p>SC Ja, that's right</p> <p>MN Have you always had second language learners in your class</p> <p>SC UM, for most of my teaching years, yes</p> <p>MN OK. You've been doing SIOP now for the past three years at Hillside, am I correct?</p> <p>SC Yes</p> <p>MN OK, can you please tell me to what extent does SIOP differ from the traditional teaching methods?</p> <p>SC OK, with um SIOP the, our learners are exposed to the written word almost from the beginning of their entering grade 1. Which in the (repeat) traditional methods we normally do a lot of drill work. Um, where they not really....we're not really focussed on incidental reading. Its words that come from their flip files, their core words and their flash words. But what happens is, in SIOP whatever we (repeat) talk about, ur..the children are exposed to that vocabulary. So that becomes incidental reading.</p> <p>MN Where do these drill words come from? Or these incidental words come from?</p> <p>SC Ok, they come from the lessons themselves.</p> <p>MN And how do they...how are the learners exposed to this words?</p> <p>SC</p>	
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	<p>Ok, in our...during our lesson if there is a new word that we introduce they normally, ur, its normally written on flashcards which are then ur kept for the duration of that lesson or maybe for the week or two weeks on a word wall. So whenever we make reference the children are (repeat) referred to those words all the time. So they are reinforced most of the time. Not just during like um, the morning drill work. Because what happens in the traditional method was you read it in the morning and the flip files go away and you only use it during sentence construction work. But with the SIOP they are exposed to these words throughout the day. And sometimes if lessons overlap, the same words are used in other learning areas.</p> <p>MN How are these incidental words reinforced with the learners besides the word wall?</p> <p>SC Um, ok in my class its most of the times during ur, it's like the flash cards which I make reference to.</p> <p>MN OK, when you talk about the drill words that you use with you learners,</p> <p>SC Uh huh</p> <p>MN In the flip files in the traditional teaching methods, do they not have this in the SIOP methods?</p> <p>SC Uh, they do but what I'm saying is for example our core words, looks its integrated because when we do, um in the beginning of the year, ur our themes are on 'my family'. With the core words, the words do..That are in our core words are words like 'mom', 'dad', 'brother', 'sister'. So those words the children are exposed to but maybe the words like 'uncle', 'brot.. .'; 'aunt' and 'nephew' and 'niece' are not. So when we do the SIOP lesson we introduce those extended vocabulary as well.</p>	
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	<p>MN Is that the only way that it differs, in terms of vocabulary? Is there no other way it differs between SIOP and traditional methods?</p> <p>SC Um, (pause)</p> <p>MN The planning, how does it differ?</p> <p>SC Ok, the planning there is a lot of planning that goes into it. Um, like the chil...like you take into account the individual children, individual intelligences, ur and with...if you looking at SIOP it's like integrated with OBE we working at the learners pace. With the traditional methods that was before OBE, are you referring to before OBE or after?</p> <p>MN After</p> <p>SC Ur, so OBE and the SIOP?</p> <p>MN Ja, but I'm not talking about before OBE.</p> <p>SC But there's not much of a difference because what we've done in the traditional methods was basically what we doing in SIOP. It's just that we're doing a lot of reinforcement of vocabulary, but our learners come into grade 1 they lack the vocabulary, so that's where our...the area is where they need support. It's basically to have a workable vocabulary. And with the ...ur...traditional OBE, the written work was introduced much later. And like I say with SIOP we introduce it much later.</p> <p>MN And in terms of the teaching methodologies, does that differ from traditional methods?</p> <p>SC Um</p>	
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	<p>MN The way you teach in the class</p> <p>SC Yes, there is a lot of um techniques that you use for example you like do the inner outer circle where you allow children to match things. But they allowed to do it in inner circle or outer circle. You praise them a lot, you know you give them little cues for example: kiss you'r brain and things like that, that they do enjoy. We've also got a cup with names where um, you know you don't allow them to answer on their own; you ask them, so with the names in the cup. So what happens is that everybody gets a fair chance to answer and they know that they must be alert at all times. Where, where as in the old OBE I never really did that. Somehow you tend to ask the children that you know will answer the questions. And then the weaker ones somehow get left behind, but with this you are forced to ask children even though they are weak , they are forced to listen and then to answer. So.....</p> <p>MN Have you found that from the time you have been using SIOP that your teaching has changed?</p> <p>SC Um, YES. Because I pay a lot of attention now to vocabulary, especially in subjects like ur, numeracy. Where before, we just taught the concept. If the concept was on maybe addition and subtraction, um, you don't actually introduce the word 'addition' you show them the plus sign, but you never really showed them the word addition. And so everything now is like the work 'equal to' the children have to know the word and they have to know the symbol. Whereas previously, I only showed them the symbols without the words (repeat). So if the children were given for example maybe later in the year, if we give them a word like um.....um... six plus three in words they couldn't really read it because they didn't know what the word add was or plus. They were only use to those symbols. But now because they introduce it all the time, they, and we</p>	
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	<p>don't take for granted that they know. That one thing with SIOP you never ever take for granted that the children know. You always, even if you talk about the three little pigs, you show them what a pig looks like. (siren) because we take it for granted that everybody knows what a pig is which isn't the case.</p> <p>MN Do you think that the children also find the lessons more interesting?</p> <p>SC UM. They do, because there is a lot of group work involved now, it's not just now where its teacher centred where you stand in front of the chalkboard, um or you just sitting in a group with the children on the carpet and just answering questions. There's lot of work where they have to do themselves ur lot of demonstrating, uhm, lot of practical work where they have to report back. With that they also have to ur read and reinforce uhm, ur words. For example if we do definitions, in the past, if we say like um, symmetry is where two sides of an object are identical we never really wrote that um like the sentence or the definition down. So they learnt it the first time and we forgot about it. But now if a definition is on the board it's reinforced all the time. So they get use and they get use to expecting to see words and they associate with it much better.</p> <p>MN Are they able to write more sentences?</p> <p>SC What I found was that compared to three years ago children were writing sentences or constructing sentences much quicker in the year than what they did. Before, towards the end of the third term we only introduce sentence construction. But we have already introduced sentence construction in the beginning of the second term now. And um, like they know ok the written work...whatever you speak there are words and symbols associated with that. So they know that already.</p>	
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	<p>MN We've already discussed SIOP in terms of your planning or instruction in the classroom, can you tell me a bit about your planning? In terms of...do you plan for an entire class, so its one planning sheet per class?</p> <p>SC It's one planning sheet per class but we do have in some cases other worksheets that we give the children that are weaker. Ok, but look, I know you suppose to plan for individual groups, but somehow if you give a worksheet to the children in the class with 90% of them cope, but 10% you obviously going to take out they given ur, extra intervention during the course of the day, so they given other worksheets and other practical work. Like in most cases they need a lot of practical work so the practical work is done uhm, it addition to the normal class work. But 90% of the time we do give the same worksheet</p> <p>MN But the learners are able to cope with the worksheet</p> <p>SC Ja they do cope but the ones that do not cope we take them out and work with them individually which is mostly about 6 or 7 at a t time.</p> <p>MN Do you also find that it takes more time for you to plan with SIOP?</p> <p>SC Yes, it took a lot of time. Because you have to think about, um, what strategies you are going to use to try and get something across to the learners. What vocabulary do you think is important for that lesson for the children to know? Ok and how are you going to reinforce this, ur during the course of the week? So, it's not just one lesson where you use those words, you gottaYour follow up lessons gotta be uhm, based on those words. So it's not like you use the words rather today and tomorrow and you forget about it, the next two three</p>	
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	<p>lessons you need to work with those same words. So the children see it in a different context and we try to bring it into the different learning areas as well.</p> <p>MN How are your lessons structured in a SIOP lesson?</p> <p>SC Um, ok what do you mean in that?</p> <p>MN How do you start your lesson off, how do you...</p> <p>SC Ok, what we do is, um the children is suppose...in a SIOP lesson there is content outcomes, that is actually what your assessment standards are. And then you have your language outcomes which is not part of the policy document. But from your content outcomes and lesson, you have to pull out what language um concepts the children need to learn. For example you need to be (helicopter sounds outside) reading something, or writing something or speaking. We focus on those things: the reading the writing and the speaking.</p> <p>MN Ok, so how many do you do in a lesson? How many outcomes do you cover?</p> <p>SC Ur, um, it depends on your lesson. But we try to focus on three, two to three. Not more than that because the children eventually lose interest and it becomes too much. But in our SIOP, Ja, it's either reading or speaking or speaking or writing. If it lends itself to all three and it's not that difficult we put it in. So it's fine. So but we try to do that in every lesson. Where we gotta read something, speak, say talk about something and then write something as well.</p> <p>MN So in your entire SIOP lesson you do a language outcomes and a content outcome that</p>	
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	<p>you have to cover?</p> <p>SC Yeas</p> <p>MN Any you integrate it in your lesson or do you do language first then content?</p> <p>SC NO it gets integrated in the lesson itself. So in the beginning of you lesson, for example you ask the children to....if you show them a picture and you ask them to talk about the picture, so then your language outcome comes in there. But in the same vein if your content outcome was to identify the different family members, so they know that's mother, father, brother, sister, so your content outcome comes in there. But they also able to um, identify and name so your language outcome comes in there. You don't teach just content and then afterwards concentrate on language, so its integrated</p> <p>MN In terms of your lesson preparation which do you prefer, the traditional method or the SIOP methods?</p> <p>SC Look the SIOP method is a lot of work. It works at the end of the day but you have to put a lot of effort in. The traditional way was much easier but ur, the results were not...like I felt like the results were not that great and with the....I mean if you read our SAMP reports there has been an improvement. Ur, whether it's due to SIOP or not we can't say but we've been using it and there has been an improvement. So as long as it benefits the children then why not?</p> <p>MN To what extent do the learners understand the content when the teachers are implementing SIOP? So in other words how do you test for understanding once they have covered the content and the language objectives?</p> <p>SC</p>	
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	<p>Ok, we have err, where then we have our different forms of assessment which is in the traditional, your...your...em, practical, or oral, or demonstration, or written.....so we use three to five different forms of assessment to assess one task. So the children who are not good at writing will do an oral for example, so at the end of the day, if you look at it, if the child coped with it orally or the child could draw something for you based on your content, it shows that the child understands. He may not have the vocabulary to explain something to you therefore we use three to four forms of assessment to assess the child.</p> <p>MN Do you use many question and answer sessions in your classroom?</p> <p>SC Um, I do but um, ok that was before, we were very limited but with the children who are second additional learners we can't just rely on that because there are chil...they...do know the answer and concepts but because they can't um, really explain something to you, you think they don't understand. And it's difficult for another child to translate for you because you don't know if other children in the class are translating the same stuff correctly. So we don't rely on it a lot. Ok, I prefer then for the child to do a practical demonstration, for example if I ask the child, ok how do you make a sandwich? There are children who will be able to write it, this child may not but he can come and show me, puts two pieces of bread together with something in between and that's his sandwich. So he shows that he knows it.</p> <p>MN But do you think with the use of the vocabulary that that improve that particular learners, especially English second language learners?</p> <p>SC It does, it does!</p> <p>MN Are they attempting to make a sentence?</p>	
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	<p>SC They use the vocabulary because they, like I say they are exposed to that few, look we don't use a lot ofwe introducing 20 words at a time. Ok, we introduce maybe six at a time, the most for the week. So it's not every day you are teaching new words that they have to learn at the end of the week, which is impossible. So you focus on the six important words that you feel they need to use and they use it when we do sentence construction. We trying to use it in themes related to the themes. So, by the end of the week that child should know exactly what the meaning of that word is. So, if I ask him to make a sentence or to build a sentence he knows how to build a sentence and they trying to use it in the class.</p> <p>MN So they use the words that's on the word wall?</p> <p>SC Yes, they use it.</p> <p>MN To make their sentences. How would you describe the performance of learners before you started the SIOP programme?</p> <p>SC Ok, err, um, that's a difficult question because err, are you talking about the beginning of the year three years prior?</p> <p>MN Three years ago. So that's even before SIOP...</p> <p>SC Ok, now the problem is, look I just had a discussion with my colleague and we find that the children coming in are at a lower level because they haven't been to grade R. So the calibre of children coming in to our schools are at a much lower standard. So it takes a lot for them to get....like three years ago the kids were still fine. So you, with the traditional methods you would still cope. If they were exposed to the SIOP they would have done much better.</p> <p>MN</p>	
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	<p>Three years ago?</p> <p>SC Three years ago. They would have really excelled. But if you look at the learners, if I had to use the traditional method they wouldn't have been up to standard and that would showed in their ANAs. Umm..Definitely, their scores would have really been bad. But because now we using the SIOP, but the children are at a much lower level, so it takes a lot for them to get aboard and to get up to a certain standard. So, I, like you know we were talking and we just said that without the SIOP, it's difficult with the SIOP, but without it we would have been...um...</p> <p>MN Worse off?</p> <p>SC Ja, worse off, so it helps a lot. Because if you look at the children coming in to grade 1, they don't speak, they don't understand English, were as three years ago they could at least understand you. They were at formal grade R, although Grade R is suppose to be compulsory, a lot of them go to nursery schools and they don't do much. So when they come into grade 1, they come with basically nothing. So, with the SIOP, it hel..it has helped. It's kept us sane, let's put it that way.</p> <p>MN And do think that the learners coming from Grade R do better in the classrooms?</p> <p>SC Yes, I've err, um...from our last year's lot where they also um, doing, well they haven't been for, haven't been doing SIOP as in 100%, but they use some of the techniques and those children that came into grade 1 are the ones that are the top achievers now in grade 1. Compared to the children that haven't been to our grade r class.</p> <p>MN And you talking about the Grade R at your school?</p>	
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	<p>SC At our school, yes.</p> <p>MN So what happens to those um top achievers in your grade 1 class? Because you have learners that are top achievers from SIOP in Grade R and learners that have come from different areas with no ... so how do you handle both groups of learners in your classroom with SIOP. Is it applicable to both?</p> <p>SC Err,</p> <p>MN To the top achievers and the..</p> <p>SC, It is, it is, because I mean, they exposed to like from the six words you gave, the top achievers may get all six. And the children that are weaker will get three out of the six. So the top achievers are still learning, just at a faster rate. And then they are given expanded opportunities...</p> <p>MN Ja,</p> <p>SC Where they sit and write and they given enrichment, so they take out books and read, so...</p> <p>MN So SIOP is not only aimed at second language learners, it can also be...</p> <p>SC No, to enrich learners who have English as a first language also.</p> <p>MN And have you seen an improvement with those learners who have first...who are...who err...top achievers?</p> <p>SC</p>	
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	<p>Yes, they very eager. And you can see it in their written work, especially in their sentence construction. You can see them, they already putting err sentences together and their sentences are related to a specific topic. So for example if they writing about err my birthday. You can see their sentences are related to the birthday and not in isolation.</p> <p>MN Ja</p> <p>SC Whereas the learner who never yet reached that standard are still writing simple sentences for example: um, I ate cake at a birthday. Err; I got a present at the birthday. Other children will go further, they will use conjunctions,</p> <p>MN Ja</p> <p>SC So you can see they a bit at a higher level but still not where they gonna become bored or anything like that.</p> <p>MN So, SIOP caters for all learners in the class?</p> <p>SC It does. It does</p> <p>MN How would you describe the performance of your learners at this stage now?</p> <p>SC Uhm, they doing well, we got, well I'm not gonna say 90%, 100% of them are doing well. Out of the lot about 70% of them are coping.</p> <p>MN OK, before you just carry on, I just want to ask you, you started with SIOP since January,</p> <p>SC January, yes</p> <p>MN</p>	
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	<p>And, and you seen an improvement since January as these are learners who have come for the first time to school.</p> <p>SC Yes</p> <p>MN Except for those grade Rs. So have you seen an improvement in them, have you seen a difference in their performance?</p> <p>SC I have, um, with like I say 70 -80% of the learners, the other 20% are still struggling but in any class you gonna find that. You are going to find the children that are in need of support. So it does not matter what method you use, they need on top of that extra...</p> <p>MN Additional support</p> <p>SC Ja, additional support which, which they are receiving. So, they coping some of them might have to repeat and some of them might um progress.</p> <p>MN Can you provide an example of how the performance of the learners are at this stage?</p> <p>SC OK, at this stage they are able to um they able to especially with language, we are busy now with reading err construction of sentences, like I say they are not in their basics where they start constructing sentences, simple sentences, like 'I love my mom'. That's been done already last term. Or the beginning, end of last term beginning of this term, they now putting, you know their sentences are now becoming coherent, err its related to a topic. Which is what we want from them when they get to grade 2.</p> <p>MN And that's in terms of language?</p>	
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	<p>SC Language.</p> <p>MN And for numeracy?</p> <p>SC In numeracy, um, also when we speak of for example I just tested this children the other day I gave them a story sum. But I used the words plus and minus and equals to. I didn't use the symbols. They were able to read that sentence and give me the number..</p> <p>MN And this is because of the vocabulary emphasised using SIOP?</p> <p>SC Yes</p> <p>MN To what extent do you think SIOP has impacted performance in standardised testing? Now when we talk about standardised testing we are referring to the ANA results as well as the foundations for learning campaign?</p> <p>SC I don't know compared to other schools, but if I look at the results of last year. Our kids were ok, I felt what they came in with at the beginning of the year and what they left with and with what they understood, yes there was a big difference. So they might not have been, um, on standard with the rest of the country's schools, but in terms of what levels they were when they came and what levels they were When they wrote the ANAs, was a big difference. And um, they, there were a lot of things like their words that they were exposed to in the ANA's that we wouldn't have used if we used the traditional methods just concentrating on core words and flash words.</p> <p>MN Um</p> <p>SC But because we expose them to other words,</p>	
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	<p>there were words like, ok I can't remember, but there were a few words there, that we did as incidental reading and we introduced incidental and they recognised when it came to, when they saw it in the test.</p> <p>MN And in terms of foundations for learning.</p> <p>SC Um, ok now our foundations for learning, ok you see there when we were introduced to SIOP. Our school had already started planning. So our assessments, tasks that we plan don't really coincide with the foundations for learning. Although what they are, what they ask, it might have been taught but we haven't assessed. Ok, so it was just part of our normal teaching. There I can't say, if the children are given an assessment, they might not, like we didn't really focus on err, how can I say, like the task that they gave, is not what we assessing. For example if we assessing in the second term, um, addition and subtraction, they may have maybe assessed symmetry. So if the</p> <p>MN It's the planning that..</p> <p>SC Our planning is out and the problem is that our task that we are assessing doesn't coincide with the foundations for learning task, but the Los and Ass are covered.</p> <p>MN So your content in covered?</p> <p>SC Our content is covered? Just a different times Ja, so if somebody has to come in and assess our children at this point in time using the foundations for learning assessment, our children might not cope because it could have been something we haven't yet taught,</p> <p>MN Ja</p> <p>Sc</p>	
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	<p>So, in that respect, but if it's at the end of the year they will definitely cope because everything would have been covered at that point in time.</p> <p>MN How did you learners fair last year in terms of the Foundations for learning?</p> <p>SC They...I think they did ok, if I compare the previous year, second one and last year, the children were not that far off. They cope more or less at the same level. With the rest of the country, I'm not sure.</p> <p>MN You said to me earlier that your learners did relatively fair from the time they came in to the time they left last year?</p> <p>SC Yes</p> <p>MN Are the grade two's doing foundations for learning, I mean SIOP?</p> <p>SC Yes, right up to grade three</p> <p>MN So they doing it all in your foundation phase. Has there been an improvement generally in the foundation phase, from the time they started to the time they finish?</p> <p>SC Yes, last err, the learners in grade 2, the teachers find there is an improvement. Especially in the literacy. C, compared to the previous time. They don't have to really go back much in to grade 1 and into the grade phonics and flash words because the children have covered it and they know more, in addition to that word, they know much more. So err, the teachers are basically happy with what's going on the grade 1.</p> <p>MN</p>	
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	<p>And in the grade 2 and 3 there is progression from grade 1.</p> <p>SC I should think so (laugh)</p> <p>MN OK. I think we have covered most of the questions that I needed to ask you, is there anything else that you want to talk about. In terms of SIOP is there anything you want to share with us. There was just one thing I forgot to ask you.</p> <p>SC Um</p> <p>MN Do you find that there is a change in terms of the learner's personality in the classroom, any behaviour and attitude towards coming to school, learning...</p> <p>SC Um, (pause) I wouldn't like, look, no not really. Because I, I suppose them coming to school has got a lot to do with the teacher first of all. If you find they not happy with the teacher or they not happy with the class situation, generally kids don't want to come to school.</p> <p>MN Um</p> <p>SC But, I err, haven't had a problem even in the last 3 years they've been coming regularly to school so I don't think, I'm not, well I haven't looked into it, maybe if I really focus and see like you know, has there been an improvement in their behaviour generally, with the traditional methods there were a lot of..rigid where you know you had your groups and now because it's a lot of groups at a time and children tend to be a bit noisy, but its constructive noise. It's not where they sitting and talking about things that doesn't relate to the lesson. So in that terms its fine.</p>	
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	<p>MN And when they talk in their groups; do they talk English or do they talk mother tongue?</p> <p>SC Look, err we allow them to converse in their mother tongue because that's what they comfortable with and we have to acknowledge diversity. So we allow it, but when they report back ,90% of the time when they report back, we prefer that they report back in English so that everybody understands. But if they corcus in their mother tongue, its fine, its fine with me</p> <p>MN You don't have a problem?</p> <p>SC I don't have a problem</p> <p>MN You don't understand what they saying</p> <p>SC But when they do report back then obviously I will</p> <p>MN They report back in English to you</p> <p>SC I'll understand whether they understood the concept or not.</p> <p>MN And all work that is assessed through you is done in English?</p> <p>SC In English</p> <p>MN I think I've covered most of my questions. I would just like to thank you for taking part in this interview and like I mentioned in the beginning, all information will be treated confidentially. And lastly if you have any questions that you would like to ask, is there any comment you would to make regarding SIOP, anything you would like to say?</p>	
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	<p>SC No, I would just like to thank you for taking an interest in our school. It's been a pleasure</p> <p>MN And I would like to thank you allowing me in your classroom and for being interviewed.</p>	
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APPENDIX E : OBSERVATION FIELD NOTES

Observation A:

Observation Protocol- 7 September 2010	
Observer: M.Pillay	Teacher: A
Grade: One	School: Target School
Role of Observer: Non-participant observer	Topic: Graphs
Length of observation: 40 min	Time: 10:00 am
<p style="text-align: center;">Content Objective supported by lesson delivery</p>	<p style="text-align: center;"><i>LWBAT: Read simple pictographs</i></p> <p style="text-align: center;"><i>Complete a simple pictograph.</i></p> <p>The lesson was about simple pictographs where learners had to read simple pictographs and then complete a simple pictograph.</p> <p>The lesson began with a simple mental math counting exercise where learners had to count yoghurt cups and put them in tens, fives, and count. An example was done on the chalkboard with magnetic strips stuck on the cups. These were placed on the chalkboard and individual learners were called to the board, using the 'magic cup' to count out empty yoghurt cups. Learners were then asked to count their cups on the tables with their partners while the teacher walked around and checked their counting. After the counting pictures of learners using simple modes of transport to school were placed on chalkboard. Learners were asked what each child was doing in the picture. Learners responded that children were walking, coming by bus, coming by taxi, driven by parents coming by bicycle to school. The teacher explained that they were going to put this information on a graph. This was then demonstrated to learners and they were shown how to complete a pictograph. The grid for the pictographs was already prepared by the teacher. The pictures were then placed on the graph and the words that made up the word wall were</p>

		<p>also labelled on the graph.</p> <p>Thereafter, the teacher demonstrated to the learners how to read off the graph with the pictures. Two children come to school by bicycle, therefore there are two pictures of children riding bicycles under the bicycle heading.</p>
	<p>Language objectives supported by lesson delivery</p>	<p><i>LWBAT: Read the vocabulary</i> <i>Write down numbers and names of objects</i> <i>Discuss ways of coming to school</i> <i>Count with their partners</i></p> <p>As the learners were talking about the modes of transport that learners use to come to school, the key vocabulary were put up on the chalkboard with prestick. Example: car, bus, taxi, walk, bicycle, drive, transport. These words formed the key vocabulary on the board. The teacher placed pictures of children using various modes of transport up on the chalkboard with prestick. Learners were asked individually to explain what each child is doing. Learners responded by saying ‘the child is walking to school with his school bag’, ‘the child is coming to school by taxi’, etc. From the discussion on what they saw, the teacher asked random learners to tell the class how they come to school. The key vocabulary was also read out aloud by the class before moving to the next activity.</p> <p>Different learners explained different modes of coming to school. From the discussions and demonstrations on how to complete a pictograph, learners were given a picture on a pond with ducks, flowers, insect and frogs. Learners had to count the various objects on the worksheet and then fill in the pictographs. In this way, the learners were counting number of objects and writing down names such as ‘frog’ , ‘flower’ etc.</p>

		<p>These names were firstly discussed by the teacher and written on the chalkboard for learners to refer to while completing the lesson.</p>
	<p>Learners engaged</p>	<p>Learners were actively engaged in all activities in the lesson. They firstly had practical tools for counting (yogurt cups) which they really enjoyed. It took the boredom out of counting. Secondly, they were involved in constant discussion in the lesson. The teacher had very good control over the learners and any learner who was not actively involved, was roped into the lesson by being made to answer questions and come up the front of the class to point out a picture, word, etc. The learners were excited about the worksheet as they could colour in the picture and did so very well. Although the learners did not play any games or move around the class, they showed enthusiasm and excitement in the lesson through their peer counting, and class discussions. They answered all questions and took part eagerly in discussions and sometimes the teacher had to use the ‘magic cup’ to ensure that all learners were given an equal opportunity to take part in discussions. Learners also worked well with little disruptions during the individual activity which showed the researcher that they understood what was expected of them in the activity. Learners who completed the individual activity early, had to write sentences on the key vocabulary in their workbooks.</p>
	<p>Review of key vocabulary</p>	<p>Key vocabulary was placed on the board as the discussion was in place. After the vocabulary was placed on the chalkboard, the teacher read out each word phonetically and learners repeated the word as she read them out. The ‘magic cup’ was used to call</p>

		<p>out learners to match the picture with the word on the chalkboard. Learners then had to read out the word that they matched.</p> <p>Throughout the lesson, as words came up from the discussions and activities, the teacher asked a learners to come up and identify the words. Therefore, all words were reinforced. For the individual activity, the teacher gave each child a worksheet and a discussion took place about learners saw in the picture. Words such a ‘frog’, ‘flower’, ‘pond’, ‘birds’ were placed on the chalkboard. These words formed the vocabulary for the worksheets. On the worksheet learners had to count the objects and place them on the pictograph. The worksheet had a prepared grid with a picture of what the learner had to count and a space for the learner to write down the name of picture. Learners who completed the worksheet earlier, had to write sentences on the key vocabulary in their workbooks.</p>
	<p>Review of Content concepts</p>	<p>The content concepts ‘pictograph’ ‘graph’ was emphasised and used throughout the lesson so that learner knew what a pictograph was. Learners were taken back to the content objectives and asked whether they had completed what was stated. They were asked whether they had done what they were suppose to do for the lesson. Content objectives and concepts were reinforced as the teacher asked used the concepts and asked individual learners to come up the chalkboard and explain what a pictograph is.</p>
	<p>Regular Feedback Provided</p>	<p>Learners were positively motivated and given regular feedback all the time. Learners were also very well disciplined and the teacher had good control over the class. the learners were constantly given positive</p>

		feedback such as ‘good work’, ‘well done’ ‘ try again’.
	Objectives stated for learners	In the beginning of the actual lesson, after the mental maths, learners were told what they were going to be doing for the lesson. Both content and language objectives were written on a chart paper and read out to the learners. They were explained to the learners in a clear and concise manner. Learners then read out what the objectives were and individual learners were called to explain what it meant. Three learners were called out so that the teacher could determine whether the learners understood what was expected of them. Those three learners then had to translate what they had said in mother tongue so that ESL learners also understood what was being said. This teacher also used Sepedi words to make learners understand what was being said, even though she was not fluent in the language. The learners enjoyed the teacher using Sepedi concepts and often laughed at her attempts.
	Key words emphasised	Throughout the lesson, reference was made to key vocabulary, learners were asked to read out the words, match the picture to the words and write down the key vocabulary. The teacher also made use of the content vocabulary in her discussions all the time.
	Language Integrated in lesson	Language was integrated in the lesson. Learners spoke about different modes of transport to school. They counted aloud with the partners in the lesson. They wrote words on the worksheets. They read key vocabulary from the chalkboard with the teacher, they read out objectives and they read from the worksheets.
	Other	The class was very neat and tidy. Each child had their pencil cases neatly placed in the centre of their desk. Each desk was neatly covered with a table cloth to fit

		<p>over the table. The class was in a very good condition, there were colourful charts made by the teacher all over the class. Each item in the class was labelled in a clear, legible writing. Requirements for FFL were displayed. There was a word wall where previous lessons vocabulary were placed and left for learners to refer to. The learners books were very neatly covered and the learners took pride in work as they wrote very neatly in their books. The teacher was gently and patient with the learners. There was one learner who had a physical disability and he enjoyed walking on the number line in the front of the class. he however, need support from the teacher all the time as he was unable to cope with the work.</p> <p>The teacher did review the objectives after the lesson with the learners asking them whether they achieved the objectives or not.</p>
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Observation B:

Observation Protocol – 7 September 2010	
Observer: M.Pillay	Teacher: B
Grade: One	School: Target School
Role of Observer: Non-participant observer	Topic: Hygiene
Length of observation: 40 min	Time: 9:00 am

THE SHELTERED INSTRUCTION PROTOCOL N (SIOP)

Lesson Delivery	Content objective supported by lesson delivery	<p><i>LWBAT: Personal Hygiene-What we use to clean our bodies and how we clean our bodies</i></p> <p>The content for the lesson was to teach the learners about personal hygiene which included how to clean our bodies, teeth, brush our hair, wash our bodies and then to give examples of what we use to do the above. For example, we use toothpaste to brush our teeth with a toothbrush. We use a facecloth to wash our bodies with soap. All of the above were demonstrated using a doll and a baby bath. Learners were given the opportunity to demonstrate (role-play) how to bath a baby using a facecloth and soap. The learners thoroughly enjoyed this activity and were very excited to ‘play’ during teaching time. At the same time, the key vocabulary was constantly emphasised as they used various cleaning instruments. The entire lesson was based on how we clean our bodies and what would the consequences be if we did not clean ourselves. The lesson also demonstrated how we should clean our bodies.</p>
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Language objective supported by lesson delivery

LWBAT: Read the words from the vocabulary cards

Write down words from the word wall

Talk about ways to keep our bodies clean

Each objective was fulfilled in the delivery of the lesson. Learners were given the opportunity to read the key vocabulary that was placed on the word wall, at different times of the lesson delivery. Learners played the inner-circle/out circle game where in the inner circle had a set of vocabulary cards and the outer circle had the matching object. The outer-circle had to move around the inner circle until they found their match and stand behind their partner. Example: toothbrush written on a flash card and a toothbrush as an object. This required both the inner and outer circle to read the words on the vocabulary cards and discuss with their partners whether they were match or not. Thereafter, they had to hold up their cards with the object, read out what was on the flash cards, and the rest of the class had to also read the card and say if they were correct or not.

As a follow up to the reading, learners were given a worksheet with various types of pictures; each picture was related to the vocabulary words. Learners had to write down what the picture was showing, example: girl brushing her teeth. Learners had to write down what the girl was doing in the picture. Therefore, the writing aspect of language objective was also covered. Not only were learners required the specific word on the word wall, they were required to write it out a sentence, as they were busy with sentence construction at that stage. The lesson began with the teacher bringing out a doll and a baby bath. Learners were told that they were going to bath the baby as the baby was dirty. Learners automatically talked about using 'colgate' instead of toothpaste, 'sunlight' instead of soap. However, the teacher was able to correct the learners immediately and show them the correct names. Therefore, learners discussed ways of cleaning their bodies and what they

The teacher used a 'magic cup' where all the learners in the class had their names written on an ice-cream stick. This 'magic cup' was used to call out names randomly ensuring that all learners were given an equal opportunity to talk/discuss.

	Learners engaged	<p>Learners were constantly engaged in the lesson. Firstly, by role-play where they had to role-play cleaning a baby doll. Secondly in the inner-circle, outer circle game and lastly in the individual activity they were doing by writing. The teacher ensured that the lesson was fun, exciting and like a game for the learners. They enjoyed the lesson, showed enthusiasm by taking part in the activities and at one stage, becoming bit loud in the class. The teacher however, was very good at controlling the class. They participated and those learners who don't talk much in the class were kept on their toes by the 'magic cup'. This strategy allowed all learners an equal opportunity to participate in the discussion and not only the confident, outspoken learners.</p>
	Review of key vocabulary	<p>Key vocabulary was reviewed through the game played-inner/outer circle.</p> <p>Key vocabulary was read out aloud by the teacher and learners read them out aloud as well. Key vocabularies were left on the word wall where learners could make reference to them throughout the lesson. By using the 'magic cup' individual learners were called out to identify words, read words from the word wall. Through the worksheets, key vocabulary was also reviewed and written out.</p>
	Review of content concepts	<p>Content concepts were reviewed as with the key vocabulary as they were the same.</p>

	<p>Regular feedback provided</p>	<p>Feedback provided was sensitive and appropriate to the learners. There was constant feedback and learners were also motivated when they read out words correctly. Words such as ‘well done’, ‘good listening’, ‘thank you’, ‘good work’ were used through the lesson by the teacher.</p>
	<p>Objectives stated for learners</p>	<p>The teacher read out the language and content objective of the lesson. This was written out on a chart paper. The teacher explained what each objective meant to the learners. The class then had to read out the objective as a group and learners were asked to explain each objective, to check their understanding of what the lesson was all about and what they were expected to do in each lesson. Therefore, each objective was clearly stated and explained to the class.</p>
	<p>Key words emphasised</p>	<p>As mentioned previously, there was sufficient emphasis on key words</p>
	<p>Language integrated in lesson</p>	<p>Language was very well integrated in the lesson as all skills in language were catered for. Learners had the opportunity to read, write and discuss in the class.</p>

	<p>Other:</p>	<p>All objectives were reviewed at the end of the lesson where the teacher asked learners:</p> <ol style="list-style-type: none"> 1. Did we talk about personal hygiene today? And the learners replied 2. Did we read our words from the word wall? And the learners replied that they did and they played a game with the words from the wall. <p>All language and content objectives were read out and the teacher asked learners whether they completed it as a class. All objectives were covered in the lesson. The class was very well resourced and colourful charts on the walls (FFL included). The word wall was clear and learners could refer to the words at any time.</p> <p>The class also had all the flags on the countries participating in the world cup 'hanging' from the ceilings with the names of countries clearly displayed. Learners coloured the flags and decorated the class according to the World Cup theme.</p>
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APPENDIX F: LETTERS OF CONSENT

27 November 2009

Dear Participant

My name is Melonie Pillay and I am a MEd Assessment and quality Assurance student at the University of Pretoria. The purpose of the research is to explore the effectiveness of SIOIP in the South African context . The aim of the research is to undertake an evaluation of the Sheltered Instruction Observation Protocol programme currently being piloted at the school. My research question is ‘ To what extent does the Sheltered Instruction Observation Protocol improve instructional practice in a primary school where the mother tongue is different to the Language of Teaching and Instruction?’

You are invited to participate in a research undertaking that aims to evaluate the effectiveness of the Sheltered Instruction Observation Protocol in the South African Context. Your input into is of great importance for a greater level of understanding of the implementation process of SIOIP in the class.

During the research, you are requested to participate in a one-to-one interview with the researcher during which your thoughts about SIOIP will be explored. This will be followed by observations of how you implement SIOIP in your classrooms. All interviews are to be recorded on an audiotape so as to ensure accurate recording of participants’ views and to ensure that no information is lost.

The research results will be used in the composition of a Master’s degree mini-dissertation, in partial fulfilment of the academic criteria for the degree Med (Quality Assurance and Assessment) at the University of Pretoria. The mini-dissertation will as such become public domain for the scrutiny of the examiners and the academic community. It is important to note that your anonymity will be guaranteed and that no personal information will be disclosed that will allow you or your family to be identified. Your participation is voluntary and confidential. Confidentiality will be guaranteed and you may decide to withdraw from the research at any stage during the data collection process.

If you are willing to participate in this study, please sign this letter as a declaration of your content i.e. that you participate in this project willingly and that you understand that you may withdraw from the research project at any time. Under no circumstances will your identity be made known to any staff at your school or in the reporting of the research results in any format.



CEA (Centre for Evaluation & Assessment)
AIS Centre, Faculty of Education
Groenkloof Campus Pretoria 0002

Tel: +27 (0) 12 420 4175
Fax: +27 (0) 12 420 5723

Please acknowledge consent to be interviewed and observed in class.

Participants signature : _____

Date : _____

Researcher's Signature : _____

Yours Sincerely

.....
Melonie Pillay, Med (Quality Assurance and Assessment) candidate.

.....
Dr. Vanessa Scherman (Supervisor)

23 November 2009

Hillside Primary School
Himalaya Street
Laudium
Pretoria
0037

Mr. Salleh-Mohammed

**APPLICATION FOR PERMISSION TO CONDUCT RESEARCH WITH TEACHERS
AT HILLSIDE PRIMARY SCHOOL**

My name is Melonie Pillay and I am a MEd Assessment and quality Assurance student at the University of Pretoria. The purpose of the research is to explore the effectiveness of SIOP in the South African context . The aim of the research is to undertake an evaluation of the Sheltered Instruction Observation Protocol programme currently being piloted at the school. My research question is ‘ To what extent does the Sheltered Instruction Observation Protocol improve instructional practice in a primary school where the mother tongue is different to the Language of Teaching and Instruction?’

Two teachers in the Foundation Phase will be approached to participate in my research. The teachers will be interviewed and observations of classroom practice will take place. The findings will be used in the compilation of a Master’s degree mini-dissertation in partial fulfilment of the academic requirements for the degree Med (Quality Assurance and Assessment) at the University of Pretoria. The teachers will be asked to participate and the research explained to them. The teachers will be able to withdraw from the study at any time. The information obtained will be kept confidential.

Your consideration of my request for approval with a written reply to the request will be much appreciated.

Yours Faithfully,

Melanie Pillay
MEd (Quality Assurance and Assessment) student

Dr. Vanessa Sherman (Supervisor)
Supervisor

23 November 2009

Hillside Primary School
Himalaya Street
Laudium
Pretoria
0037

To the School Governing Body

**APPLICATION FOR PERMISSION TO CONDUCT RESEARCH WITH TEACHERS
AT HILLSIDE PRIMARY SCHOOL**

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The teachers will be asked to participate and the research explained to them. The teachers will be able to withdraw from the study at any time. The information obtained will be kept confidential.

Your consideration of my request for approval with a written reply to the request will be much appreciated.

Yours Faithfully,

Melanie Pillay
MEd (Quality Assurance and Assessment) student

Dr. Vanessa Sherman (Supervisor)
Supervisor

APPENDIX G : SPSS DATA