

# ***The effect of LoLT on learner performance in disadvantaged schools in the Western Cape, South Africa***

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A minor dissertation submitted in *partial fulfillment* of the requirements for the award of the degree of Master of Education in Educational Administration, Planning & Social Policy.

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## **DECLARATION**

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## List of Abbreviations

<b>CAPS</b>	Curriculum and Assessment Policy Statement
<b>CSM</b>	Code switching and code mixing
<b>DBE</b>	Department of Basic Education
<b>DoE</b>	Department of Education
<b>FP L1 LoLT</b>	First language language of learning and teaching in the Foundation Phase followed by a transition to L2 LoLT from Grade 4 onwards
<b>FP L2 LoLT</b>	Second language language of learning and teaching in the Foundation Phase as well as throughout subsequent grades
<b>HOD</b>	Head of department
<b>L1</b>	First language
<b>L2</b>	Second language
<b>LiEP</b>	Language in Education Policy
<b>LoLT</b>	Language of learning and teaching
<b>NQ</b>	National quintile
<b>SA</b>	South Africa
<b>SASA</b>	South Africa School's Act
<b>SES</b>	Socio-economic status
<b>SGB</b>	School Governing Body
<b>SMT</b>	School management team
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>UCT</b>	University of Cape Town
<b>UNESCO</b>	The United Nations Educational, Scientific and Cultural Organization
<b>WCED</b>	Western Cape Education Department

## 1. Introduction

Language is what makes us uniquely human. It “is the house of the being” (Heidegger, 2000, p. 83) and it “is the dress of thought” (Johnson, 1905, p. 67). It is also the vehicle that carries the content of life-giving education for disadvantaged learners in South Africa (SA).

The research was inspired by this, and led to investigating the manner in which the use of language during lessons has affected the extent to which learners within disadvantaged bilingual contexts of primary schooling have been able to learn.

The key issue investigated was the differential impact of the language of learning and teaching (LoLT) on learner performance in relation to learners’ first language (L1) compared to their second language (L2) as measured by the Western Cape Education Department (WCED) Systemic Testing results. The context within which this was investigated is discussed below.

### 1.1 Context

In SA, despite the fact that government allocated a greater percentage (19,3%) of its total expenditure to education than the global average for middle-income countries (15,7%) between 1997–2014 (World Bank, 2016), the learner performance of the country’s education system during this period was of the poorest in the world (Spaull, 2013, p. 3).

While the definite cause of this is subject to debate, the choice of LoLT policy in South African (SA) schools was a significant causal factor (Pinnock & Vijayakumar, 2009, p. 16). This highlights the importance of evaluating the available LoLT policy options for that which is most likely to facilitate optimal performance, raising the question: *How does LoLT affect learner performance?* This was the research problem.

### 1.2 The research problem

Responding to this problem was the reason for conducting the research. By answering this key question, the research aimed to contribute to filling gaps in the knowledge commonly held by LoLT policy role players on the topic.

For informed decisions to be made on which LoLT policy is most likely to facilitate learner performance within the context of interest required further understanding of how LoLT affected learning within that context.

### 1.3 Purpose of the research project

The purpose of the research was to find out how LoLT policy, in the form of LoLT models, affected learner performance. In so doing, the research aimed to contribute to a LoLT discussion in SA by producing knowledge that would shed light on how LoLT policy was typically formulated, implemented, and performed within schools. It was hoped that such knowledge could then be used to guide the formulation as well as implementation of LoLT policy in the manner that served the educational interests of disadvantaged learners in SA, optimally. The value of responding to the research problem was significant because of the potential for the research to achieve this.

### 1.4 Significance of the research problem

As is the case in SA, “in multilingual societies, the choice of language of instruction and language policy in schools is critical for effective learning” (Education For All (EFA), 2005, p. 160). It is of crucial importance for a LoLT policy which is appropriate for use in the context of implementation to be determined if effective learning and quality education are to be achieved. The research problem – *how does LoLT affect learner performance* – was significant, because informed and appropriate LoLT policy choices could be made using knowledge gathered by responding to the problem.

By responding to the problem within the context of interest, the research provided an indication of the model of LoLT that was evidently optimal for facilitating teaching and learning of maximal quality within a system of schooling that required learners to write school-leaving examinations in a L2 – as was the case for the vast majority of disadvantaged SA learners. This indication is critical if schools within such contexts are to make informed decisions when formulating LoLT policy that will facilitate the education of learners to their best long-term advantage.

Additionally, by responding to the problem, the research also generated knowledge of factors surrounding LoLT policy implementation that affected the extent to which it

supported quality teaching and learning. This knowledge holds significant value in that it indicates how such factors can be best managed for optimal teaching and learning as an outcome of using the LoLT.

It was necessary for several problem-related questions to be asked in order for the research to provide a comprehensive response to the problem.

### 1.5 Research questions

These questions are presented below. Together, they provided the structure within which the research was conducted. As the research engaged with each question, a questioning process that operated in a systematic self-reflexive cycle was employed in order to allow the development of new questions as the research progressed.

The purpose of the first set of questions was to find out what options disadvantaged primary schools in SA had when adopting LoLT policy models, as well as to determine the extent to which each option was educationally sound. The answers to these questions were found by reviewing the relevant literature and by visiting schools:

- *To what extent did relevant evidence-based research on best practice manifest in LoLT policy at schools?*
  - What were the LoLT policy options available to schools?
  - How did language in education experts view each particular LoLT policy option?

The second set of questions was answered by exploring whether a pattern existed between LoLT policy and learner performance:

- *What effect did LoLT policy have on learner performance?*
  - More specifically, what was the relationship between LoLT policy and learner performance during Grade 3 and 6 WCED Systemic Tests in disadvantaged schools?

Lastly, the third set of questions investigated the nature of how LoLT policy materialised in schools according to role players involved in its implementation:

- *How did role players in schools say LoLT policy was implemented?*

- What reasons did role players give for having decided upon the LoLT policy at their schools?
- What theories of language had role players drawn upon when they made LoLT decisions?
- What language in education legislation had role players consulted when they made LoLT policy decisions, if any?
- How did role players regard the way that LoLT policy was implemented at their schools?
  - Did role players regard the LoLT policy at their schools as having been successfully implemented or not?
  - What problems or benefits had been experienced by role players in relation to the LoLT policy at their schools?
  - How was the designated LoLT policy reflected by classroom practices, according to role players?

These questions were answered by the research in order to provide a comprehensive response to the research problem by employing the following research design.

## 1.6 Research design

The research used a two-part mixed-methods design.

The first part (Part A) provided a quantitative indication of the learner performance associated with the implementation of two different LoLT models. These were the *early-exit transitional LoLT model*, which employed L1 as LoLT until Grade 4, where a transition to L2 LoLT occurs; and the *straight-for-English LoLT model*, which made use of a L2 LoLT from the start of primary schooling and throughout all grades thereafter. The performance of learners in schools following each LoLT model within a homogeneous sample was compared cross-sectionally as well as longitudinally using data from WCED Systemic Testing of Language and Mathematics. The findings from these comparisons were described statistically and tested for statistical significance.

The second part of the research (Part B) provided a qualitative assessment of how the two different LoLT models were typically formulated and implemented. To do this, a comparable sample comprised of several schools following each LoLT model was selected from those that were included within Part A. Teachers and members of

school management from these schools were surveyed using questionnaires made up of comparative rating scale response items as well as interviewed using a standardised open-ended interview schedule. The data collected was captured, analysed, and presented qualitatively.

### **1.7 Assumptions, limitations and scope**

Several assumptions were inherent to the nature of the process described above.

The research assumed that the learner performance data used was accurate, and resulted from the use of reliable and valid instrumentation administered and captured under controlled circumstances. It was further assumed that participants engaged with surveys and interviews in a manner that was truthful and reliable.

The research was potentially limited by the extent to which it could be generalised owing to the small size of some data sets, as a result of scarcity. Factors such as perceptual misrepresentations and researcher bias add further potential limitations to the validity of the research.

In terms of scope, Part A used data sets reflecting the learner performance of an average of 128 schools/14 714 learners within disadvantaged contexts of the Western Cape, SA; while within the same context, Part B visited 5 schools and surveyed 11 teachers, as well as interviewed 14 teachers, members of school management.

### **1.8 Overview**

Chapter 2 sets out the legislative, empirical and theoretical framework within which the investigation was located. A detailed account of the design and methodology employed follows in Chapter 3. Findings from the research are then presented in Chapter 4. Chapter 5 concludes the report. This chapter contains conclusions from the research as well as recommendations for the formulation and implementation of LoLT policy most likely to result in disadvantaged SA learners' quality of education and brighter future.

## 2. Research context

This chapter highlights the significance of this research, which is contextually located in WCED primary schools located in disadvantaged communities in SA. It reviews:

- The challenges faced in formulating LoLT policy in SA;
- SA LoLT policy as legislated as opposed to its practice;
- What options are available to meet this challenge as well as the debate around these alternatives; and
- The repercussions of LoLT policy in SA on factors affecting learner performance.

### 2.1 LoLT policy challenge

Successful education for the majority of learners in SA depends on their becoming fluent in a language that is not their first language (L1). This is because all SA learners must write their school-leaving examinations in either English or Afrikaans, although English is more frequently chosen (Taylor & Coetzee, 2013, p. 33). In 2007, 83,4% of learners wrote their school-leaving examinations in a second language (L2) (DBE, 2010, p. 13). During this year, 81,4% of SA learners wrote these examinations in English, compared to 12,8% that wrote them in Afrikaans (DBE, 2010, p. 16).

This raises questions about what might be the most advantageous language education policy options. For example:

- Is learners' L1 to be used in school, or is schooling to be conducted in English or Afrikaans?
- If learners' L1 is to be used, should it be used as a LoLT or taught as a subject?
- If learners' L1 is to be used as a LoLT, is this to be throughout schooling, or should there be a transition from L1 to L2 as the LoLT at some point? If so, at what point and how should such a transition take place?

### 2.2 LoLT policy options

Various LoLT policy options embody possible answers to these questions.

LoLT policy options can be divided into two often opposing groups: *weak* and *strong bilingual models*.

*Weak bilingual models* include: *subtractive bilingual models*, where the aim is to move learners from L1 to L2 LoLT as soon as possible; as well as *transitional models* that aim to move learners from L1 to L2 LoLT in a transition (Heugh, 2006, p. 60). These models are referred to as ‘weak bilingual models’ as they have one language as a target for use as a LoLT, this language being a learner’s L2.

At the subtractive extreme of weak bilingual models is the *submersion* approach, where a L2 as a LoLT is used without any transition and without learners having had any prior exposure to it in school.

Should a transition from L1 to L2 LoLT be present and occur within the first 1 to 4 years of starting school, the model is an early-exit transitional model (Ouane & Glanz, 2011, p. 11). If transition occurs after 5 to 6 years of having started schooling, the model is a *late-exit transitional model* (Heugh, 2006, p. 114). *Very-late-exit transitional models* also exist. Here, the transition from L1 to L2 LoLT occurs after 8 to 9 years of having started schooling (Heugh, 2006, p. 120).

*Strong bilingual models* are *additive bilingual models*. The target of LoLT is either the L1 with L2 taught as a subject, or the use of both L1 and L2 as LoLTs in a dual-medium style (Heugh, 2006, p. 61).

Within strong bilingual models the L1 is not removed as a LoLT and the target is a strong learner proficiency in both L1 and a L2 (Heugh, 2006, p. 114).

### 2.3 LoLT policy debate

The LoLT policy debate is one that draws on two conflicting pools of theoretical thought.

Proponents of a ‘stronger’ bilingual LoLT policy hold the view that a later transition to English LoLT is needed, as non-English L1 learners cannot understand English from day 1 of school and are not able to learn if it is used (Taylor & Coetzee, 2013, p. 3). This view is that L1 LoLT should be used until the learner has reached a level of academic proficiency in the L2. Consensus exists between L2 acquisition experts that this is the most pedagogically sound approach (Heugh, 2013: 220).

Those in favour of a ‘weaker’ bilingual LoLT policy are of the opinion that using L1 as LoLT during early schooling delays and distracts learners’ learning of the L2 (Taylor & Coetzee, 2013, p. 4). This thinking is that L2 learning must begin as soon as possible to maximise time spent learning the L2 (Imhoff, 1990), and language learning is easier at a young age (Pinnock & Vijayakumar, 2009, p. 12).

## 2.4 SA school language education policy

LoLT policy in SA is based on the *Constitution of the Republic of South Africa* (RSA, 1996a) and the *South African Schools Act* (SASA) (RSA, 1996b). From these, the then Department of Education promulgated the *Language in Education Policy* (LiEP) (DoE, 1997), expanded upon in the *Revised National Curriculum Statement* (DoE, 2002), and the *Curriculum and Assessment Policy Statement* (CAPS) (DBE, 2010). In 2013, the now Department of Basic Education published a draft and yet-to-be-finalised policy document, *The Incremental Introduction of African Languages in South African Schools* (DBE, 2013). This legislation currently sets the primary legal context for which LoLT policy is developed in SA.

The Constitution legislates the official and equal status of eleven languages in SA as well as the constitutional right of all South Africans to receive education in the official language(s) of their choice in public schools within reasonable practical limitations. Informed by this, SASA (RSA, 1996b) prescribes that school governing bodies (SGBs) determine the LoLT policies of schools subject to prevailing law. LiEP (DoE, 1997) adds voice to the Constitution and SASA’s views on LoLT policy. LiEP requires that schools formulate LoLT policy that:

- Promotes *multilingualism* (the ability to speak two or more languages) in the form of strong bilingual dual-medium LoLT implementation by “using more than one LoLT, and/or by offering additional languages as fully-fledged subjects” (DoE, 1997, p. 3); and
- Assists Provincial Education Departments to honour the constitutional right of learners to determine their LoLT.

LiEP (DoE, 1997) recommends schools adopt an “additive approach to bilingualism” (DoE, 1997, p. 1) as a way of achieving multilingualism where “the underlying principle is to maintain home language(s) while providing access to the effective acquisition of additional language(s)” (DoE, 1997, p. 1). As such, “an additive

approach to bilingualism is to be seen as the normal orientation of our [DoE] language-in-education policy” as “most learners benefit cognitively and emotionally from the type of structured bilingual education found in dual-medium schooling” (DoE, 1997, p. 1).

In practice, SA primary schools are obliged to ensure that all learners learn:

- Their home language and at least one L2 which must include English, as prescribed by CAPS (DBE, 2011), as subjects from Grade 1; and
- An African language as a subject for a minimum of three years by the end of the General Education and Training band of schooling (Grades R up to and including Grade 9).

The schools must then determine all remaining aspects of LoLT policy via decisions made by SGBs (Taylor & Coetzee, 2013, p. 4).

In contrast to the additive approach to bilingualism as DBE’s normal orientation, how LoLT policy pans out for the majority of disadvantaged primary schools in SA is that a *transitional approach* is taken in the form of a late-exit transitional LoLT model where the L1 is used as the LoLT up to but not including Grade 4, while English is taught as a subject in this time. Then, from Grade 4 onwards, a transition occurs, and English is used as LoLT while the L1 is taught as a subject. Within a minority of disadvantaged SA schools a straight-for-English approach is taken, where English is LoLT from Grade 1, while the L1 is taught only as a subject. This is a type of submersion LoLT policy.

As such, and contrary to the prevailing language in education legislation, the models of LoLT policy prevalent in disadvantaged SA primary schools are subtractive, not additive, in their approach to bilingualism. DBE (2010) data illustrates this trend. In 2007, 70% Grade 4 African-language L1 learners in SA were taught in English (up from less than 30% in Grade 3) (Pluddeman, 2015, p. 192).

As such, a gap in implementation exists between the emphasis placed by the Constitution and LiEP on achieving multilingualism, and how LoLT policy is formulated and implemented by schools. According to Heugh (2013, p. 1), this is as a result of a disjuncture between constitutional and other government policies, which results in “an assimilatory drive towards English” as the LoLT in SA schools.

With regard to where responsibility for the implementation of LoLT policy in SA schools rests, this is only vaguely referred to within government policy documents as “the school”. The extent to which LoLT policy is implemented within SA schools is difficult to ascertain as doing so is reliant on reports from education role-players who often share some responsibility for the LoLT implementation — and are therefore unwilling to disclose information on the matter.

The high prevalence of teachers not using the LoLT when *code switching* and *code mixing* (switching between two languages when speaking) during lessons within L2 LoLT classrooms in Africa provides an indication of the limited extent to which LoLT policy is implemented in similar SA contexts (Benson, 2005, p. 2; Brock-Utne & Alidou, 2006, p. 116; Bush et al., 2009, p. 3; de Wet, 2002, p. 121).

## 2.5 Effects of LoLT policy implementation

LoLT policy implementation holds far-reaching effects on learners both inside and outside of the classroom. The research on these effects discussed below refers to LoLT policy contexts that are comparable to those found in disadvantaged SA schools.

### a) LoLT accessibility

The majority of SA learners must accept schooling that is conducted in a L2 that they cannot understand to some degree. Because of this tendency of SA LoLT policy to presuppose learner (and teacher) competence in the LoLT, learners often do not understand what their teachers are saying (Brock-Utne & Alidou, 2006, p. 102) and are not able to access the curriculum because of miscommunication of a systematic nature found to exist between teachers and learners (Erickson, 1987).

Similarly, most teachers in disadvantaged SA schools must teach in a language that is not their L1 and in which they are not fully proficient. As such, communication of the curriculum is jeopardised because neither teachers’ nor learners’ L2 skills are adequately developed (Probyn, 2008, p. 217). Learners’ and/or teachers’ inability to use the LoLT is therefore viewed as the central pedagogic problem in L2 LoLT schooling contexts as a result of the curriculum inaccessibility caused by inefficiency in ‘pedagogic transmission’, that is, learning (Smits, Huisman & Kruijff, 2008, p. 7).

Learners perform poorly in subjects taught in an unfamiliar LoLT, particularly in those that require decontextualised use of language such as Mathematics and Science (Heugh, 2006, p. 71). This is strikingly apparent in SA. During the most recent Trends in International Mathematics and Science Study (TIMSS) held in 2015, SA learner performance was amongst the very worst of the 57 countries that participated (*The Economist*, 2017).

### b) Educational outcomes

A difference between the language that learners speak at home and LoLT negatively affects educational outcomes (Smits, Huisman & Kruijff, 2008, p. 6). Within disadvantaged L2 LoLT contexts, learner performance and school attendance are lower, while repetition and drop-out rates are higher compared to similar contexts where learners are taught in their L1 (Pinnock & Vijayakumar, 2009, p. 26).

Learners learn better when they are taught in their L1 because they can understand their teachers better (Bender et al., 2005, p. 2). L1 LoLT use is also conducive to the effective teaching of early literacy because the language barrier introduced when learners are required to decode a language that they do not understand before making connections between spoken and written language is avoided (Smits, Huisman, & Kruijff, 2008, p. 8).

Table 2.1, below, developed from international research conducted by Thomas & Collier (1997, p. 76) shows anticipated learner performance of Grade 12 learners in the subject English following different LoLT models. Score A illustrates the anticipated score of a learner who begins schooling in L2. Score B shows the predicted score of a learner who begins learning in a L2 at the start of Grade 4. Score C indicates the predicted effect on the Grade12 English score of beginning to learn in the L2 from the start of Grade 8. Score D indicates the predicted learner score for learners who follow a type of dual-medium LoLT model, while Score E shows the anticipated score for those learners that learnt in the L1 throughout school with L2 as a subject.

**Table 2.1: Anticipated learner performance in English at Grade 12 (Thomas & Collier, 1997, p. 76)**

Anticipated scores for English in Grade 12					
	A	B	C	D	E
70					
60					
50					
40					
30					
20					
10					
0%					
	L2 only from start of schooling	L1 for 2 / 3 years Early- exit	L1 for 6 / 7years Late-exit	L1 6/7yr and Dual medium Thereafter	L1medium + L2 subject Grades 1 - 12

**c) Learning and literacy development**

Compared to learners taught in their L1, learners taught in a L2 suffer a pedagogic processing disadvantage (Cooper, 1999, p. 254) because learning new ideas and information is most efficient when what is being taught is located within learners’ existing frame of reference, accessed easily via, and inextricably linked to, the L1, in a learning process where learners’ prior knowledge is built upon to create more advanced knowledge during a process of assimilation (Bransford, Brown & Cocking, 1999). Learners’ L1 is the primary vehicle upon which the success of their learning and cognitive development depends, because teaching in learners’ L1 better supports learners' ability to learn than teaching in a L2 does (Traoré, 2001).

Longitudinal experimental research on the effect of extended L1 LoLT use on learner performance in disadvantaged contexts gives evidence to the above and has shown that learners who are taught in their L1 for the first six years of school perform significantly better throughout their schooling (Brock-Utne & Alidou, 2006, p. 106) compared to those learners who were taught in their L1 only for the first three years of their schooling. Comparable studies have found similar results (Alidou, 1997; Bergman et al., 2002; Chekaraou, 2004; UNESCO, 2003). Research also shows that the use of L1 LoLT is more conducive to the development of literacy in learners, generally, than a L2 LoLT is (UNESCO, 2016, p. 3).

Learners who are taught in their L1 during the early years of school not only learn more quickly but also develop stronger reading and writing skills than learners in comparable contexts who are taught in a L2 (Smits, Huisman, & Kruijff, 2008, p. 8).

Learners are also able to learn and use a L2 for learning far more easily after they have fully learnt their L1, which takes about 12 years from birth to accomplish (Benson, 2005), compared to older learners or adults who have not fully developed their L1 (McLaughlin, 1992).

Understanding the effect of L1 on learning and L2 acquisition, research brings to light problematic implications for a learner who has had the mastery of their L1 curbed before it is fully developed:

- If a learner has not first learnt ideas and words in his or her L1, he/she will be less able to later transfer his or her understanding of these ideas and words for use in a L2 (Daby, 2015, p. 7).
- A learner is likely to be unable to understand or use L2 words that relate to academic or abstract concepts if such concepts have not first been properly learnt in the learner's L1 (Pinnock & Vijayakumar, 2009, p. 13).
- Any word that a learner learns to use but that does not understand is an exercise in memorisation, not the development of that learner's literacy. The use of a L2 that a learner does not understand in learning to read and write is counterproductive (Pinnock & Vijayakumar, 2009, p. 13).
- If a learner's L1 is not used at school, that learner will be unable use his or her L1 for academic and abstract purposes later because only through use can a language develop.

The relationship between LoLT and the development of literacy in learners<sup>1</sup> emphasises the link between language development and literacy. Such research indicates that without L1 development, progress in gaining L1 and L2 literacy in learners is undermined in that a sufficient level of L1 development is required to attain literacy in any language, regardless of whether a L1 or a L2 (Mackenzie & Walker, 2013, p. 6). As an effect of subtractive bilingualism, this results in learners achieving only what scholars describe as *semilingualism*, the incomplete linguistic development of both the L1 and the L2 (Hibbert, 1995, p. 7).

#### d) LoLT transition

The extent to which a learner must be proficient in a L2 before being able to use it adequately as a LoLT is another prominent factor that should be taken into account when deciding upon the appropriate age for a learner to make the transition from

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<sup>1</sup> Taylor & Coetzee (2013) provide a good summary of this research.

learning in his or her L1 to learning in a L2, an unavoidable reality for most disadvantaged learners in SA.

While the ‘common sense’ notion is that the sooner a learner is exposed to a L2 at school, the better they will learn it, this is not the case and, to the contrary, is likely to have the opposite effect (Heugh, 2006, p. 64). It is not only unreasonable to expect that a learner learns in a L2 LoLT when they have not yet developed proficiency in using it, but expecting this from a learner is also likely to undermine the development of both the learner’s literacy in both the L1 and L2 (Mizza, 2014, p. 102).

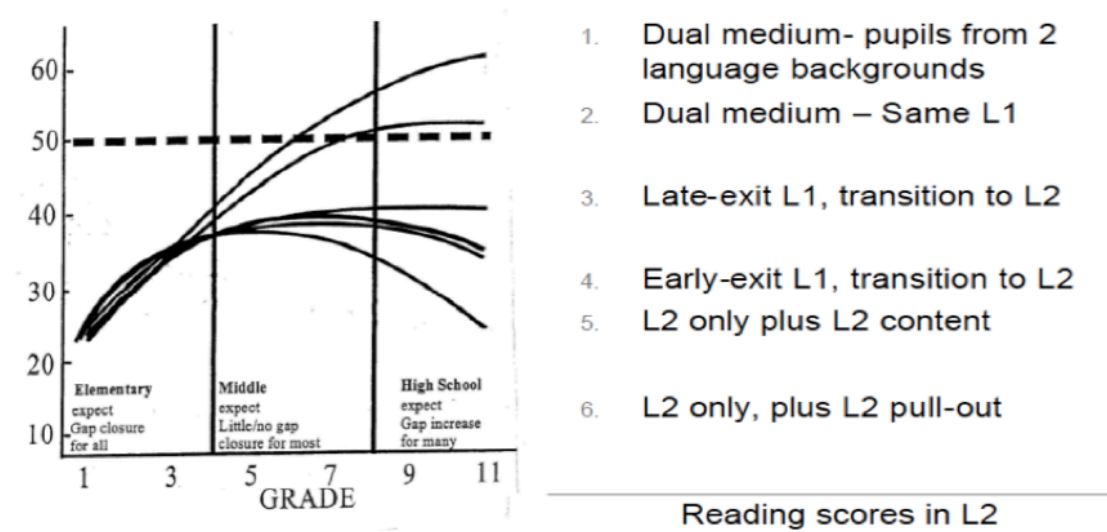
An example of a LoLT model that requires learners to make the transition from L1 to L2 LoLT before they are adequately prepared to do so is the early-exit LoLT model, found in most disadvantaged SA primary schools. This model is criticised by those who favour for the following reasons a stronger bilingual approach to LoLT policy.

At the point of LoLT transition from L1 to L2 in Grade 4, learners experience a significant barrier to learning where the required cognitive leap for learners to perform adequately from ‘learning to read’ the L2 to ‘reading (the L2) to learn’ is too great for the majority (Pretorius, 2002; Pretorius & Ribbens, 2005). A learner cannot be expected to learn a L2 as well as perform adequately using it as a LoLT at the same time (Heugh, 2006, p. 64). Should this be expected of learners, they are likely not to learn the L2 adequately, as well as to fail to understand explanations of concepts and skills that teachers attempt to teach them using it, thereby paralysing their learning. This will then result in such a learner declining in his or her performance and falling behind the performance of learners of his or her age who are taught in their L1.

Research conducted throughout Africa, such as that by Halaoui (2003) in Niger and Sampa (2003) in Zambia, has examined the effect of early-exit LoLT models, where learners move from L1 to L2 LoLT in Grade 4, on learner performance. This research found that learner performance declined within one or two years after learners had begun learning in a L2, and further continued to decline in subsequent grades (Heugh, 2006, p. 71).

Illustrating further findings comparable to those found in SA, Figure 2.1 below, reproduced from work by Thomas & Collier (1997, p. 53), shows the learner

performance in reading scores of 43 217 L2 learners who followed alternate LoLT models between 1982 and 1996 in the USA. Amongst these learners, those in early-exit models (represented by Line 4 on Figure 2.1) showed a steady decline in their performance from the point of LoLT transition at the SA equivalent of Grade 4 when they began learning in a L2 LoLT, while those learners who continued to learn in L1 LoLT for a longer period (represented by Lines 1-3 on Figure 2.1) performed better over time.



**Figure 2.1: Learner performance per LoLT model (Thomas & Collier, 1997, p. 53)**

A reason for the decline in learner performance from the point of L1-L2 LoLT transition in early-exit models is that learners are required to know the L2 LoLT impossibly well in order to access and meaningfully engage with the primary school curriculum. While a minimum active vocabulary of between approximately 5 000 and 7 000 words is required for understanding the curriculum in Grade 4 (Thomas & Collier, 1997), by the end of Grade 3 SA learners have been found to have been able to amass a L2 vocabulary of only about 500 words (Heugh, 2006, p. 65). Such learners are also unable to engage fully with, or express, their prior knowledge in the L2 during learning processes.

Learners in early-exit systems are often not allowed the time needed to learn the required vocabulary to access the curriculum in a L2. While most learners in disadvantaged countries must learn in a L2 after having had little or no exposure to it at school, a learner needs to have spent between six and eight years learning the L2

before they are able to understand curricular content in that language adequately (DoE, 2007, p. 2).

Not one example in Africa of an early-exit model has been found to have succeeded (Heugh, 2006, p. 66). For disadvantaged primary schools that follow this LoLT policy, the repercussions for education include poor performance (Heugh, 2006, p. 71), low literacy attainment, the underdevelopment of both the L1 and L2 (Heugh, 2006, p. 67), and escalations in repetition and attrition rates from the point where learning begins in the L2 (Heugh, 2006, p. 65), as well as the use of ineffective and inefficient teaching methods (Alidou & Brock-Utne, 2006, p. 85) that produce education of a low quality.

#### **e) Instructional quality**

The implementation of L2 LoLT policy within contexts where very few people can speak the LoLT is problematic as the language causes a barrier to teaching and learning when teachers and learners cannot use it to communicate and learn (Alidou & Brock-Utne, 2006, p. 85).

Within such contexts where teachers and learners cannot adequately use the L2 LoLT, classroom observations show that teachers tend to attempt overcoming the language barrier by providing learners with lessons, activities and assessments which are characterised by their tendency to facilitate cognitive processes that are limited to a lower order, and result in a poor quality of education (Alidou & Brock-Utne, 2006, p. 87). Lower-order cognitive processes are educationally ineffective because they do not facilitate the higher-level cognition required for learners' effective learning. This is because teachers can engage learners' higher-order thinking only by using questions of a high quality, which is generally possible only when facilitated in the learners' L1 as a result of teachers' and learners' proficiency in it (Alidou & Brock-Utne, 2006, p. 87).

Low-quality teaching practices commonly found to be employed by teachers in contexts where the LoLT is neither the teachers' nor the learners' L1 include those such as safe talk, repetition, memorisation, and chorus teaching, as well as code switching and mixing (Alidou & Brock-Utne, 2006, p. 85; Brock-Utne & Alidou, 2006, p. 102). In such contexts, learners tend to hold back from actively participating

and are typically passive and quiet during lessons taught in the L2 (Alidou & Brock-Utne, 2006, p. 85).

In contrast to patterns of low learner participation, teacher-centred and educationally-ineffective teaching styles and the poor quality of education typically found in L2 LoLT classrooms, experimental research from comparable contexts shows that in L1 LoLT classrooms:

- Teachers employ teaching methods that are more engaging and more educationally effective (Bender et al., 2005, p. 2);
- Learner participation is higher (Alidou & Maman, 2003; Dzinyela, 2001);
- Greater active teacher-learner interaction is fostered, which further allows learners to develop higher-order thinking skills (Chekaraou, 2004);
- The stronger development of problem-posing and problem-solving skills in learners is allowed (Fredua-Kwarteng & Ahia, 2005 [online]); and
- greater cognitive development in learners is evident (WCED, 2007, p. 2)

L1 LoLT use is also likely, for pedagogical efficiency reasons, to reduce inequality, since it minimises classroom miscommunication and benefits learners' desire to learn while bolstering their self-esteem as able learners (Smits, Huisman, & Kruijff, 2008, p. 10).

#### **f) Code switching and mixing**

Code switching and code mixing (CSM) are communication strategies frequently found in both L1 and L2 LoLT contexts employed by both teachers and learners in disadvantaged SA classrooms. Switching between L1 and L2 sentences during speaking is referred to as code switching, while the use of both the L1 and L2 within the same sentence is referred to as code mixing (Heugh, 2002, p. 190). The National Centre for Curriculum and Research Development in SA (DoE, 2000, p. 68) observes code switching in SA to be a "main linguistic feature in classrooms where the teacher and the learners share a common language, but ha[ve] to use an additional language for learning ... the learners' language is used as a form of scaffolding".

CSM are variously employed by teachers, according to their views on the strategies and their own language skills, to help learners understand what is being taught and to

increase learner participation during lessons (Probyn et al., 2002, p. 35), and involve teachers' and/or learners' mixed use of the LoLT and teachers'/learners' L1 during lessons. These strategies are also commonly used by teachers to mitigate their own limited proficiency in using the LoLT (Banda, Mostert & Wikan, 2012, p. 24).

Generally, however, teachers employ CSM while they teach as they feel they have no choice but to do so within their circumstances, as the following quote from research conducted by Mwinsheikhe (2003, p. 16) illustrates: "I personally was compelled to switch to Kiswahili [learners' L1] by a sense of helplessness born of the inability to make students understand the subject matter by using English".

As such, the use of learners' L1 for explanatory purposes is the main reason for code switching by teachers in lessons in L1 and L2 LoLT contexts (Probyn et al., 2002, p. 35). Teachers also make use of learners' L1 via code switching for various additional functions that fall under the categories 'classroom management discourse' and 'interpersonal relations' (Ferguson, 2003, 16, p. 2). Within L1 LoLT contexts, teachers and learners have also been found to code switch to English when the L1 lexicon is inadequate, inefficient, or does not exist. Code switching for this reason occurs most within subjects such as Mathematics and Science.

Learners in L2 LoLT classrooms have been found to code switch predominantly in order to respond to questions, during individual or group interactions, as well as during whole-class interactions when engaging in discussion (Setati et al., 2002, p. 81).

### ***Advantages of code switching/mixing in classrooms***

The primary advantages of code switching within L2 LoLT classrooms are also the main reasons why code switching is employed by teachers and learners: to be understood, to understand, and to communicate. As such, within multilingual classrooms, code switching can be considered a social and linguistic skill (Mesthrie, 2008, p. 67) used to facilitate communication between people of different cultures (Wolff, 2011, p. 66) as well as to facilitate learning by improving the communication of curriculum between teachers and learners (Brock-Utne, 2007, p. 521). As a pedagogical strategy, code switching is useful as it allows what research refers to as *exploratory talk* within classroom conversations, where learners' L1 is used to

explore concepts and ideas to a degree greater than would have been possible if they were to have been explored in the L2 LoLT alone (Setati et al., 2002, p. 78).

Research on L2 Mathematics teaching in SA has found that code switching, usually to give learners an explanation of concepts and processes in their home languages, is educationally beneficial and necessary for adequate learning to occur (Setati, Chitera, & Essien, 2009, p. 72).

In light of the educational advantages of code switching and mixing in classrooms, very little training is provided for teachers in SA on how to use code switching strategies as a linguistic resource in a manner that is planned and strategic (Probyn, 2008, p. 220).

### *Disadvantages of code switching/mixing in classrooms*

Despite code switching as a practice in education being viewed positively as an educational resource (Setati et al., 2009, p. 66), its use remains dilemma-filled and an issue of considerable debate as a result of problems surrounding code switching's impact on education. While most disadvantaged SA schools report an English L2 LoLT, this is largely inaccurate. Within such schools learners are expected to write and read in English while being taught using L1/L2 CSM (Heugh, 2013, p. 221). This difference between official LoLT and unofficial classroom practice has negative consequences for learner progress (Probyn et al., 2002, p. 42).

Despite having been often taught in L1 LoLT, when assessed, SA learners are required to answer questions in the L2 LoLT and will receive zero marks for any answer provided in their L1 even if they are correct (Brock-Utne & Alidou, 2006, p. 116). By their use of code switching during lessons, teachers set learners up for failure during assessment in this way. Studies conducted throughout Africa paint a related picture (Kalole, 2004), finding learners' incompetence in the L2 LoLT to be the predominant factor negatively influencing learner performance during assessment.

Code mixing is even more prevalent in SA than code switching as a practice used by teachers during teaching (Heugh, 2002, p. 191). As such, the model of language provided in such schools is often a code-mixed model, the closest that teachers who are teaching in a second language can get to providing L2 LoLT learners with

education in English. This is problematic within contexts where the goal is to learn a language, as very clear linguistic boundaries between the L1 and L2 need to exist in order for learners to learn either of the two languages well (Murray, 2004, p. 440).

This is because the process of developing a learner's proficiency in a language is one facilitated by expanding the learner's capacity to link an idea associated with a spoken word to text as a form of that word made visible in writing. For this to occur, the learner must be repeatedly provided with a correctly pronounced spoken word. This becomes impossible if a teacher is unable to provide learners with the correct pronunciation of a spoken word because of the teacher's lack of proficiency in that language, or if the teacher frequently switches between words that are pronounced differently in the L1 versus the L2.

Developmental psycholinguistic research also indicates that learners in the foundation years of schooling are disadvantaged by CSM practices in this way because of the significant confusion that these practices cause for them while attempting learn a L2 while also navigating and comprehending new conceptual understandings (Henning, 2012, p. 69). The reason attributed to this is that such learners have not yet fully developed the socio-pragmatic skills (Myers-Scotton, 2002) that teachers use when they code switch or mix and are therefore psychologically unprepared (Cantone, 2007) to cope with the demands of learning from teachers who code switch or mix.

Research highlights code switching/mixing in early education as problematic because these practices: 1) create barriers to learning, and 2) undermine the cognitive development of learners because of the intersection that exists where language and conceptual development must meet in order for cognitive growth to occur – but do not meet (Henning, 2012, p. 75). It is also argued that code switching in classrooms undermines learners' development in learning a language as they are not challenged by the inputs that they receive during teaching and learning to learn that language further (Gough, 1993, p. 2).

#### **g) Experience of school**

The experience of schooling for a learner who is taught in his or her L2 is more uncomfortable than that for a learner taught in his or her L1, for various reasons. Learners who are taught in a language that is foreign to them find school intimidating

as they are not able to understand what his or her teachers are saying to them. Within such situations, learners become confused, bored and withdraw (Jhingran, 2005).

Further exacerbating the discomfort and frustration experienced by learners in L2 LoLT classrooms is the tendency in such circumstances for teachers to employ coercive measures intended to force learners to use the L2 LoLT. Such coercive measures range from learners who do not comply with the LoLT being humiliated to their being beaten in public. The effects of such measures include further reduced learner participation during lessons, increased learner anxiety associated with school, greater educational disaffection among learners, and the increased risk of learner dropout (Smith, 2003).

Teachers who must teach in a L2 also experience discomfort using the LoLT when they lack the proficiency in the language to do so effectively. In a survey of teachers in townships around Cape Town, it was found that many Xhosa teachers felt that they were not adequately trained to do so. This is reflected in a comment by one such teacher made during this survey: “Some of us are afraid of talking English. We feel uncomfortable because we don’t want to be laughed at, as well as making mistakes” (Hibbert, 1995, p. 5).

#### **h) Language and cultural identity effects**

Research conducted in SA has led to concerns around the negative effects of subtractive bilingualism on cultural and linguistic heritage, these being the loss of L1 language proficiency and associated cultural identity (Murray, 2004, p. 438).

Relating to the linguistic threat of L1 loss that African learners are faced with when learning in a L2 LoLT is the challenge that L2 LoLT use poses to the African learners’ cultural identities when “the social conditions of learning devalue the child’s first language and associated culture” which may also “impede (their) cognitive and social development” (Luckett, 1992, pp. 46–47). Learners who are submerged at school in a L2 show losses of self-confidence and self-esteem (WCED, 2007, p. 2).

Contrary to L2 LoLT effects, L1 LoLT use has been found by research to benefit learners psychosocially and culturally. L1 instruction has been shown to hold significant benefits for learners, such as developmental self-confidence and a strong

self-concept, as well as holding advantages for the preservation of minority languages and cultures (Smits, Huisman, & Kruijff, 2008, p. 8-9).

## **2.6 Factors surrounding LoLT policy implementation and learner performance**

Various factors are typically found to exist within learners' home environments, communities and schools that have an effect on and/or are affected by LoLT policy implementation.

### **a) Within the home**

While more privileged learners are supported in their learning at home by parents who are literate in the LoLT of their children and can provide learning conducive to the optimal development of literacy, for most L2 LoLT learners this is not the case. Their progress is hampered by factors that make achieving literacy more difficult. Such factors include lack of learning resources, inadequate parental support of learning, and the lack of parental involvement in learners' learning, as parents have often missed out on education themselves and/or cannot speak, read, write or understand their child's LoLT (UNESCO, 2008).

Compared to L2 LoLT use, which is shown to impact negatively on the degree to which parents support, and are involved in, their children's learning, the use of learners' L1 as LoLT in schooling is shown to lead to greater involvement of parents in their children's education as well as having the effect of promoting more favourable parent and learner attitudes towards school and education (Brock-Utne & Alidou, 2006, p. 112).

### **b) Within society**

Many parents within disadvantaged contexts consider the need for their children to learn English as vital for their success in life (Pather, 1994) and because of this most such parents choose to have their children taught in English from as early in the child's life as possible, at the expense of the L1 (Wolff, 2006, p. 42). This sentiment is illustrated by the following quote:

Many people have come to accept that 'real' education can only be obtained in a world language such as English. Even the idea that a child will benefit if his or her

initial education is given in the first language is disputed by many so-called educated parents (Bamgbose, 2000, p. 88).

This sentiment is one shared by African children and has contributed to the rise of what is known colloquially as the *coconut* or *Oreo* phenomenon. It is characterised by young African people shunning their cultures and languages in favour of English and Western ways. The result of this is the diminished use of African languages and loss of African culture, further worsened by a shortage of African writers as well the demise of African oral tradition. To use English as a LoLT aggravates this pattern of loss, as this quote reflects:

There is little doubt that the systematic but frequently ignored differences between the language and culture of the school and the language and culture of the learner's community have often resulted in educational programmes with only marginal success at teaching anything except self-depreciation (Okonkwo, 1983, p. 377).

The survival of African languages is also threatened by inherent linguistic difficulties within certain contexts on usage. For example, African teachers and learners tend to use English terminology when engaging with communication around mathematical and scientific concepts. The reasons for not using the African terminology is that if it does exist, it is often difficult to use and cumbersome in its usage, or is otherwise unavailable or unknown (Probyn, 2006, p. 396; Setati & Barwell, 2008, p. 3; Vorster et al., n.d., p. 151; Wolff, 2006, p. 43).

SA learners from townships are further disadvantaged by the lack of exposure to any pure form of language, whether it be their own language or English. This results in confusion as learners are exposed to mixtures of various different languages in an unstructured manner that undermines their progress in learning their language as well as English, resulting in learners not knowing enough of either language in order to engage optimally with lessons using them (Probyn, 2006, p. 406).

Within disadvantaged SA contexts, *lexical borrowing*, defined by Haugen, (1972 [1950]) as “the adoption into one language of items, patterns and meanings from another”, in addition to code switching and mixing, has been seen to give rise to varieties of unofficial languages that differ from area to area as local hybrids that have resulted from the melting of different linguistic codes in one pot. These varieties of language have developed as different languages have been used together in a mixed manner over time to the extent that a degree of convergence occurs between the

languages being mixed (McCormick, 2004, p. 219), forming new ‘languages’ that are typically used informally. Slang or *gangster language* is also evident within such contexts.

In addition to the linguistic factors mentioned above that contribute to a learner’s linguistic confusion while trying to learn several languages simultaneously, within the languages themselves, particularly in the case for isiXhosa in the SA context, great linguistic variation is found to exist from region to region in the form of differing dialects of the same language (Branford & Claughton, 2004, p. 199).

### c) Within the school

The ability of LoLT policies to facilitate learner performance is considered to be hampered by two sets of factors (Wolff, 2006, p. 50). The first set comprises those related to negative attitudes held by all stakeholders toward the use of African languages as LoLT. The second set of factors contributing to the failure of LoLT policy to produce good educational outcomes are those to do with the improper planning and implementation of LoLT policy.

Teacher training is also viewed as impairing LoLT implementation. Quality levels of pre-service and in-service teacher training in SA are low, and support to teachers in classrooms is inadequate (Modisaotsile, 2012, p. 2). The quantity of available in-service teacher development is minimal. Teacher training institutions in SA do not fully equip African home language-speaking teachers to teach English, or to teach in English – leaving newly qualified teachers unconfident in doing so, as well as likely to transfer their language errors to learners once in the classroom (Nel & Muller, 2010, p. 646).

The nature of teacher training available in SA is noted as largely inappropriate for the linguistic context of the country in that teacher training curriculum gaps around language education in multilingual classrooms (teaching methodologies, didactic tools and theoretical knowledge) exist (Alidou & Brock-Utne, 2006, p. 87; Calteaux, 1996, p. 158; Probyn, 2008, p. 220).

Learners’ educational progress is also further hampered within disadvantaged SA schools by a lack of basic material resources for use in teaching and learning, such as

classrooms and furniture, reading books, textbooks, dictionaries, and computers, as well as stationery supplies (Prinsloo & Janks, 2002, p. 37; Probyn, 2006, p. 406). A lack of printed material resources in African languages is particularly apparent within such schools, and when such resources are available they are often of poor quality (Banda, Mostert, & Wikan, 2012, p. 33).

Having established the policy context within which the research was conducted, the next chapter will detail how the research was conducted. In this chapter, all of the elements that made up the research design employed will be specified, including research methods, research tools, sources of data and, procedures of data collection and analysis. Potential limitations and ethical considerations will also be addressed.

### **3. Research methods**

The research was conducted in two parts: A and B.

Part A quantitatively compared the performance of learners in the WCED Systemic Testing of Language and Mathematics from National Quintile (NQ) 1–3 schools which followed different LoLT models in the Western Cape. These were studied because it is within such schools that the LoLT models in respect of which this research intended to gain an understanding were typically found, that is, straight-for-English and early-exit transitional LoLT models, as well as where teachers and learners are isiXhosa L1 speakers.

Part B adopted a mixed-methods approach (McMillan & Schumacher, 2010, p. 11), where a sample of schools from Part A was identified from each of the different LoLT models and visited for the purpose of investigating how LoLT model formulation and implementation affected learner performance.

While Part A aimed to indicate which LoLT model was associated with higher learner performance, Part B aimed to explore the extent to which Part A's findings reflected LoLT model implementation, as well as how this implementation affected performance.

#### **3.1 Part A: Learner performance compared by LoLT**

##### **3.1.1 Data source**

Part A data was sourced from WCED records of Grade 3 and Grade 6 learner performance during annual systemic evaluations of learner proficiency in language and Mathematics. It was collected by WCED officials in 2012 and 2015 via the administration of standardised tests written by all learners in public schools throughout the Western Cape. This data was used because it provided a valid and reliable assessment of learner performance within the schools of interest to the research.

##### **a) Population**

Part A data was sampled to represent a population of SA schools characterised by being:

- Public primary schools within socio-economically disadvantaged contexts;
- Staffed by teachers who taught in a L2; and
- Attended by learners who learnt in a L2.

This population of schools, ‘Population A’, was relevant, because it was within such schools that the research aimed to find answers to the research problem: ‘*How does LoLT affect learner performance?*’

Finding these answers was valuable considering the size and demographic of learners who attended the population of schools of interest to the research in SA:

- 89,7% of black SA Grade 4–6 learners were reported by DBE (2010, p. 2) to be taught in a L2 in 2007, a percentage that has since increased (Taylor & Coetzee, 2013).
- 70,5% of black SA children lived in low income households in 2011 (Stats SA, 2013, p. 14)
- 75% of black SAs had not completed high school in 2011 (Stats SA, 2012, p. 39).

#### **b) Sample**

The sample of learner performance data analysed during Part A, ‘Sample A’, was determined by a non-probability purposive sampling strategy (McMillan & Schumacher, 2010, p. 138) in order to ensure that the data was from schools characteristically similar to the extent that valid and statistically significant comparisons were possible (Babbie & Mouton, 2005, p. 478).

Sample A selection criteria were determined by specifying required school characteristics to be representative of Population A, allowing research that responded to the research problem in a valid manner. Sample A schools met the following criteria:

1. Administration by the same provincial education department, in this case the WCED;
2. A primary school;
3. Categorisation as NQ 1, 2 or 3;
4. No-fee status;

5. Implementation of one of two LoLT models; either a straight-for-English model or a late-exit transitional model;
6. Attendance by learners who were predominantly (80%>) isiXhosa L1 speakers; and
7. Staffing by teachers who were predominantly isiXhosa L1 speakers.

The procedure followed to determine Sample A was to select schools that fulfilled the sampling criteria. During this, referring to the criteria above:

- Criterion no. 1: Satisfaction was a given as a result of all of the systemic testing data being from WCED schools.
- Information to apply criteria nos. 2 to 6 was readily available within WCED data.
- Only isiXhosa L1 learner performance data was sampled.
- Application of criterion no. 7 required schools to be evaluated individually.

**Table 3.1: Sample sizes per learner performance data set**

Learner performance data sets		No. of schools	No. of Xhosa learners
2012	Grade 3 WCED Systemic Testing performance in language	132	14 293
	Grade 3 WCED Systemic Testing performance in Mathematics	135	14 263
2015	Grade 3 WCED Systemic Testing performance in language	132	17 264
	Grade 3 WCED Systemic Testing performance in Mathematics	132	17 259
2015	Grade 6 WCED Systemic Testing performance in language	115	12 272
	Grade 6 WCED Systemic Testing performance in Mathematics	122	12 930

The final sample of data was limited by availability of schools meeting the sampling criteria and varied between data sets analysed. After sampling, as per criteria, data of schools identified as outliers was removed (McMillan & Schumacher, 2010, p. 165). The size of the resultant sample data sets is reflected above, see Table 3.1. The way in which outlying data was identified will be specified later in this chapter. Furthermore,

the sizes of Grade 6 data sets were affected by the removal of schools that did not have corresponding 2012 and 2015 data sets available.

Sample A was representative of Population A because of the comparable nature of the demographics of learners attending schools included within the sample and population.

### **3.1.2 Instrumentation**

Instruments used to measure learner performance were tests of language and Mathematics written by learners.

Tests were composed of age-appropriate assessments items that measured learner proficiencies in language and Mathematics in a reliable and valid manner. Tests used were written in the LoLT of the learner: either English or isiXhosa.

Tests were standardised in various respects in order to allow a variety of valid comparisons of learner performance using the data produced (McMillan & Schumacher, 2010, p. 189):

- International comparisons. Test items were benchmarked against international assessment standards.
- Comparisons within the Western Cape. Only one version of tests was used for every learner in the province.
- Comparisons over time. Tests administered were standardised from year to year.
- Comparisons between grades. Test items were age-benchmarked.
- Comparisons between LoLT contexts. Language used in test items was standardised.

Owing to the standardised and controlled nature of the instrumentation employed during the WCED Systemic Testing of learner performance, the data resultant was eligible for use because it provided a valid indication of learner performance per LoLT context. This allowed valid comparisons of performance between LoLT contexts to be made.

### **3.1.3 Design**

Part A research design was quantitative and descriptive, and made use of a comparative research method (McMillan & Schumacher, 2010, p. 222). This method was used to investigate the relationship between LoLT and learner performance by examining whether performance differences existed between L1 and L2 LoLT contexts.

Language and Mathematics performance in schools where L1 LoLT was used during the Foundation Phase (switching to L2 LoLT from Grade 4 onwards) was compared to performance from schools where L2 LoLT was used during the Foundation Phase (and throughout subsequent grades) in two ways:

1. Cross-sectional comparison (Babbie & Mouton, 2005, p. 92). Sample A data was used to compare learner performance from different LoLT contexts at particular points in time.
2. Longitudinal comparison (Babbie & Mouton, 2005, p. 93). Sample A data was used to compare learner performance of roughly the same cohort of learners from different LoLT contexts over of period time.

### **3.1.4 Procedure**

#### ***a) Data collection***

Data collection in Part A was facilitated by the WCED. The researcher's role in 'data collection' was to obtain the required WCED Systemic Testing Language and Mathematics learner performance data for Sample A. This data was provided as an average of learner scores per school per learner performance data set.

WCED systemic tests were written by learners under circumstances controlled by examiners appointed officially by the WCED external to the schools. Performance data was captured from completed tests marked by examiners similarly appointed during a process subjected to moderation checks for quality assurance purposes.

#### ***b) Data analysis***

Sample A performance data (averaged learners scores per school) was analysed in a comparative manner via a process of steps and calculations.

Cross-sectional comparisons were made in the following manner. For each data set:

1. Data was grouped by LoLT context of origin. Two groups resulted from this as only two LoLT contexts were included in the data:
  - a. Schools that used L1 LoLT during the Foundation Phase (switching to L2 LoLT from Grade 4 onwards) – hereafter referred to as ‘FP L1 LoLT schools’; and
  - b. Schools that used L2 LoLT during the Foundation Phase (and throughout subsequent grades) – hereafter referred to as ‘FP L2 LoLT schools’.
2. The average (mean) score for each group was calculated.
3. The standard deviation (SD) of scores from, as well as the standard error of the mean (SEM) of, each group was calculated.
4. The standard score ( $z$ -score) for each school in each group was calculated.
5. Schools with standard scores 3 or more standard deviations from the mean of their group were excluded, and all prior calculations were re-performed.
6. A measure of the degree to which the difference of scores from the two groups was statistically significant was calculated using an unpaired  $t$ -test (results expressed as  $p$ -values) (McMillan & Schumacher, 2010, p. 300).
7. The mean score from each group was compared to determine which group was associated with greater learner performance. The difference in learner performance between the groups was evaluated for whether it was statistically significant or not at a 95% confidence interval.

Longitudinal comparisons were similarly made. However, instead of comparing the performance of FP L1 LoLT schools to FP L2 LoLT schools on isolated occasions, the change in these groups’ performance over time was compared using 2012 Grade 3 data and 2015 Grade 6 data – reflecting the performance of approximately the same learner cohort. For each performance data set:

1. 2012 Grade 3 scores were matched to 2015 Grade 6 scores school by school. Any school score that could not be matched because of the absence of a corresponding score in either 2012 or 2015 was excluded. School scores that were determined to be outliers during prior cross-sectional comparisons were also excluded.
2. Matched scores were grouped by LoLT context of origin. Again, two groups resulted, as only two LoLT contexts were in the data: FP L1 LoLT and FP L2 LoLT schools.
3. The performance change between 2012 and 2015 was calculated school by school by subtracting each school’s 2012 score from its 2015 score.
4. The mean performance change for each group was calculated.

5. The standard deviation (SD) of performance changes from, as well as the standard error of the mean (SEM) of, each group was calculated.
6. The standard score ( $z$ -score) of performance change for each school in each group was calculated.
7. Schools with standard scores (of performance change) 3 or more standard deviations from the mean of their group were excluded, and all prior calculations were re-performed.
8. A measure of the degree to which the difference of performance changes from the two groups were statistically significant were calculated using an unpaired  $t$ -test (results expressed as  $p$ -values) (McMillan & Schumacher, 2010, p. 300).
9. The mean performance change from each group was compared in order to determine which group was associated with greater performance over time. The difference in performance over time between groups was evaluated for whether it was statistically significant or not at a 95% confidence interval.

The following findings from the analyses conducted will be presented in Chapter 4 and will make use of tables and figures.

### **3.2 Part B: Implementation compared by LoLT**

Part B was a mixed-method approach, aimed at investigating the ways in which LoLT model formulation and implementation affected the learner performance data analysed during Part A.

#### **3.2.1 Data source**

Part B data was sourced during May and June 2016 by the researcher from among research participants (Grade 3 teachers, heads of departments [HODs] and principals working at sampled schools) using information forms, questionnaires, and interviews.

This data was sourced in order to develop an understanding of how LoLT policy was formulated and implemented by the role-players directly involved in doing so within the research context of interest. This understanding was developed to establish the degree to which and in what way(s) LoLT policy formulation and implementation affects performance.

### **a) Population**

The population within which Part B was conducted (Population B) was chosen to sample schools which had previously been researched as a result of the research context of interest being located within this population.

Population B was composed of the schools included within Sample A of Part A. Population B, therefore, was equivalent to Sample A. The parameters of the schools within Population B were the same as for Population A; see Section 3.1.1(a).

Population B comprised of approximately 17 000 socio-economically disadvantaged isiXhosa L1 learners in approximately 130 NQ 1-3 (no-fee) schools.

### **b) Sample**

The sample of schools researched during Part B, 'Sample B', was sampled using a non-probability purposive sampling strategy (Babbie & Mouton, 2005, p. 166). The sampling criteria employed aimed at identifying a sample that held the potential to produce findings that shed light on:

- How LoLT policy was formulated and implemented; as well as
- What effects LoLT policy formulation and implementation had on performance.

In lieu of this and the need for schools in Sample B to be valid contexts for comparative research, the sampling criteria employed were geared to result in a sample of schools that varied by LoLT model followed as well as by performance produced. As such, a school from Population B was eligible to be included in Sample B if it:

- Followed one of the two LoLT models implemented within Population B; either FP L1 LoLT or FP L2 LoLT; and.
- Produced learner performance considered to be of the best or of the worst among the schools within Population B following the same LoLT policy.

In addition to applying these criteria, the procedure that produced Sample B was guided by the need to include at least two schools from each LoLT contexts. The steps taken to determine Sample B were, therefore, the following:

1. Schools within Population B were grouped by LoLT model followed, resulting in two groups since all of the schools included within Population B followed one of two LoLT models, as mentioned previously.
2. The performance of each school was defined by the quartile that it fell into within each group. Grade 3 performance data from 2015 WCED Systemic Testing of Language was used for this purpose.
3. Using the aforementioned data, a minimum of one school was selected from each group that performed in the 1st quartile and a minimum of one school from each group was selected that performed in the 3rd or 4th quartile. This was done to vary the type of school visited by taking into account factors affecting performance.

From the sample of schools identified, several were visited by the researcher in order to invite the principals of these schools to participate in research. Of such principals who indicated their desire for their schools to participate in the research, five schools were selected to make up Sample B:

- Three FP L1 LoLT schools; and
- Two FP L2 LoLT schools.

Sample B was representative of Population B, but also of Population A, due to equivalence of learner and teacher demographic, socio-economic context, as well as of LoLT model at the schools included.

The fact that Sample B was representative of both Population A and B allowed the potential for the findings produced during Part B to hold relevance to similar schools within the Western Cape and throughout SA.

### **3.2.2 Instrumentation**

The instruments used during Part B, included in Appendices A, facilitated the collection of data that contributed to the research response to the research problem.

#### **a) School Information Form**

A form was employed to capture data pertaining to the nature of participant schools' geographic and socio-economic context, learner body and teaching staff composition, educational inputs and outputs. Data captured by this form was used primarily to confirm the extent to which participant schools were comparable in terms of their ability to perform.

### ***b) School Management Team Member and Teacher Information Forms***

A second type of form was employed to collect school management team (SMT) member and teacher research participant data of a demographic and professional nature. Data collected by these forms was used to evaluate the extent to which the staff compositions of schools were comparably similar in terms of the degree to which they were able to facilitate performance via LoLT policy formulation and/or implementation.

### ***c) Teacher Survey Questionnaires***

Questionnaires were administered to research participants who taught, and were made up of close-ended items that provided respondents with a combination of dichotomous and comparative rating scale response options (McMillan & Schumacher, 2010, p. 198) to questions that probed how the LoLT affected teaching and learning in their classrooms. Six possible responses were provided per questionnaire item so that respondents could not respond in a neutral manner. The effect of LoLT on the following factors was surveyed:

- Teacher comfort and ability to teach using the LoLT;
- Teacher and learner LoLT extent of use;
- Teachers' theoretical knowledge on using the LoLT, as well as classroom practices, in this regard; and
- Learner comfort, participation, and ability to learn using the LoLT.

The questionnaire gathered this data in order to comparatively explore how LoLT affected teaching and learning within FP L1 LoLT versus FP L2 LoLT schools according to teachers.

### ***d) School Management Team Member and Teacher Interview Schedules***

Standardised open-ended interview schedules (McMillan & Schumacher, 2010, p. 355) were employed face-to-face (Babbie & Mouton, 2005, p. 249) in order to gather data from participants on the nature of their school's LoLT policy and their opinions of it. Questions probed each school's LoLT policy specification, the manner in which LoLT policy was formulated and implemented, as well as the participants' opinion on the suitability of the LoLT for performance.

The purpose of the interviews was therefore to systematically collect data on how LoLT policy affected performance within FP L1 LoLT and FP L2 LoLT schools, according to interviewees.

Interviews were structured in three parts:

1. Opening. This part established rapport, dealt with matters of consent and confidentiality, provided information of how the interview would be conducted, outlined the interview's purpose, indicated interview duration, as well as invited participants to seek clarity by questioning any matter covered during the interview at any stage.
2. Body. This part questioned participants on the following topics pertaining to LoLT policy: context, formulation, implementation and reflection.
3. Conclusion. This part aimed to summarise the interview and maintain rapport, as well as indicate what action would follow. As such, the researcher:
  - a) Explained that the interview was concluding and asked the interviewees if there was anything else that they would like to discuss;
  - b) Thanked the interviewees for their participation and welcomed any further communication from them; and
  - c) Asked the interviewees if they would be interested in receiving a copy of the completed dissertation, taking note of the responses.

Part B's instruments were relevant to the research as their use facilitated the collection of data that, when analysed, generated valid understandings of how LoLT affected learner performance.

### **3.2.3 Design**

Part B's research design made use of a mixed-method approach. While information forms and survey questionnaire instruments were quantitative in their nature and interview schedules were qualitative, both types of instrument were geared toward exploring the issue central to the research.

Collecting the bulk of Part B's data, the interviews were used to evaluate answers to questions relevant to the effect of LoLT on performance in detail. Due to the qualitative nature of the data collected, the research explored the subtle and complex experiences of teachers and learners using LoLT in order to understand how LoLT affected performance within the different LoLT contexts. This was done using

comparative analyses where data from L1 LoLT contexts was compared to data from L2 LoLT contexts.

Part B findings could not be used for purposes of generalisation, but could provide a better understanding of the effect of LoLT on performance within contexts of schooling comparable to Population A and B.

### **3.2.4 Procedure**

#### ***a) Data collection***

Numerous schools within Population B were visited and each school's principal was invited to be a part of the study. Of the schools visited that agreed to participate, appointments were made with 5 principals setting a date and time when the researcher would return to their school in order to collect data.

Part B's instruments were administered in the order numbered below. The researcher was available to provide clarity throughout this process.

#### **1. Information Letter and Consent Form**

At each school, prior to research tool administration, each participant was provided with an Information Letter and Consent Form with an invitation to participate in the research, which they read and signed. This document was discussed by participants and the researcher before they did so. The document:

- Invited the participant to participate voluntarily in the research;
- Explained what the purpose of the research was;
- Specified what participation in the research would entail;
- Detailed the terms and conditions of participants' participation;
- Addressed issues of ethics and confidentiality; and
- Facilitated the participant's signed acknowledgement of the project's terms and conditions; and also
- Formalised the participant's consent to participate in the research via the administration of instrumentation.

Completed and signed forms were filed and stored. A scan or photocopy of each completed and signed form was provided to each participant.

## 2. Information Forms

The School Information Form was completed for each school by the researcher and the principal of that school. Participants completed either the Teacher Information Form or the SMT Information Form, depending on their role within the school. Participants were not required to write their names on these forms – and could remain anonymous.

## 3. Teacher Survey Questionnaires

The Teacher Survey Questionnaires were administered individually and in private to participants who were Grade 3 teachers. Participants were allowed to remain anonymous and so were not required to write their names on the questionnaire. Participants were encouraged by the researcher to seek clarity should they require further understanding of what any particular questionnaire item meant. Completed questionnaires were returned to the researcher.

## 4. Interview Schedules

Participants were interviewed by the researcher using the SMT Member or Teacher Interview Schedules. Interviews were conducted in private and on a one-on-one basis. During interview facilitation, the researcher adhered to the script and questions in the standardised open-ended interview schedules. Interviews were audio recorded.

### ***b) Data analysis***

Part B's data analysis was guided by a general inductive data analysis process (McMillan & Schumacher, 2010, p. 323): the data was organised; organised data was placed into segments; segmented data was coded; observations were described; data was categorised; and patterns of data were developed as they emerged by using comparative research techniques. How the data was analysed is discussed in relation to each of the instruments used, below.

## 1. School Information Form

School information data from the sample schools was tabulated and evaluated against Sample B sampling criteria in order to confirm the comparability. The categories of such data included:

- a) Teachers' and learners' home language;
- b) The LoLT used in the Grades 1 to 3;
- c) Class size; and
- d) NQ rating.

Additionally, each school's WCED systemic performance in language testing for the years 2012 to 2015 was tabulated and compared. In addition, to supplement this data, the socio-economic status (SES) of the municipal ward within which the school was located was compared, using the SES index for each area provided by local government (Western Cape Government Provincial Treasury, 2013, p. 30).

The findings generated from data collected using the School Information Form were used during discussions of findings.

## 2. Teacher and School Management Team Member Information Forms

The data collected by the Teacher and SMT Member Information forms was coded by item. The frequency of each response to each item was counted. The frequency count of each response to each item was tabulated and represented graphically using pie charts. The data processed in this way was used to compare the characteristics of teacher and SMT member research participants within L1 LoLT contexts to those within L2 LoLT contexts. This was done in order to reconfirm the comparability of the schools in Sample B.

## 3. Teacher Survey Questionnaire

The data collected by using the survey questionnaire was used to compare how LoLT affected the nature of teaching and learning in L1 versus L2 contexts. The items that the survey questionnaire was comprised of were coded and grouped by theme. The frequency of responses to each survey item was tabulated and represented as pie charts. Findings from the questionnaire are included within Chapter 4.

#### 4. Interview Schedules

Audio recordings of the interviews conducted were transcribed word for word, resulting in 155 pages of interview transcriptions, approximately 65 000 words in length. These transcriptions were e-mailed to interviewees for their input and verification of accuracy.

During analysis, transcriptions were coded by item, theme and theme section (McMillan & Schumacher, 2010, p. 370) using the same codes used during the analysis of the data collected during the survey questionnaire. Coded transcriptions of interviews were then processed by a word-frequency counter that ranked the words and codes of the interview transcriptions from most to least frequently occurring. This information was tabulated by item, theme, and theme section, resulting in a document that provided various insights into the interview data collected, including the prevalence of each:

- Item among all items;
- Item within each theme;
- Item within each theme section;
- Theme among all themes;
- Theme within each theme section; and
- Theme section amongst all theme sections.

These insights were used to structure as well as prioritise the presentation order of findings by prevalence in the next chapter. Following this structure and order, responses from interviews on items of significance from L1 LoLT schools were compared to those from L2 LoLT schools in order to investigate how LoLT affected the nature and quality of teaching and learning within the two LoLT contexts. Participants were quoted in order to illustrate findings. Tables and figures were also used.

### 3.3 Potential limitations

Various potential limitations to the extent that research findings produced during Part A and Part B were valid. These are noted, below.

### **3.3.1 Part A**

During Part A, the following potential limitations were identified as threats to the validity of Sample A as consisting of comparable units:

- Inaccurate demarcation of learners' home language within schools captured by WCED data resulting from learners' parents / guardians falsely specifying learners' home language as isiXhosa.
- Inaccurate evaluation of teachers' home languages during sampling.

Relatedly, the validity of comparison made was potentially threatened by:

- Unaccounted existence of variables within comparison groups that affected performance resulting in the diminished validity of comparisons made
- Changes to learner cohorts whose performance was examined longitudinally.

Regarding the instrumentation used in data collection. The presence of test item irregularities within tests used, test administration as well as test marking and result capture process limitations potentially threatened the validity of data generated.

The dangers associated with the use of averages when data was analysed during Part A was noted as potentially limiting the validity of conclusions drawn.

### **3.3.2 Part B**

During Part A, the use of Sample B for valid research was limited by its size. It was limited by the practicability of research application as facilitated by a single researcher. Additionally, the unknown existence of factors affecting learner performance within Sample B schools, beyond those investigated by the research related to LoLT formulation and implementation, could possibly have undermined the validity of research findings, as such factors were not able to have been taken into account.

The valid use of Part B instrumentation was limited by the extent to which data provided by participants was inaccurate. Inaccuracy of data provided by research participants may have been caused by, among other factors:

- Research participants' inability to understand the language used by the instruments;

- Research participants' human error completing instruments;
- Research participants' inability to articulate responses to items within instruments; and
- Negative effects resulting from the unavoidable presence of the researcher during the data collection process social desirability bias.

The validity of Part B findings were potentially limited by researcher's personal bias, limited skills, and idiosyncrasies.

### **3.4 Research ethics, permissions and access**

The research accorded with:

- The *UCT Code for Research Involving Human Subjects* (UCT, 2012);
- The *Statement of Values for the University of Cape Town and its Members* (UCT, 2001);
- UCT statutes and policies.

In view of this accordance, permission to conduct the planned research was sought from, and approved by, the University of Cape Town's Research Ethics Committee, the WCED, and the participants. See Appendices B for the documentation that facilitated the required permissions.

## **4. LoLT policy in reality**

This chapter presents the results of the field-work in two parts; A and B.

Part A utilises the data from WCED Systemic Testing to demonstrate the relationship between choice of LoLT and performance in Mathematics and language. That is the different outcomes for FP L1 (early-exit transitional) and FP L2 (straight-for-English) LoLT models.

Part B utilises the interview and questionnaire data to illustrate how LoLT(s) are implemented in reality.

### **4.1 Part A: Learner performance compared by LoLT**

Part A compared learner performance from schools designated as following:

- An isiXhosa LoLT in the Foundation Phase (FP L1 LoLT); then
- Early-exit LoLT transitioning to English from Grade 4,  
to schools designated as following:
- An English LoLT in the Foundation Phase (FP L2 LoLT) and throughout subsequent grades (a form of straight-for-English submersion model),  
at particular points in time as well as over time.

The findings produced from this are presented quantitatively using descriptive statistics and then discussed. When interpreting learner performance test scores, it must be remembered that testing was conducted in the language of the LoLT. For example, Grade 3 FP L1 LoLT testing was conducted in isiXhosa, and Grade 3 FP L2 LoLT testing was conducted in English. Furthermore, it must be noted that because of the LoLT transition from isiXhosa to English in Grade 4 that occurred at all FP L1 LoLT schools included in the research, the testing of Grade 6 learners was conducted in English – as it was for Grade 6 learner testing in FP L2 LoLT schools.

#### **4.1.1 Cross-sectional comparisons of performance in 2012 and 2015**

FP L1 LoLT and L2 LoLT schools were compared by their Grade 3 learners' performance in WCED Systemic Testing of Language and Mathematics in 2012 and 2015. The two groups of schools were also compared by their Grade 6 learners'

performance writing the same tests in 2015. The findings from these comparisons are reflected in Table 4.1, below.

**a) Cross-sectional comparisons of Grade 3 performance in 2012 and 2015**

As is evident in Table 4.1, below, it was found that Grade 3 learners in FP L1 LoLT schools performed better on average in both WCED Systemic Testing of Language and Mathematics than learners in FP L2 LoLT schools did in both 2012 and 2015:

- FP L1 LoLT learners out performed FP L2 LoLT learners during language testing by 5,3% and 9,5%, in 2012 and 2015, respectively. While this difference in performance was not found to be statistically significant in 2012, it was in 2015; and
- FP L1 LoLT learners achieved better results than FP L2 LoLT learners did during Mathematics testing to a very statistically significant extent in both 2012 and 2015, by 9,7% and 12,1%, respectively.

**Table 4.1: Cross-sectional comparison of Grade 3 learner performance from alternate LoLT contexts in 2012 and 2015**

	Language				Mathematics			
	Mean score (%)	SD	SEM	n	Mean score (%)	SD	SEM	n
<b>Grade 3 in 2012</b>								
FP L1 LoLT schools (testing in isiXhosa)	36,8	9,006	0,796	128	42,8	8,851	0,782	128
FP L2 LoLT schools (testing in English)	31,4	6,461	2,284	8	33,2	9,416	3,329	8
Difference	5,3	Not statistically significant			9,7	Very statistically significant		
p-value	0,1026				0,0033			
<b>Grade 3 in 2015</b>								
FP L1 LoLT schools (testing in isiXhosa)	38,2	7,677	0,673	130	48,7	8,477	0,744	130
FP L2 LoLT schools (testing in English)	28,7	6,53	3,265	4	36,6	11,162	5,581	4
Difference	9,5	Statistically significant			12,1	Very statistically significant		
p-value	0,0157				0,006			

It is to be expected that Xhosa learners who wrote tests of language in their L1 would perform better than those who wrote it in a L2 because they had had more exposure at home to, and had mastered to a greater extent, the language assessed than was the case for learners assessed in English. Compared to FP L2 LoLT learners, FP L1 LoLT learners would, therefore, be better able both to understand the language used in the assessments as well as respond to the assessment in the language required. This

advantage held by FP L1 LoLT learners over FP L2 LoLT learners pertains to understanding why the former group of learners performed better in Mathematics, as well.

When understanding the superior performance of FP L1 LoLT learners, it should be remembered that they were likely to have been able to understand explanations of, and learn, language and mathematical concepts during lessons to a greater extent than FP L2 LoLT learners were, because FP L1 LoLT learners were taught in a language in which they were proficient – unlike the case for Xhosa learners taught in English.

The reasoning provided above indicates that FP L2 LoLT learners performed in Language and Mathematics to a lesser extent than FP L1 LoLT learners because of the L2 LoLT used; suggesting that English was an additional barrier to both teaching and assessing FP L2 LoLT learners.

Furthermore, it is reasonable to speculate that the predominantly Xhosa teachers of FP L1 LoLT learners were able to provide teaching of a higher quality because they were teaching in their L1, whereas this was not the case for FP L2 LoLT learners.

#### ***b) Cross-sectional comparisons of Grade 6 performance in 2015***

As reflected in Table 4.2, below, it was found that on average Grade 6 learners in FP L1 LoLT schools performed worse during 2015 WCED Systemic Testing of both Language and Mathematics than those in FP L2 LoLT schools did:

- FP L1 LoLT Grade 6 learners' performance in Language was 3,7% lower than that of FP L2 LoLT learners, a statistically significant difference; and
- FP L1 LoLT Grade 6 learners' performance in Mathematics was 2% lower than that of FP L2 LoLT learners.

When understanding these findings, it must be remembered that by the time testing occurred in English FP L2 LoLT, Grade 6 learners had been schooled using English designated as LoLT for a greater period of time (+/- 6 years) than was the case for FP L1 LoLT Grade 6 learners (+/- 2 years' English LoLT exposure) and that this was likely to have advantaged FP L2 LoLT Grade 6 learners in terms of being able to understand the language of assessment, respond to it using the required language, and perform well.

Related to this, because of FP L2 LoLT Grade 6 learners' greater exposure to English as designated LoLT from Grade 1, these learners were likely to have been advantaged in their proficiency understanding explanations of, and learning, concepts during lessons delivered in English, in comparison to FP L1 LoLT Grade 6 learners, who had begun being taught in English as designated LoLT only from Grade 4. If this was the case, which was probable, FP L2 LoLT Grade 6 learners would have been better prepared to write assessments because more learning had occurred subsequently than was the case for FP L1 LoLT Grade 6 learners.

**Table 4.2: Cross-sectional comparison of Grade 6 learner performance from alternate LoLT contexts in 2015**

	Language				Mathematics			
	Mean score (%)	SD	SEM	n	Mean score (%)	SD	SEM	n
Grade 6 in 2015								
FP L1 LoLT schools (testing in English)	32,4	3,923	0,376	109	37,1	6,579	0,611	116
FP L2 LoLT schools (testing in English)	36,1	6,803	3,571	7	39,1	7,98	3,016	7
Difference	-3,7	Statistically significant			-2	Not statistically significant		
p-value	0,0241				0,4526			

From the above, the findings indicate that English as LoLT (and the language of assessment) was possibly an additional barrier to learning, and demonstrating learning, for FP L1 LoLT Grade 6 learners, when compared to FP L2 LoLT Grade 6 learners, who were better prepared to deal with overcoming it.

That learners following a straight-for-English LoLT model performed better than those in an early-exit transitional model context flies in the face of prevailing research on the matter. As noted at the beginning of this chapter, the LoLT model designation FP L2 LoLT was not found to be accurate in terms of the model's implementation. This will be discussed later.

#### 4.1.2 Longitudinal comparison of performance between 2012 and 2015

In order to secure an indication of how learners in the alternate LoLT contexts performed over time, FP L1 LoLT and FP L2 LoLT schools were compared by the difference in their learner performance in WCED Systemic Testing of Language and

Mathematics between 2012, when learners were in Grade 3, and 2015, when learners were in Grade 6.

As reflected in Table 4.3, below, the comparison of learner performance difference in WCED Systemic Testing of Language and Mathematics between 2012 (when learners were in Grade 3) and 2015 (when learners were in Grade 6) showed that:

- FP L1 LoLT schools performed on average 6,9% lower than FP L2 LoLT schools did during the assessment of Language – which was found to be a statistically significant difference; and
- FP L1 LoLT schools performed on average 11,2% worse than FP L2 LoLT schools did during the assessment of Mathematics – which was found to be a very statistically significant difference.

**Table 4.3: Comparison of difference in learner performance from alternate LoLT contexts between Grade 3 in 2012 and Grade 6 in 2015**

	Language				Mathematics			
	Mean score (%)	SD	SEM	n	Mean score (%)	SD	SEM	n
Difference in learner performance between Grade 3 in 2012 and Grade 6 in 2015								
FP L1 LoLT schools	-3,5	7,636	0,731	109	-5,8	9,399	0,873	116
FP L2 LoLT schools	3,4	8,527	3,223	7	5,4	11,285	4,265	7
Difference	-6,9	Statistically significant			-11,2	Very statistically significant		
p-value	0,0225				0,003			

As was the case for the previous comparison, when understanding the higher performance of FP L2 LoLT Grade 6 learners over FP L1 LoLT Grade 6 learners, it should be noted that the former were likely to have been comparatively advantaged when assessed by their greater proficiency in the LoLT in terms of better-developed abilities to understand, learn and perform during testing, using the LoLT gained as a result of larger exposure to English as the designated LoLT. Similarly, the L2 LoLT was again indicated as being a barrier to teaching, and the assessment of learning occurred for FP L1 LoLT Grade 6 learners because of their more limited exposure to English as designated LoLT.

As was the case for the previous Grade 6 learner performance comparison, discussed later, the interpretation of these results must be tempered by what the research found to be an inaccurate designation of the LoLT model, particularly FP L2 LoLT.

### **4.1.3 Summary of results**

From Part A, the following conclusions were evident:

1. Learner performance was optimal when learners were taught and assessed in their L1. This was apparent from Grade 3 learner performance cross-sectional comparisons and was in line similar research conducted, such as that by Broom (2004, p. 506), who found the same trend in her comparative study of Grade 3 learner performance in disadvantaged SA schools.
2. The performance of learners within early-exit LoLT transitional models typically declined after the point of transition. Again this confirmed previous research (see for example Thomas & Collier, 1997).
3. The last conclusion was more nuanced than the first two. The comparison of FP L1 LoLT vs FP L2 LoLT learner performance over time between Grade 3 and Grade 6 indicated that FP L2 LoLT learners were likely to perform better in the long run, signalling perhaps that straight-for-English submersion LoLT model may be more advantageous to learners. On the face of it, this finding goes against the prevailing research (see, for example, Taylor & Coetzee (2013, p. 7)).

In order to explain this anomalous and perhaps far-reaching finding it was necessary to visit schools to see how the LoLT models described above were enacted in practice.

### **4.2 Part B: Implementation compared by LoLT**

While Part A aimed to provide an indication of learner performance typically associated with FP L1 (early-exit transitional) and FP L2 (straight-for-English submersion) LoLT models, Part B aimed to gather an indication of how the LoLT models were implemented and what effect implementation had on teaching and learning, and ultimately learner performance.

Part B's discussion begins by providing a snap shot of the manner in which LoLT policy was indicated as having been formulated within the schools researched, and how respondents felt about the LoLT policy at their schools. The nature of LoLT policy implementation (or non-implementation) forms the bulk of the discussion. An overview of the reported effects that LoLT policy had on learners brings this section to a near end. It concludes with a summary of findings.

#### 4.2.1 LoLT policy formulation

Findings that contextualise the LoLT models researched in terms of factors contributing to how they were formulated are presented below, briefly. These include decision-making, consultation of legislation and theory, and how teachers felt about the LoLT in their schools.

##### a) School LoLT policy decisions

Regarding the manner in which LoLT decisions had been made in schools visited:

- Parents had rarely been consulted;
- Parents' preferences carried little influence;
- SGBs had usually been involved; and
- The DBE's preferred LoLT model was generally the deciding factor.

The findings above illustrated that the prevailing legislation, such as *the Constitution of the Republic of South Africa* (RSA, 1996a) and the *South African Schools Act* (RSA, 1996b), legislating the manner in which LoLT policy was formulated was not fully adhered to. This was further indicated, below.

##### b) Legislation and theory consulted

Regarding whether relevant legislation and language theory had been consulted during LoLT policy formulation, of 14 interviewees:

- Roughly 50% did not know about LoLT legislation.
- 29% said legislation was consulted.
- 86% said that they did not know about language theory or that it had not been consulted.
- 14% said language theory had been considered.

From the above, a distinct lack of legislation and theory consultation was evident during LoLT formulation processes.

c) Sentiment towards LoLT policy

Interviewees were more negative (77%) than positive (23%) about the LoLT policy in their schools.

**Figure 4.1: General LoLT policy sentiment**

Interview finding

General LoLT policy sentiment



Reasons for differences in sentiment formed a pattern of why respondents were either pro- or anti-LoLT policy.

Negativity towards isiXhosa LoLT use up until Grade 4 was predominantly a result of the problematic LoLT transition at the start of that grade. Further negativity toward isiXhosa as LoLT was found to stem from isiXhosa-specific linguistic challenges that will be detailed later. Negativity towards isiXhosa as LoLT was also found to spring from the belief that the language did not serve learners’ future best interests.

Interviewees were positive about isiXhosa LoLT use during the early years of schooling because of the benefits of mother tongue education for learners.

Negativity towards English as LoLT was found because of the fear that learners lose their language and culture by not learning in their L1. Positivity toward English as LoLT stemmed from the belief that English is necessary and beneficial for learners’ future education and employment. English LoLT use was viewed positively because it was the most accessible LoLT choice within heterolingual contexts.

The findings above indicated that respondents were of the opinion that prevailing LoLT policy did not serve their purposes. In light of those, respondents were asked what their LoLT preference was, indicated below.

#### d) Prevailing LoLT policy preference

The prevalence of LoLT preference among 14 interviewees was:

1. 57% indicated a preference for the straight-for-English LoLT model.
2. 29% indicated a preference for an early-exit transitional LoLT model.
3. 14% indicated a preference for a late-exit transitional LoLT model.

Having presented an indication of how research into LoLT policy in schools came to exist, as well as how teachers felt about it, the discussion now turns to evaluating how LoLT policy was implemented.

#### 4.2.2 LoLT policy implementation

This section begins with a discussion of the extent to which LoLT policy was found to be implemented, moving on to include a reflection upon how varying levels of teacher and learner proficiency in the LoLT affected implementation, and the teaching and learning practices associated with the implementation of LoLT, and concludes with an evaluation of factors beyond the classroom indicated as affecting implementation.

##### 4.2.2.1 Extent of implementation

LoLT was found to be implemented to a greater extent within L1 contexts than in L2 contexts, see Figure 4.2, below. The extent to which LoLT implementation differed between L1 and L2 contexts was described by a principal using figures to illustrate his assertions:

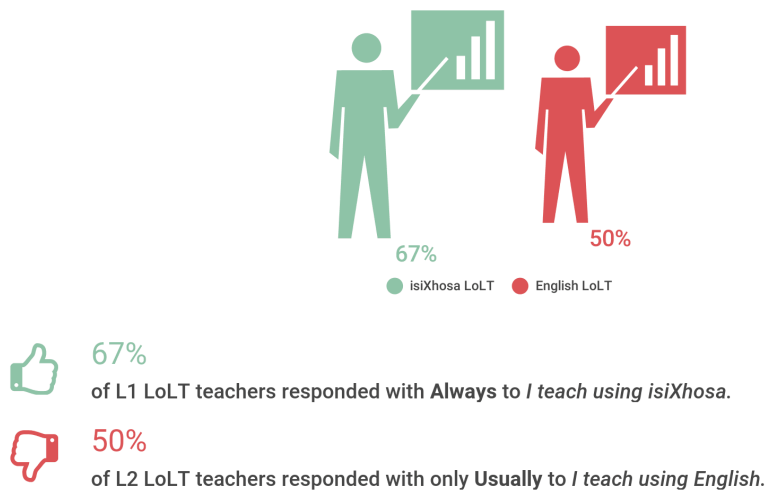
In the Foundation Phase [where L1 LoLT is policy] up to 100%, but in the Intermediate and Senior Phase [where L2 LoLT is policy] I would say it is about 50% (Principal C, principal at FP L1 LoLT school).

Interviews confirmed this quote. They also found that the causes of non-implementation differed between L1 and L2 LoLT contexts, forming two patterns. Both patterns congregated around a major factor. This factor was a lack of LoLT accessibility of use – in terms of efficiency and effectiveness – by both teachers and learners as a result of smaller factors specific to either context, or to both, to be discussed later.

**Figure 4.2: Extent of LoLT implementation**

Questionnaire finding

## Extent of LoLT implementation



Generally, non-compliance was driven by necessity when teachers and/or learners needed to use a language other than the LoLT to communicate, employing mixed-language-use practices such as CSM to do so. These practices constituted the almost-exclusive source of LoLT non-implementation to the extent that the prevalence of CSM within LoLT contexts invalidated the designated LoLT descriptor, especially in L2 LoLT contexts. Therefore, conclusions relating to the LoLT model as it was specified could not be drawn. Instead, any conclusions made regarding the LoLT models researched needed to be tempered by a disclaimer that stated that LoLT designations were inaccurate. Additionally, the nature of the LoLT as it was implemented in practice within classrooms was required to be specified.

No evidence of intentional defiance by teachers and/or learners as a cause for LoLT non-compliance was found.

When reflecting during interviews on who was responsible for this, significant uncertainty was expressed by respondents. Various role-player groups fingered one another. A lack of accountability for LoLT implementation within schools was also evident.

Now that the extent to which LoLT policy was found to be implemented within the schools visited has been indicated, various factors found to affect LoLT implementation are explored.

#### **4.2.2.2 Teacher and learner proficiency**

How teacher and learner LoLT proficiency reportedly affected implementation of the LoLT (or not) during teaching and learning are discussed below. LoLT proficiency is explored as ability, comfort, and participation using the LoLT. Findings are presented in order of significance.

##### **a) Teacher and learner ability**

Teachers' and learners' ability to use the LoLT was found to have the greatest impact on the degree to which the LoLT was conducive to learning, and able to be implemented.

Teachers in both contexts during every interview specified that learners' inability to understand the LoLT was the largest factor preventing education within their school. While "the kids don't have [a] flipping clue of what English is about" (Teacher J, Grade 3 teacher and FP HOD at FP L1 LoLT school), learners were also reportedly challenged learning in isiXhosa.

What this reflected for education in disadvantaged schools of the Western Cape was summed up like this: "In actual fact we have two problems at the same time. In English and in isiXhosa" (Principal D, principal at FP L1 LoLT school).

Confirming interview findings, questionnaire responses indicated that learners understood teaching in L1 LoLT better than they did in a L2 LoLT: 100% of L1 LoLT teachers responded positively with 'Almost always true', or 'Usually true', or 'Learners understand isiXhosa teaching', while 75% of L2 LoLT teachers responded negatively with replies that ranged from 'Often true' or 'Rarely true' to 'Learners understand English teaching'.

In light of the above, it is understandable how a L2 LoLT was considered by this principal to be a learning barrier:

Because English itself not as a subject is a barrier to any isiXhosa-speaking person. English is a barrier because it is a foreign language. As much as isiXhosa is a barrier to an English-speaking person (Principal C, principal at FP L1 LoLT school).

While language constituted a barrier to learning within both L1 and L2 classrooms, as reflected in the quote above, the extent to which English was a barrier to learning for Xhosa learners was reportedly particularly detrimental as these learners were not able to learn in English optimally.

These findings highlighted that assessment of learners in a language that they are not adequately able to understand or express themselves in is problematic, because the results produced were invalid as they did not accurately reflect learning held by learners.

Learners within both LoLT contexts tended to use their L1 when speaking because they were less able to use the L2 to do so. Of 11 interviewees who mentioned proficiency of speech, 73% noted this trend. Within FP L2 LoLT contexts, this was a significant source of non-implementation. In this regard, questionnaire responses (see Table 4.4, below) showed learners were better able to communicate in the L1 than in the L2.

The inability of learners to speak the LoLT was not something particular to L2 LoLT contexts, however, and was thus a cause of LoLT non-implementation in these contexts, too. 36% of interviewees in L1 LoLT contexts mentioned how learners encountered difficulties speaking the ‘original’ isiXhosa required in the classroom because they were used to speaking informal versions of language that were ‘improper’, ‘slang’, ‘township’, ‘impure’, ‘tsotsitaal’, ‘kweri-kweri’, ‘social’, ‘mixed’, ‘abbreviated’, of the incorrect dialect, or, as one teacher at a FP L1 LoLT school put it, “something gibberish, something localish”.

**Table 4.4: Comparison of teacher and learner ability in the LoLT**

Questionnaire finding

## Teacher and learner ability in the LoLT

LoLT	Form of ability / Statement	Response rate	Response
<b>LOLT ASSESSMENT BARRIER</b>			
L1	Learners understand isiXhosa assessment	60%	'Agree'
L2	Learners understand English assessment	80%	'Somewhat agree'
<b>LEARNER COMMUNICATION IN THE LOLT</b>			
L1	Learners can communicate in isiXhosa	83%	'Strongly agree'
L2	Learners can communicate in English	50%	'Somewhat agree'
<b>LEARNER WRITING IN THE LOLT</b>			
L1	Learners write correct isiXhosa sentences	50%	'Sometimes but not often'
L2	Learners write correct English sentences	20%	'Sometimes but not often'
<b>ABILITY TO TEACH IN THE LOLT</b>			
L1	Teaching in isiXhosa is a challenge for me	67%	'Not a challenge'
L2	Teaching in English is a challenge for me	20%	'Not a challenge'
<b>ABILITY TO PLAN LESSONS IN THE LOLT</b>			
L1	I am comfortable planning lessons in isiXhosa	67%	'Strongly agree'
L2	I am comfortable planning lessons in English	80%	'Agree'
<b>ABILITY TO ASSESS IN THE LOLT</b>			
L1	I am comfortable assessing learners in isiXhosa	100%	'Strongly agree'
L2	I am comfortable assessing learners in English	80%	'Agree' or 'Somewhat disagree'
<b>ABILITY TO COVER CURRICULUM</b>			
L1	I teach enough of the curriculum in the correct time using isiXhosa	50%	'Always true'
L2	I teach enough of the curriculum in the correct time using English	0%	NA
<b>TEACHER VOCABULARY IN THE LOLT</b>			
L1	The number of isiXhosa words I know is enough to teach in the language well	33%	'Disagree'
L2	The number of English words I know is enough to teach in the language well	0%	NA
<b>ABILITY TO TEACH MATHS AND SCIENCE</b>			
L1	I am able to teach Maths and Science in isiXhosa	67%	'Almost always true'
L2	I am able to teach Maths and Science in English	75%	'Usually true'
<b>ABILITY TO ENGAGE HIGHER ORDER THINKING</b>			
L1	I engage learners higher-order thinking using isiXhosa	67%	'Strongly agree'
L2	I engage learners higher-order thinking using English	75%	'Agree' or 'Somewhat disagree'

Insufficient learner vocabulary in the LoLT was found to be a LoLT implementation challenge within both contexts. It was noted that in L1 LoLT contexts this challenge was particularly problematic when learners moved into Grade 4 where a L2 LoLT was used. Within L1 LoLT contexts, it was indicated that Xhosa learners often did not hold vocabulary in isiXhosa for mathematical, scientific and technological concepts such as, for example, the names of colours, concepts of time, or number names. The contrary proved to be true; Xhosa learners often knew such vocabulary in English. As such, for example, one teacher expressed how she had often encountered learners who were not able to use letters of the alphabet in isiXhosa, but knew the A-B-C in English. She added to this that even some Xhosa teachers did not know the alphabet in isiXhosa.

The ability of learners to read and write in the LoLT was flagged as problematic within both contexts. Interestingly, in light of the fact that isiXhosa was learners' L1, there was 28% more feedback from interviewees regarding the inability of learners to read and write in the language than from interviewees regarding the same problem in English. This barrier to implementation was reflected in questionnaire responses (see Table 4.4, above).

Reasons for learners' insufficient ability to read and write isiXhosa centred around the challenging nature of the language, which made it difficult for learners to use. This was further aggravated by a high prevalence of mixed-language learner vocabularies and a predominance of English within learners' everyday environments.

While these findings regarding learners' inability to read and write in isiXhosa were significant pertaining to the use of the language itself, they were also significant pertaining to learners' ability to read and write in English. As one teacher pointed out, if Xhosa learners are not able to read and write in isiXhosa, learning to do so in English is made even more difficult. As such, learners' ability to read and write in the LoLT was found to be a stumbling block to its implementation.

Of all the reported challenges faced by teachers in both contexts implementing the LoLT, the greatest was being able to be understood by, and understand, learners in order to teach. Both isiXhosa and English use as LoLT affected the degree to which teachers were able to teach as a result of various factors, some specific to each

language. Interviewees indicated that Xhosa teachers were better able to implement LoLT teaching in isiXhosa than they were in English as learners were better able to understand isiXhosa than English.

It was noted that more teachers stated that they had problems teaching in isiXhosa because of the challenging linguistic nature of the language than those who noted that they had problems teaching in English for the same reason.

Despite challenges to LoLT implementation posed by the difficulty of isiXhosa, questionnaire responses indicate that L1 LoLT teachers were more comfortable planning lessons than L2 LoLT teachers were. Teachers were reportedly also better able to assess in the L1 LoLT than they were in the L2 LoLT.

The delivery of curriculum was reportedly undermined where obstacles to teachers' ability to teach existed. From this it was evident that obstacles to LoLT implementation resulted in inadequate curriculum delivery. Interviews and the survey indicated that insufficient curriculum coverage was double the problem for L2 LoLT teachers than it was for L1 LoLT teachers.

Unexpectedly, interviews found that inadequate teacher vocabulary was expressed exclusively as an implementation barrier within L1 LoLT contexts. The reasons provided for this fell into two categories, the first being a vocabulary deficiency on the part of the teachers themselves and the second being, to a lesser extent, a deficiency of vocabulary within the isiXhosa lexicon. Questionnaire responses reflected this issue (see Table 4.4, above).

Teachers' ability to teach Mathematics and Science was found to be limited by the vocabulary available within the LoLT to do so. Within L1 LoLT contexts, Mathematics and Science teaching was impaired by a combination of the aforementioned teacher-and-learner vocabular inadequacy as well as the lexical deficiency of the isiXhosa language in Mathematics and Science. This was aggravated by the prevailing predominance of English usage when engaging with mathematical and scientific concepts.

Despite challenges L1 LoLT teachers faced in teaching Mathematics and Science in isiXhosa, the questionnaire reflected what interviews had found; that L1 LoLT

teachers were reportedly better able to teach Mathematics and Science than L2 LoLT teachers.

Xhosa teachers within L1 LoLT contexts were also reportedly challenged in their understanding of ‘academic isiXhosa’, which impaired the extent to which they were able to implement the L1 LoLT while teaching. This was because of issues pertaining to the prevailing nature of isiXhosa usage.

Teachers’ ability to engage learners’ higher-order thinking by implementing the LoLT was of interest as doing so is required for of facilitation of quality education. L1 LoLT teachers indicated they engaged learners’ higher-order thinking to a greater extent than L2 LoLT teachers did.

#### b) Teacher and learner comfort

Teachers’ and learners’ comfort teaching and learning using the LoLT was of interest because teachers and learners teach and learn best when comfortable with the LoLT used. Furthermore, LoLT was less likely to be implemented if teachers and learners were uncomfortable using it. In this way, comfort levels provided an indication of the degree to which implementation was likely to occur.













The most prominent learner comfort factor influenced by LoLT was the extent to which learners felt comfortable (and able) to use the LoLT to express themselves. Within both contexts learners were reportedly more comfortable using isiXhosa to express themselves than English. Of the 10 interviewees who addressed learners’ freedom of expression using the LoLT, 9 mentioned that learners were more comfortable using their L1 than English. Accordingly, teachers indicated that learners enjoyed learning in L1 LoLT more than in L2 LoLT. These findings were reflected by the questionnaire (see Table 4.5, below).

The degree to which teachers were comfortable speaking the LoLT was of interest since teachers provide optimal education when comfortable using the LoLT. It was found that teachers were more likely to implement the LoLT when they were comfortable speaking it.

**Table 4.5: Comparison of teacher and learner comfort between LoLT context**

## Questionnaire finding

## Teacher and learner comfort using the LoLT

LoLT	Indicator of comfort / Statement	Response rate	Response
<b>LEARNERS' COMFORT OF EXPRESSION IN THE LOLT</b>			
L1	Learners use isiXhosa to express themselves clearly in class	 83%	'Strongly agree' or 'Agree'
L2	Learners use English to express themselves clearly in class	 80%	'Somewhat agree' or 'Somewhat disagree'
<b>LEARNERS' ENJOYMENT OF LEARNING IN THE LOLT</b>			
L1	Learners enjoy learning in isiXhosa	 82%	'Strongly agree' or 'Agree'
L2	Learners enjoy learning in English	 79%	'Somewhat agree'
<b>TEACHERS' COMFORT SPEAKING THE LOLT</b>			
L1	I am comfortable speaking in isiXhosa	 83%	'Strongly agree'
L2	I am comfortable speaking in English	 0%	NA
<b>TEACHERS' COMFORT WRITING THE LOLT</b>			
L1	I can write in isiXhosa	 83%	'Almost always true'
L2	I can write in English	 80%	'Usually'
<b>TEACHERS' COMFORT TEACHING IN THE LOLT</b>			
L1	I smile or laugh while teaching in isiXhosa	 67%	'In every lesson'
L2	I smile or laugh while teaching in English	 0%	NA
L1	I make jokes while teaching in isiXhosa	 50%	'In every lesson'
L2	I make jokes while teaching in English	 0%	NA

From 12 respondents who explored teachers' comfort when speaking the LoLT, 67% expressed that teachers were more comfortable speaking isiXhosa during teaching while 33% indicated that teachers were more comfortable speaking English during teaching. Questionnaire responses confirm this finding (see Table 4.5, above). The reasons provided for discomfort speaking isiXhosa related to the difficulty using the language for teaching.

It was also apparent from questionnaire responses (see Table 4.5, above) that L1 LoLT teachers were more comfortable writing in isiXhosa than L2 LoLT teachers.

As further measures of comfort using the LoLT, the questionnaire (see Table 4.5, above) found L1 LoLT teachers reported smiling, laughing and joking more frequently while teaching than L2 LoLT teachers did. Noteworthy discomfort was expressed by L1 LoLT teachers regarding their ability to read official documents in isiXhosa.

Overall, it was found that teachers and learners are more comfortable with the L1 LoLT than with the L2 LoLT. Discomfort in using the LoLT was noted as a significant hurdle to implementation within L2 LoLT contexts.

Like comfort using the LoLT as an outcome of implementation, learner participation was of interest as it is required for optimal teaching and learning. The dynamic that was found to exist between LoLT and learner participation is explored in the next section.

### c) Learner participation

It was indicated that the extent to which learners participated during lessons was contingent on learners' ability to use the LoLT to express themselves. See Table 4.6, below. As such, respondents reported higher levels of learner participation in L1 LoLT contexts than in L2 LoLT contexts. It was evident that learners were inhibited in their participation as a result of their inability to respond using the LoLT in both L1 and L2 LoLT contexts, but mostly in the latter. As such, teachers indicated that learners participated during lessons to a greater extent within L1 LoLT contexts than in L2 LoLT contexts. L1 LoLT learners participated more frequently than L2 LoLT learners did, in various ways.

From this the research concluded that within L2 LoLT contexts, the occurrence of learner participation and LoLT implementation were to some extent mutually exclusive.

**Table 4.6: Comparison of learner participation between LoLT contexts**

## Questionnaire finding

## Learner participation in the LoLT

LoLT	Form of participation / Statement	Response rate	Response
<b>ACTIVELY PARTICIPATE:</b>			
L1	Learners actively participate in isiXhosa	👍 50%	'In every lesson'
L2	Learners actively participate in English	👎 0%	NA
<b>ANSWER QUESTIONS:</b>			
L1	Learners answer questions in isiXhosa during class	👍 50%	'Always true'
L2	Learners answer questions in English during class	👎 20%	'Always true'
<b>ASK QUESTIONS:</b>			
L1	Learners ask questions using isiXhosa	👍 67%	'Always true' or 'Usually true'
L2	Learners ask questions using English	👎 100%	'Sometimes true' or 'Sometimes but not often'
<b>DEBATE OR ARGUE:</b>			
L1	Learners debate or argue in isiXhosa	👍 67%	'Agree' or 'Strongly agree'
L2	Learners debate or argue in English	👎 80%	'Somewhat agree'
<b>ASK FOR HELP:</b>			
L1	Learners ask for help in isiXhosa	👍 50%	'Usually true'
L2	Learners ask for help in English	👎 25%	'Usually true'
<b>TEACH ONE ANOTHER:</b>			
L1	Learners teach one another in isiXhosa	👍 67%	'Usually true'
L2	Learners teach one another in English	👎 75%	'Sometimes true'



As discussed during this section, the research found that although L1 LoLT implementation was not without its challenges, L2 LoLT implementation faced substantially greater challenges relating to the following factors existing within the classroom. Compared to L1 LoLT contexts, within L2 LoLT contexts teachers and learners were less able to use the LoLT for teaching and learning, teachers and

learners were less comfortable doing so when they could, and learners participated to a lesser extent.

Together, these findings tentatively suggested that the quality of teaching and learning occurring within L2 LoLT classrooms is inferior to that within L1 classrooms.

Exploring this possibility, the discussion will now reflect upon the nature of the teaching and learning practices that constituted the manner in which designated LoLT models were indicated as being implemented within classrooms.

#### **4.2.2.3 Classroom practices**

It was found that particular patterns of classroom practices particular to each LoLT context existed. The use of these practices evidently resulted from the extent to which teachers and learners were able to use, and were comfortable using, the LoLT in lessons. The nature of the practices employed were of interest because they influenced the quality of education that teachers provided as well as learners' performance, directly. These practices were also indicative of the extent to which LoLT was implemented.

A discussion of CSM follows a brief overview of teaching practices indicated as commonly occurring within the schools visited. In this discussion, a large focus is placed on CSM practices within classrooms since of all the classroom practices mentioned by respondents, CSM practices were overwhelmingly prevalent.

##### **a) Teaching practices**

The following teaching practices that were indicated as in use are ordered by prevalence of respondents' mention, from most to least.

Repetition was the most prevalent of the teaching practices reportedly used within classrooms. This methodology was reportedly used out of preference in both contexts, but more out of necessity in L2 LoLT contexts in order to ensure learner understanding, as illustrated by the following quote: "You really have to explain yourself. You really have to repeat yourself more than once and you have to ensure that they [the L2 LoLT learners] understand (Teacher H, Grade 3 teacher at FP L2 LoLT school).

Chorus teaching as well as chalk-and-talk-style teaching were found within both contexts but to double the extent within L2 LoLT classrooms.

Memorisation was also found to be equally as prevalent within both contexts. However, like repetition, the practice was reportedly used more out of necessity than preference within L2 LoLT classrooms. Learners were reported as using memorisation as a way of coping with learning in a language that was not fully understood by them in L2 LoLT classrooms.

All of the above-mentioned teaching practices were reportedly more prevalent within L2 LoLT classrooms than in L1 classrooms. As teaching practices that typically produce teaching and learning of a sub-standard quality, these findings indicated that the quality of education that existed within L2 classrooms was inferior to that which existed in L1 classrooms.

#### b) Code switching and code mixing

CSM are communication strategies involving the alternate and mixed use of different languages in close proximity to varying degrees. It was found that:

- CSM usage was significantly prevalent within both LoLT contexts;
- The degree to which these strategies was used was linked to the degree that the LoLT was usable by teachers and learners; and
- The use of these strategies during lessons affected learning performance positively or negatively, depending on how they were employed.

#### *i) Prevalence in LoLT contexts.*

During interviews, all interviewees in both LoLT contexts reported that teachers employed some form of CSM during teaching at the school; either by switching between isiXhosa and English between sentences or/and by using both languages within one sentence. It was indicated that learners typically employed CSM in a similar manner.

CSM were reported during interviews as prevalent to a greater extent (as much as double as prevalent in some instances) within L2 LoLT contexts than within L1 LoLT contexts. Teachers' questionnaire responses reflected this trend.

The reportedly high prevalence of CSM practices within the classrooms of the schools researched was very significant in that this prevalence indicated that the official LoLT model designation of schools was invalid as the use of CSM practices constituted LoLT non-implementation.

Towards further understanding of the nature of CSM practices in relation to LoLT implementation and the resultant learner performance outcomes; how the practices were used within the respective LoLT contexts; the reasons why these practices were used, and which ones were used; teachers' attitudes to the practices; and teachers' responses to learners who employed the practices, as well as the reported consequences of the practices for teaching and learning, are reflected upon below.

### *ii) Pattern of usage between LoLT contexts*

The manner in which CSM was reportedly employed differed from context to context:

- English words were typically used within isiXhosa sentences in L1 LoLT contexts;
- isiXhosa words were typically used within English sentences in L2 LoLT contexts; and
- Teachers in L2 LoLT contexts also tended to switch into isiXhosa when explaining concepts or words that learners had difficulty understanding.

CSM practices were found to be employed for different specific reasons within, and particular to, each LoLT context – but for the same general purpose: in order to facilitate communication during teaching and learning. The reported reasons for CSM are presented below in order of prevalence of indication during the research.

### *iii) Reasons for code switching and code mixing*

All of the teachers interviewed expressed the necessity of CSM for learner understanding during teaching, within both contexts. However, CSM practices were reportedly more prevalent within L2 LoLT contexts than in L1 LoLT contexts.

The predominant reason for teachers' CSM within L1 LoLT contexts was to facilitate the learner understanding of isiXhosa words that were difficult or unknown, typically those related to the realms of Mathematics, science and technology.

Other challenges to the use of isiXhosa LoLT that contributed to teachers and learners using CSM included:

1. A high prevalence of informal or non-academic isiXhosa use by Xhosa speakers, generally, and
2. A predominance of commonly known 'easy' words from English that substitute difficult isiXhosa words, mentioned previously.

Within L2 LoLT contexts, the reportedly most common reason for teachers' using CSM was to translate lesson content from English to isiXhosa and to explain new English words in the learners' L1 so that learners were able to understand and learn them.

Teachers also code switched from English into isiXhosa out of necessity when, because of their inadequate ability to use English as a LoLT, the only way for teachers to communicate confidently was to use a language that they were proficient in.

CSM was typically employed by L2 LoLT learners in order to communicate with their teachers and one another, enabling their participation and learning during lessons. Within both L1 and L2 LoLT classrooms, learners tended to switch to the language they were able to express themselves in better. Learners were also inclined to respond to questions and participate in learning using their L1 since they were more comfortable speaking it than the L2 LoLT, and because they were aware they shared isiXhosa with their teachers as a mother tongue.

A further reason for CSM within L1 and L2 LoLT contexts was inadequate teacher and learner vocabulary. When teachers and learners needed to communicate a concept they did not hold the necessary words for, they switched using words from the language they held the needed vocabulary in.

Within L1 LoLT contexts specifically, teachers and learners switched to English when the isiXhosa language equivalent was laborious in its use, ineffective, did not exist or was unknown. Related to this, isiXhosa lexical inadequacy on the part of teachers and learners, in addition to as a language itself, gave rise to code mixing when teachers and learners appropriated non-isiXhosa words for use within isiXhosa sentences.

Within L1 LoLT classrooms, learners and teachers reportedly switched to English as a result of the difficult and inefficient nature of isiXhosa words and phonics. All of the L1 LoLT teachers interviewed expressed this sentiment. Learners and teachers within L1 LoLT contexts also reportedly switched from isiXhosa to English as a way of avoiding the use of isiXhosa because of what was described to be its laborious and time-consuming nature.

A combination of English predominance and impure isiXhosa usage of language within the environments of teachers and learners furthered the likelihood that they employed CSM practices within L1 LoLT contexts.

*iv) Attitudes to code switching and code mixing*

The sentiment expressed by management was that CSM were not encouraged as their use during lessons was considered to be deviating from the school's LoLT policy, but that the practices were tolerated. The prevailing sentiment expressed by teachers toward the practices was the same; that they were not permitted. Additionally, interviewees generally indicated uncertainty of what the official DBE stance on the use of the practices during lessons was.

*v) Responses by teachers to code switching and code mixing*

The responses by teachers to learners who CSM during lessons were explored because such responses were either conducive to quality teaching and learning or not.

The most common response by teachers within both contexts to CSM by learners was reportedly to correct the language of the learner in the language in which they were having difficulty and to encourage the use of the LoLT. Teachers also often accepted answers from learners in a language other than the LoLT during lessons as well as during assessments.

Less common responses by teachers to learners who CSM were to ignore, respond in a manner that resulted in learner humiliation, or learner punishment – or some combination of these.

Only teachers within L2 LoLT contexts indicated that they reacted to learner code switching in this manner. To 'I punish learners who do not use isiXhosa in class', zero

L1 LoLT teachers indicated they typically punished learners who did not speak the L1 LoLT, compared to half of L2 LoLT teachers whose responses to ‘I punish learners who do not use English in class’ indicated that they typically punished learners who did not speak the L2 LoLT in class.

*vi) Consequences of code switching and mixing for teaching and learning*

As dominant features within the classrooms of schools researched, the consequences of CSM practices during teaching and learning must be understood and considered when deciding upon appropriate policy for contexts similar to that within which to research was conducted.

It was indicated that the use of CSM during lessons held two significant consequences for the quality of education provided within both L1 and L2 LoLT contexts.

57% of interviewees within both contexts mentioned the first repercussion of CSM in classrooms; the development of a ‘language crutch’ in learners. This repercussion was problematic during assessment, when learners’ language crutches resulted in the assessment of their learning being invalid to some extent.

According to participants, learners developed the ‘crutch’ because learners’ development in the LoLT was undermined as they were not challenged to master the LoLT because of the assistance provided by teachers using CSM, resulting in learners not being as prepared to use the LoLT during assessment as they would have been if they had been challenged. Additionally, the assistance provided to learners in the form of CSM was absent when it came to learners’ assessment as assessments were generally written in one language only, the LoLT, and did not include translations in learners’ L1.

The second consequence of CSM for teaching and learning was reported by 43% of interviewees within both contexts as being learners’ ‘linguistic confusion’, occurring when learners became confused between the languages in terms of phonetics and pronunciation, spelling, and vocabulary as well as syntax, and that this confusion hampered learners’ ability to learn both the L1 and L2. The linguistic confusion of learners was reportedly intensified within classrooms where teachers were inadequately able to model correct L1 and/or L2 usage.

### *vii) Code switching and code mixing for learning*

It is evident from the reasons for teachers and learners reportedly employing CSM practices within classrooms that the use of these practices within L2 LoLT contexts is generally unavoidable. Furthermore, despite the negative consequences reported as resulting from CSM, the purpose served by these practices during lessons is valuable in that they are used to facilitate the communication ultimately required for teaching and learning to occur, as well as for the learning of a L2 to take place. Policy recommendations with regard to the use of these practices are made in the next chapter.

#### **4.2.2.4 Challenges to LoLT policy implementation beyond the classroom**

Various factors reportedly existed outside of the classroom within the home, within society and within the school that affected LoLT implementation. These will now be discussed.

##### **a) LoLT challenges within the home**

Within the home environment of learners, the reportedly most significant factor that negatively affected L1 and L2 LoLT implementation for learning was the low level of literacy amongst parents, resulting in an inadequate level of support of learning available to learners outside of school. The inability of parents to speak the LoLT further undermined the extent to which parents were able to support to their children's education at home. This was found to be particularly the case in L2 LoLT contexts. A general lack of parental participation in learners' learning was reportedly the next biggest problematic factor in the home environment, that impaired learner performance.

##### **b) LoLT sociolinguistic and cultural challenges**

During the research, it was noted that specific challenges to learners' mastery of the respective LoLTs existed within learners' society and these were influenced by culture. Such challenges included the effects of globalisation on minority cultures and their associated languages. These are reflected upon below.

*i) Globalisation versus mother-tongue education*

A definite tension was noted as existing between the need to learn the mother tongue as well as preserve its culture, and the need to learn English for social mobility.

Participants typically expressed their desire for learners to learn their home language and retain its culture. Similarly, participants indicated the need for learners to learn their L1 in order to maintain their identities. The need to adhere to principles of L2 acquisition involving the L1 being firmly established before learning a L2, including the idea of linguistic transference, was also evident in findings. At the same time, however, participants strongly indicated the inevitable need for learners to learn English in order to ensure a bright future, a sentiment that reportedly gave rise to Xhosa parents typically preferring that their children should be taught in English.

*ii) Challenges to isiXhosa as LoLT*

A set of inter-related challenges specific to isiXhosa reportedly existed that prevented the optimal implementation of the language as a LoLT for quality education. These challenges are addressed separately, below, as they were found not to apply to English to the same extent.

The greatest challenge to isiXhosa as a LoLT was a reportedly high prevalence of variation within the language, hampering learners' mastery of the language because of the confusion that it caused. This confusion was indicated to be aggravated by the following contributing factors:

1. Prevailing impure usage of isiXhosa inside and outside of school, where the language was mixed with other languages during use;
2. Learners' inadequate exposure to 'pure' isiXhosa as a result of prevailing impure isiXhosa usage;
3. Regional dialect differences within the isiXhosa in general use to which Xhosa learners were exposed; and
4. The influence of a high predominance of slang as well as abbreviated language use.

The confusion referred to was reportedly worsened by a predominance of English usage for certain purposes within learners' social environments that had the effect of undermining isiXhosa LoLT implementation when learners were unable to use

isiXhosa for these purposes at school when they needed to because they had not learnt to do so outside of school.

Learners' learning of isiXhosa, and therefore its use as a LoLT, was also reportedly undermined by the generally decreasing prevalence of isiXhosa language use within learners' environments outside of school. The undesirability of the isiXhosa as language of communication amongst learners was indicated as contributing to this and further undermining its use as a LoLT.

An additional factor that reportedly undermined the extent to which isiXhosa was able to serve as a LoLT was the language's 'user-unfriendly nature', in comparison to English. isiXhosa was reportedly tiresome to use because of its phonetics and words being difficult to use, and also for being difficult to teach and learn.

Related to this, interviewees expressed their opinion of isiXhosa as a language that was inefficient and ineffective as a LoLT. The use of isiXhosa as a LoLT was to a notable extent, according to them:

1. Inefficient because of what was described as being the time-consuming nature of using the language;
2. Ineffective because of what was described as a deficiency in the isiXhosa lexicon.

Significantly, the productive implementation of isiXhosa as a LoLT was reportedly impaired by several mismatches of language that existed inside and outside of the classroom:

1. The isiXhosa that learners used within their home environments was to some extent not the isiXhosa that was required to be used within the classroom.
2. The isiXhosa used within the official documents differed to some degree from the isiXhosa that Xhosa teachers used and understood.
3. The isiXhosa used within isiXhosa teaching and learning resources varied from the isiXhosa that learners and teachers used.
4. The isiXhosa that teachers and learners commonly used differed from the isiXhosa that was used during external assessments in the language.

The sociolinguistic and cultural challenges to LoLT implementation mentioned above were noted as weighing heavily against the likely success of isiXhosa as a LoLT, instead framing English as a more suitable LoLT.

### c) LoLT challenges within the school

Various challenges were found within schools that impeded the successful implementation of LoLT, as indicated by participants. They are presented in order of prevalence of mention by interviewees.

#### *i) Inadequate prior learning of the LoLT*

The greatest challenge faced by teachers implementing the LoLT within both L1 and L2 contexts was the reportedly inadequate prior learning of the LoLT within previous grades or before learners had enrolled at their current school. It was commonly indicated that the extent to which learners had mastered either of the LoLTs by the time they reached Grade 4, when they were required to begin learning in a L2, was inadequate. Learners' inadequate prior learning of the LoLT was identified by respondents as somewhat resulting from learners' insufficient exposure to pure language.

#### *ii) Insufficient exposure to pure language*

As found, the effective implementation of both LoLTs was hindered by learners' insufficient exposure to pure languages and learners' detrimental exposure to impure languages within learners' environments outside of school, and interviewees indicated that the same applied inside of school. This insufficiency was indicated as somewhat relating to teachers' inability to speak pure forms of language.

#### *iii) Human resource deficiency*

A human resource deficiency reportedly existed within schools that undermined the implementation of the both LoLTs. The most prevalent of these was teachers' lack of proficiency using the LoLT.

Of the interviewees that mentioned this problem, 80% did so in relation to isiXhosa, 13% mentioned it in relation to English, and 13% in relation to both. These findings were reflected in the following opinion given by a principal: "There are few isiXhosa

resources and a few people who can teach isiXhosa. But there are many people who can teach English”. Referring to the indicated shortage of teachers who are able to teach in either isiXhosa or English, the same principal added: “With a lack of such human resources the quality of teaching will never be at the good standard that we want it to be” (Principal A, principal at FP L1 LoLT school).

Respondents were of the opinion that teachers were not able to use either or both LoLTs because they had not been trained properly to do so.

#### *iv) Teacher training inadequacy*

As such, an inadequacy of teacher training, resulting in a lack of proficiency in teachers using the LoLT, was indicated to be a problem that stood in the way of implementing both English and isiXhosa LoLTs.

#### *v) Lack of material resources*

A lack of material resources was indicated as a factor that undermined the implementation of both isiXhosa and English LoLTs, but this was particularly the case for isiXhosa. isiXhosa teaching and learning material resources were reportedly very limited in their availability and often of a poor quality.

Having discussed the nature of LoLT implementation, as well as the factors surrounding the likelihood of implementation being successful, the following section outlines the reported effects on learners of the manners in which LoLT was implemented within the schools visited.

### **4.2.3 LoLT policy effects on learners**

While the research found both positive and negative reported implementation effects of both LoLTs on learners, these effects were found to be significantly more negative than positive.

#### **4.2.3.1 Positive effects of LoLT on learners**

LoLT implementation reportedly affected learners positively in the following ways.

#### a) Learner performance

36% of interviewees indicated good learner performance as being a positive effect of L1 LoLT use. Only one teacher was of the opinion that English LoLT use was conducive to learner performance. Similarly, simply put:

I have been teaching for 10 years, so I have seen the difference. If the child is learning in their mother tongue the child does better (Teacher G, Grade 3 teacher at FP L2 LoLT school).

#### b) Inclusivity in heterogeneous sociolinguistic contexts

43% of interviewees indicated that the use of English as a LoLT was positive in its capacity to be educationally inclusive within heterogeneous sociolinguistic contexts; that non-Xhosa learners were better able to access teaching and learning in English than they were able to access it in isiXhosa

The opinion that English LoLT use was conducive to the social integration of SA learners from diverse backgrounds was evident to a greater extent than was the case for isiXhosa.

#### c) Access to the globalised world and opportunities for social mobility

Participants indicated that English LoLT use was unavoidable if learners were to exercise social mobility later by:

- Undertaking to further their education at tertiary institutions where English was dominant; and
- Gaining access to professional employment typically available only to speakers of a dominant language, such as English.

While it could be argued that the dominance of English was detrimental to the disadvantaged SA learner for various reasons, the research took the view that an English LoLT holding social mobility for learners who learn English as a positive effect.

#### d) Linguistic and cultural preservation

The use of L1 LoLT was indicated as beneficial in that its use proliferated the language and associated culture beyond the classroom. In other words, using a language as a LoLT was conducive to maintaining the general prevalence of that

language as well as its associated cultural knowledge within the society surrounding the school.

#### **4.2.3.2 Negative effects on learners**

Having outlined the positive effects that LoLT reportedly had on learners, the negative reported effects are now presented in order of the prevalence that there were mentioned during the research.

##### **a) Barrier to teaching and learning**

The greatest negative effect of LoLT on teaching and learning was indicated as being the LoLT constituting a barrier to learning as a result of teachers' and learners' inability to use it for teaching and learning, this being particularly the case within L2 LoLT contexts. Of those indicating that the LoLT was a barrier to learning in their schools, all did so referring to English, while a third did so referring to both isiXhosa and English.

##### **b) Disadvantaged learners' chance at education**

That the LoLT had the effect of disadvantaging learners' chances of attaining education was referred to in relation to isiXhosa L1 LoLT and English L2 LoLT equally, but for different reasons, as already discussed. In brief, respondents were of the opinion that neither LoLT model, in the way in which each was implemented, satisfactorily advanced learners' educational opportunities.

##### **c) LoLT policy transition**

The LoLT transition from isiXhosa L1 LoLT to English L2 LoLT at the beginning of Grade 4, as is typically the case for the vast majority of SA disadvantaged schools where the L1 is used as a LoLT only in Grades 1 to 3, was viewed as highly problematic by all of the interviewees within L1 LoLT contexts. This was because, from the point of LoLT transition, learners were reportedly unable to learn adequately because they were not able to understand and apply English as a LoLT well enough to do so. It was indicated that this situation was aggravated by the simultaneous additional burden on learners to cope with a larger workload – as the number of subjects they were taught expanded from 4 to 7. The effect on learners of this LoLT

transition was indicated as a decline in performance evident throughout subsequent grades.

At the point of LoLT transition, learners' inadequate ability to express themselves using English was also indicated as problematic for various reasons that negatively impacted on learning. These included learners' inadequate ability to use the LoLT in order to participate during teaching and learning activities; demonstrate learning during assessments; as well as to draw upon and express prior knowledge.

#### d) Inadequate mastery of L1 and/or L2

71% of all interviewees indicated that learners' inadequate mastery of isiXhosa, English, or both languages was an effect of LoLT policy implementation in their schools. While 20% of such interviewees were from L2 LoLT contexts, 80% were from L1 LoLT contexts. Of those from L1 LoLT contexts:

- 80% indicated the LoLT model at their school resulted in learners' inadequate mastery of English;
- 60% indicated the LoLT model at their school resulted in learners' inadequate mastery of isiXhosa; and
- 40% indicated the LoLT model at their school resulted in learners' inadequate mastery of both languages.

Participants typically indicated that learners' inadequate mastery of either English or isiXhosa, or both, was caused by the poor quality of the manner in which the languages were taught and that this resulted in learners being ill-equipped to learn using the languages, negatively affecting learner performance and drop-out rates.

#### e) Learner drop out

As a consequence of learners' inadequate mastery of the LoLT and the poor learner performance that this results in, learner drop out was indicated as resulting from the manner in which the LoLT policy was typically implemented within disadvantaged schools.

#### f) Linguistic, cultural and identity loss

Xhosa learners' linguistic, cultural and identity loss was indicated as being caused by L2 LoLT use in the following ways:

1. The exclusive use of English LoLT pushed the isiXhosa language towards extinction.
2. The implementation of English LoLT during the early years of schooling limited the extent to which Xhosa learners are able to master their mother tongue.
3. By decreasing the prevalence of learners' usage of isiXhosa, English LoLT use eroded the extent to which learners held Xhosa heritage as well as undermined the proliferation of Xhosa culture.
4. English LoLT implementation weakened the cultural identity of Xhosa learners.

#### g) Socio-economic marginalisation

Interviewees indicated that the prevailing LoLT policy in SA schools had the effect of socio-economically marginalising the most disadvantaged of the country's learners.

This sentiment was alluded to in the points below, taken from a L1 LoLT principal's discussion of how he saw LoLT affecting learners' futures. His view was that for Xhosa learners in schools like his:

- The chances that they would leave the schooling system having not mastered both English and isiXhosa were strong;
- Mastering or not mastering English (as influenced by prevailing LoLT policy) meant the difference between learners obtaining a language that they would be able to use to mobilise themselves socially via further education and employment or not; and therefore
- That the level of learners' proficiency in English and isiXhosa, albeit to a greater extent for the former, would ultimately determine the extent to which they were socially and economically isolated or not.

#### h) Deprivation of choice

Interviewees indicated that LoLT policy in SA did not allow most of the country's learners the constitutional choice of what language they used for education and that in this way these learners were forced to learn in a language that was not their L1.

Interviewees also expressed that for most black SA teachers, teaching in a language that was not their L1 was not a matter of choice, either.

### **4.3 Overview of findings**

Part A provided an indication of the learner performance associated with each respective LoLT model tempered by the finding that LoLT designations should not be assumed to accurately represent the LoLT implementation that they designate. It was found that those who learnt in their L1 performed better than learners who learnt in a L2. Furthermore, findings illustrated that learner performance benefited from additional exposure to the language of teaching, learning and assessment. This confirms what Taylor & Coetzee (2013, p. 15) found with regard to English.

Part B provided an indication of the nature of LoLT formulation and implementation within the schools researched. It was found that LoLT policy formulation was irregular in terms of the extent to which legislation was adhered to and theory consulted during the process. It was indicated that LoLT policy was only somewhat implemented, particularly in L2 LoLT contexts, and that non-implementation predominantly took the form of mixed language use. It was also indicated that the quality of teaching and learning typically found within disadvantaged L2 LoLT classrooms was inferior to that typically found within similar L1 LoLT classrooms. Furthermore, various challenges to LoLT implementation that reportedly existed within society, within the home and within the school were surveyed. These challenges were particularly stacked against isiXhosa LoLT implementation, but negatively affected that of English LoLT to a substantial extent, too. Part B concluded by listing the reported effects of prevailing LoLT policy implementation on learners within the schools that were researched.

LoLT policy recommendations that are suitable to contexts similar to that within which the research was conducted will be made in the next chapter, based on the findings.

## 5. Making LoLT policy work for disadvantaged SA

### 5.1 The LoLT policy conundrum

Access to tertiary education and the labour market for the vast majority of SA disadvantaged learners depends on them becoming fluent in a LoLT that is not their L1. This is because such learners have no choice but to write school-leaving examinations in a L2, which is usually English. In this quote, a principal ponders upon the conundrum that this reality poses:

When do I think it is a suitable time for learners to [begin being] be taught in a first additional language [L2]? That is a \$100 question [sic]. Because we also [in addition to retaining the L1] need to prepare learners for the outside world. We have got to introduce foreign languages for the outside world. We have got to introduce foreign languages but the problem is when. I don't have an answer now for that. Ja, I think that that is the biggest problem I always think about (Principal C, principal at FP L1 LoLT school).

It is a problem that the research attempted to solve by responding to the question:

*What model of LoLT would optimally facilitate learners' mastery of a L2 LoLT while being conducive to their maximal learning?*

To do this, the research explored the impact that LoLT policy had on learner performance, comparing the performance as well as the implementation of two LoLT models while asking a central question: *How does LoLT affect learner performance?*

The findings generated by asking this question are significant as they indicate a way forward beyond the LoLT predicament faced by SA education. Education in SA has been shown to fail the most disadvantaged of learners and the nature of LoLT policy in the country is believed to have contributed to this, significantly.

### 5.2 LoLT policy performance and implementation

How the research responded to the problem in terms of conclusions that were drawn reflecting the learner performance and nature of implementation associated with each LoLT model researched follows.

#### 5.2.1 Part A conclusions

Research conducted during Part A concluded that:

- a) Learning occurs best using L1 LoLT. Grade 3 Xhosa learners in isiXhosa LoLT contexts performed better than Grade 3 Xhosa learners in English LoLT contexts, particularly in Mathematics.
- b) The performance of learners in the early-exit transitional model of LoLT (those following the model referred to during the research as FP L1 LoLT) declined over time between Grade 3 and Grade 6, after the point of transition to a L2 LoLT in Grade 4.
- c) The performance of learners within schools that were designated as following FP L2 LoLT performed better over time between Grade 3 and Grade 6 compared to the performance of learners in schools designated as following a FP L1 LoLT. This finding must be interpreted in conjunction with findings 5.2.2 (d) and (e), below.
- d) Xhosa learners who had had more years of exposure to English as LoLT performed better later than Xhosa learners who had had fewer years' exposure to the language as LoLT when taught and assessed in it.

### 5.2.2 Part B conclusions

Research conducted during Part B concluded that:

- a) The formulation of LoLT policy by schools was generally irregular in its process because of the limited extent to which prevailing legislation was followed or relevant theory was consulted by schools.
- b) The greatest challenge within **both** isiXhosa and English LoLT contexts was learners' inability to understand and use the LoLT in order to learn. Teachers' inability to understand and use the LoLT in order to teach was also found to be a challenge, but to a lesser extent than was the case for learners. As such, the LoLT was, in effect, a barrier to learning. This was particularly the case for where English was LoLT.
- c) In an attempt to overcome the LoLT barrier to learning, teachers and learners within both LoLT contexts commonly employed mixed-language-use practices to communicate during lessons. The use of these practices deviated from the designated LoLT and in a technical sense constituted LoLT non-implementation.
- d) The non-implementation of English as LoLT within FP L2 LoLT contexts existed to such a significant extent that the LoLT descriptor designating the LoLT model implemented within these contexts was inaccurate.
- e) Schools that were designated as following a FP L2 LoLT model were found to be unintentionally implementing a form of dual-medium (two-way immersion) LoLT model because of the significantly high prevalence of mixed-language use during lessons in those schools.

- f) Mixed language use in classrooms predominantly took the form of CSM practices, found present to a pervasive extent within both LoLT contexts – but especially within L2 LoLT contexts. The practices were defining features of these contexts and, as such, needed to be taken into account when adopting LoLT policy for the effect that they had on teaching and learning.
- g) The LoLT transition occurring at Grade 4 within FP L1 LoLT schools, following an early-exit transitional model of LoLT, was problematic in terms of a decline in educational outcomes evident from the point of transition onwards.
- h) Compared to where L2 LoLT was designated for use in classrooms, teachers and learners were better able to teach and learn using L1 LoLT. As such, teachers and learners were more comfortable in L1 LoLT contexts, and learner participation was higher.
- i) The implementation of both English and isiXhosa as LoLT was hindered to a somewhat equal extent by factors existing inside and outside of the classroom.
- j) The implementation of prevailing LoLT policy within disadvantaged contexts affected Xhosa learners more negatively than positively, in a pervasive manner.

### **5.3 LoLT policy for learning**

#### **5.3.1 LoLT policy for SA's future**

From the conclusions generated during the course of this research, the following was apparent as being applicable to disadvantaged bilingual contexts of schooling in SA.

The use of weak bilingual LoLT policy such as the straight-for-English and early-exit transitional models of LoLT are not advisable ways of facilitating L2 LoLT proficiency in learners. In addition to being uncondusive to facilitating bilingualism within learners and therefore incongruent with SA constitutional and legislative guiding principles on language in education, research has found that these models typically failed to produce academic L2 proficiency in learners, resulted in poor learner performance, and were generally detrimental to the education and development of learners in various respects. Instead, it is advised that stronger bilingual LoLT policy be followed when determining an appropriate LoLT model for the facilitation of learner L2 LoLT proficiency.

In its characteristically substantial use of both L1 and L2 as LoLTs, one such model option resembles a model that the research found to be associated with superior learner performance when compared to that of the early-exit transitional LoLT model.

By definition, this implementation of strong bilingual LoLT policy is referred to as a *two-way immersion (dual-medium) model*, and involves the use of both L1 and L2 LoLTs in a dual-medium style.

While the research does not recommend that a textbook definition of dual-medium model of LoLT be implemented within SA disadvantaged contexts of schooling, it does recommend that:

1. Learners should be provided with greater exposure to English as a LoLT before the inevitable transition to the sole use of the language as a LoLT.

This is recommended so as to prepare learners better for the L2 LoLT transition, a transition that research has shown most learners are unable to cope with and never recover from. It was found by the research that Xhosa learners who had had greater exposure to English as a LoLT in Grades 1–3 performed better during assessments written in the language at Grade 6 than learners who had not had this exposure.

2. The inevitable point of transition from L1 to the L2 LoLT should occur much later than is typically the case within the research context, ideally at Grade 7 or 8.

This type of LoLT model is typically referred to as a late-exit transitional model. SA's history provides an illustration of the positive effect on learner performance that this model's later transition to L2 LoLT has. The school-leaving examination pass rate for African-language-speaking learners fell drastically from the point where L1 LoLT use was reduced from 8 to 4 years in 1976, that is, from the time when a change was made from late-exit to early-exit LoLT implementation. In this year (1976), the pass rate was 83,7%, while by 1992 it had fallen to 44% (Heugh, 2003).

3. A dual-medium late-exit transitional LoLT model with gradually increasing L2 LoLT/gradually decreasing L1 LoLT use from Grade 1 up to the point of transition should be advocated for. The L2 should then be used as sole LoLT for the rest of schooling toward best preparing learners for school-leaving examinations and tertiary education in the L2. The L1 should be taught as a subject during this time.

The research concluded that this was most likely to be the optimal LoLT policy for disadvantaged SA learners. It is a combination of the only three ways that research has found such learners can successfully develop their L1, learn a L2, and perform satisfactorily in other subjects (Heugh, 2006, p. 64):

- a) L1 used as the LoLT throughout school, with L2 taught as a subject;
- b) L1 and L2 used as LoLTs side by side throughout school; and
- c) L1 used as LoLT and L2 taught as a subject for +/- 8 years, with a very late-exit transitional to L2 as LoLT in the ninth year of schooling.

In accompaniment of this LoLT policy recommendation, several smaller but no less-significant policy recommendations are made towards effectively supporting LoLT policy implementation and learner performance within disadvantaged SA schools.

These are discussed below.

### **5.3.2 Allowing and supporting school LoLT policy implementation**

Several peripheral LoLT policy implementation recommendations were indicated by the research as needing to be addressed if LoLT implementation is to achieve optimal educational outcomes. They are presented in order of significance as evident in the findings:

- a) The use of isiXhosa as a LoLT must be further promoted in education if the language is to contribute significantly to improving learner performance in parts of SA where the language is L1. The challenges faced by the language as an effective LoLT because of its linguistic nature, a breakdown in the African oral tradition, the scarcity of isiXhosa literature as well as teaching and learning resources, compounded by competition from English, are considerable. Areas in need of prioritisation include further training of teachers in bilingual isiXhosa education and the increased production of isiXhosa literature, including teaching and learning materials, as well as the further funding and celebration of the literary isiXhosa arts.
- b) The educationally-sound use of CSM practices should be more strongly included within teacher training curricula. These practices must be considered powerful teaching tools that should be valued and used wisely and only after appropriate training. As defining features of disadvantaged SA classrooms, CSM practices cannot be ignored. The practices are both necessary and beneficial for learning in such contexts, but problematic and damaging to educational outcomes if not used correctly.
- c) The extent to which responsibility and accountability for LoLT implementation exists within schools is to strengthen if learner performance improvement is to result from LoLT policy implementation.
- d) In order to honour the SA Constitution (RSA, 1996a) as well as adhere to expressions of it in legislation pertaining to the right of parents to choose the LoLT that their children are educated in, SGBs must be more closely monitored for their compliance with the SASSA (RSA, 1996b).

- e) Initial as well as in-service teacher training must improve both in terms of capacity and quality. Furthermore, greater emphasis should be placed on language education practices within teacher training curricula.
- f) Teaching and learning material resource inadequacies within schools should be addressed.

#### **5.4 The complicated but simple LoLT challenge**

While the LoLT policy problem in SA education is the result of a conundrum of various factors from different realms each with its own effect on learning, both positive and negative, at constant and dynamic play, interacting across time and space, understanding the LoLT policy problem as it exists in SA disadvantaged classrooms for teachers and learners needs not be so complex. It is simply a problem of being able to communicate. In order to teach. In order to learn.

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## 7. Appendices

### 7.1 Appendices A: Research instruments

#### 7.1.1 School Information Form

**School Information Form**

School name:

School address:


Socio-economic index:

District and circuit:

National Quintile:

Age of institution:

Infrastructure:

LoLT policy:

Teaching staff size:

No. of learners per grade:

Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Total

Average class size:

	2011	2012	2013	2014	2015	Average
Grade 3						

School day hours long:

End time minus start time =
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Mission statement:


WCED literacy systemic performance:

	2011	2012	2013	2014	2015	Average
Grade 3						

Home language of teachers:

Most prevalent	Somewhat prevalent	Least prevalent

Home language of learners:

Most prevalent	Somewhat prevalent	Least prevalent

### 7.1.2 School Management Team Member Research Tools

#### a) School Management Team Member Information Form

**School Management Team Member Information Form**

Please provide the following information in writing or by putting a cross (X) in the block of your response, as applicable.

1	Name & surname (OPTIONAL):	
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2	Home language:	English	Afrikaans	isiXhosa	Other	
		a	b	c	d	<input type="checkbox"/>

3	Age in years:	20 - 30	31 - 40	41 - 50	50 +	
		a	b	c	d	<input type="checkbox"/>

4	Number of years teaching experience:	0 to 1	1 to 3	3 to 7	7 to 10	10 to 15	15 to 20	20 +	
		a	b	c	d	e	f	g	<input type="checkbox"/>

5	Current post level:	2	3	4	
		a	b	c	<input type="checkbox"/>

6	Highest level of qualification held:							
	Higher certificate	Diploma	Bachelor's degree	Honours degree	Postgrad diploma	Master's degree	Doctoral degree	
	a	b	c	d	e	f	g	<input type="checkbox"/>

7	Approximate hours of professional training and development a term:	None	± 2	± 4	± 6	± 8	More	
		a	b	c	d	e	f	<input type="checkbox"/>

This is the end of the form. Please take a moment to check that you have accurately responded to each of items above. Thank you!

## b) School Management Team Member LoLT Policy Interview Schedule

### **School Management Team Member Interview Schedule**

#### **I OPENING**

##### **A: Establish rapport**

Interviewer: 1) Introduces themselves 2) Shares sentiment of their passion for quality education in South Africa and how it developed 3) Shares common work situation in relation to Interviewee 4) Expresses appreciation to interviewee, thanking them for their time, reassuring them that by participating they are helping gain findings that will be used to improve education in South Africa.

##### **B: Confidentiality**

Interviewer: 1) Explains that the interview is conducted in confidentiality and that the interviewee's identity and school is to remain anonymous; that their name and as well as the name of the school that they work for will remain confidential and will never appear in any thesis or report resulting from this study 2) Explains that the interview will be recorded for the purpose of documenting what is said but that the recording will never be listened to by anyone except the Interviewer, but with their permission anonymous quotations may be used 3) Explains that the interview will be transcribed and sent to the Interviewee for them to confirm accuracy and clarify any points that they wish 4) Explains that if at anytime the Interviewee would like to stop the interview, they may do so, and that they are not obligated to continue with it at a later stage 5) Refers to *Research Participant Letter and Consent Form* signed beforehand, explaining that it gives the Interviewer consent to continue with the interview but is also the Interviewer's legal promise to honour the terms of confidentiality mentioned above 6) Provides Interviewee with a completed photocopy of their *Research Participant Letter and Consent Form*.

##### **C: Purpose**

Interviewer explains to interviewee that the purpose of the interview is to learn about their school's LoLT policy: 1) How it was formulated 2) How it is implemented 3) To reflect on how it affects teaching and learning.

##### **D: Motivation**

Interviewer explains to Interviewee that by talking about these questions in the interview they will be helping develop knowledge to be used in determining which LoLT policy models in disadvantaged South African schools may be conducive to learners' optimal performance in literacy. Interviewer commits to share a copy of the completed dissertation, should the Interviewee be interested in receiving it.

##### **E: Timeline**

The Interviewer informs the Interviewee that the interview will take approximately 45 to 90 minutes to complete.

##### **F: Questions**

The Interviewer asks the Interviewee if they understand all of the above, and if they have any questions regarding what has been explained. Before continuing with the interview, the Interviewer addresses any questions that the Interviewee may have.

## II BODY

Topic 1: The school's language policy: BACKGROUND

Question a) Does your school have an official language policy?

Question b) If so, what is the language policy that your school follows and is it available to read?

Question c) In your own words, how would you describe the language policy that your school follows?

Question d) Do you think that the language policy that your school follows suits your school's needs?

Question e) Are you familiar with the Department of Basic Education's language policy? If so, do you think that it suits the needs of schools like your own in South Africa?

*Transition to next topic: ...*

Topic 2: The school's language policy: FORMULATION

Question a) When was the decision to follow the language policy at your school made?

Question b) Who was part of the decision to follow this language policy at your school?

Question c) How was the decision to follow the language policy at your school a made?

Question d) What language policy options were available to the school when it decided to follow the language policy that it does?

Question e) What were the reasons for choosing the language policy that your school follows?

Question f) Which legislation, if any, was consulted when deciding on the school's language policy?

Question g) Which theory of language, if any, was consulted when deciding on the school's language policy?

Question h) Is the language policy at your school ever revised, and if so, how often?

*Transition to next topic: ...*

Topic 3:	The school's language policy: IMPLEMENTATION
Question a)	To what extent do you think that your school's language policy is implemented in its classrooms?
Question b)	Who, if anybody, is responsible for ensuring that your school's language policy is implemented in its classrooms? How do they ensure this?
Question c)	Are any procedures in place at your school that aim to ensure that your school's language policy is implemented in its classrooms? If so, how do these procedures work?
Question d)	What are the challenges preventing the full implementation of your school's language policy in its classrooms?
Question e)	How does your school's language policy influence how teachers teach?
Question f)	What positive effects does your school's language policy have on the quality of teaching and learning?
Question g)	What negative effects does your school's language policy have on the quality of teaching and learning?
Topic 4:	The school's language policy: REFLECTION
Question a)	Do you think that learners' should be taught in their home language or in English? Why?
Question b)	If learners are not taught in their home language, should the home language be taught as a subject? Why?
Question c)	If learners are not taught in English, should English be taught as a subject? Why?
Question d)	If the language that learners are taught in changes from their home language to English, when do you think this change should happen? Why?
Question e)	What do you think would be the most effective language policy for the quality of teaching and learning at your school? Why?

### III CONCLUSION

Summarise	The Interviewer: 1) Explains to the Interviewee that the interview is now concluding 2) Asks the Interviewee if there is anything else that they would like to discuss.
Rapport	The Interviewer: 1) Thanks the Interviewee for being interviewed and for their time in doing so 2) Welcomes further communication.
Action	The Interviewer asks the Interviewee if they would be interested in receiving a copy of the completed dissertation, taking note for action as such, accordingly.

### 7.1.3 Teacher Research Tools

#### a) Teacher Information Form

#### Teacher Information Form

Please provide the following information in writing or by putting a cross (X) in the block of your response, as applicable.

1	Name & surname (OPTIONAL):	
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2	Home language:	English	Afrikaans	isiXhosa	Other	
		a	b	c	d	

3	Age in years:	20 - 30	31 - 40	41 - 50	50 +	
		a	b	c	d	

4	Number of years teaching experience:	0 to 1	1 to 3	3 to 7	7 to 10	10 to 15	15 to 20	20 +	
		a	b	c	d	e	f	g	

5	Current grade/s taught:	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	
		a	b	c	d	e	f	g	

6	Highest level of qualification held:							
	Higher certificate	Diploma	Bachelor's degree	Honours degree	Postgrad diploma	Master's degree	Doctoral degree	
	a	b	c	d	e	f	g	

7	Approximate hours of professional training and development a term:	None	± 2	± 4	± 6	± 8	More	
		a	b	c	d	e	f	

This is the end of the form. Please take a moment to check that you have accurately responded to each of items above. Thank you!

**b) LoLT Policy Survey Questionnaires**

i) LoLT Policy Survey Questionnaire for Teachers at isiXhosa LoLT Schools

**Teaching survey questionnaire**

Please respond to the following statements accurately by putting a cross (X) in the block of your response.

1	<i>I am comfortable speaking in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

2	<i>I can write in isiXhosa.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

3	<i>I am comfortable planning lessons in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

4	<i>I am comfortable assessing learners in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

5	<i>I smile or laugh while teaching in isiXhosa.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

6	<i>I make jokes while teaching in isiXhosa.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

7	<i>I am able to teach Maths and Science in isiXhosa.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

8	<i>I engage learners' higher-order thinking using isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

9	<i>I teach enough of the curriculum in the correct time using isiXhosa.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

10	<i>I punish learners who do not use isiXhosa in class.</i>					
	Very true of me	True of me	Somewhat true of me	Somewhat untrue of me	Untrue of me	Very untrue of me
	a	b	c	d	e	f

11	<i>I think that teaching Xhosa learners in isiXhosa is:</i>					
	Perfectly Acceptable	Acceptable	Slightly acceptable	Slightly unacceptable	Unacceptable	Totally unacceptable
	a	b	c	d	e	f

12	<i>Learners use isiXhosa to express themselves clearly in class.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

13	<i>Learners write correct isiXhosa sentences.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

14	<i>Learners actively participate in isiXhosa.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

15	<i>Learners answer questions in isiXhosa during class.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

16	<i>Learners guess the answers to questions asked in isiXhosa.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

17	<i>Learners memorise classwork in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

18	<i>Learners repeat what is said or written in class in isiXhosa.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

19	<i>Learners are able to learn in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

20	<i>Learners copy notes from the board in isiXhosa.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

21	<i>The number of isiXhosa words I know is enough to teach in the language well.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

22	<i>Learners understand isiXhosa teaching.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

23	<i>Learners can communicate in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

24	<i>Learners enjoy learning in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

25	<i>Learners ask questions using isiXhosa.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

26	<i>Learners teach me something using isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

27	<i>Learners understand isiXhosa assessment.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

28	<i>Learners debate or argue in isiXhosa.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

29	<i>Learners explain how they have solved problems using isiXhosa.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

30	<i>Learners teach one another in isiXhosa.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

31	<i>Learners ask for help in isiXhosa.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

32	<i>Learners answer questions in a chorus.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

33	<i>I teach using isiXhosa.</i>					
	Always	Usually	Sometimes	Not often	Rarely	Never
	a	b	c	d	e	f

34	<i>I am allowed to use isiXhosa and English while I teach.</i>					
	This is true	This is false				
	a	b				

35	<i>I use isiXhosa and English within sentences while I teach.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

36	<i>I switch between using isiXhosa and English sentences while I teach.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

37	<i>I know about bilingual education.</i>					
	Very true of me	True of me	Somewhat true of me	Somewhat untrue of me	Untrue of me	Very untrue of me
	a	b	c	d	e	f

38	<i>I know about second language acquisition.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

39	<i>I follow the school's LoLT policy.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

40	<i>Teaching in isiXhosa is a challenge for me.</i>			
	Big challenge	Moderate challenge	Small challenge	Not a challenge
	a	b	c	d

This is the end of the questionnaire. Please take a moment to check that you have accurately responded to each of the statements above by putting a cross (X) in the block of your response. Thank you!

ii) LoLT Policy Survey Questionnaire for Teachers at English LoLT Schools

**Teaching survey questionnaire**

Please respond to the following statements accurately by putting a cross (X) in the block of your response.

1	<i>I am comfortable speaking in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

2	<i>I can write in English.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

3	<i>I am comfortable planning lessons in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

4	<i>I am comfortable assessing learners in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

5	<i>I smile or laugh while teaching in English.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

6	<i>I make jokes while teaching in English.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

7	<i>I am able to teach Maths and Science in English.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

8	<i>I engage learners' higher-order thinking using English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

9	<i>I teach enough of the curriculum in the correct time using English.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

10	<i>I punish learners who do not use English in class.</i>					
	Very true of me	True of me	Somewhat true of me	Somewhat untrue of me	Untrue of me	Very untrue of me
	a	b	c	d	e	f

11	<i>I think that teaching Xhosa learners in English is:</i>					
	Perfectly Acceptable	Acceptable	Slightly acceptable	Slightly unacceptable	Unacceptable	Totally unacceptable
	a	b	c	d	e	f

12	<i>Learners use English to express themselves clearly in class.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

13	<i>Learners write correct English sentences.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

14	<i>Learners actively participate in English.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

15	<i>Learners answer questions in English during class.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

16	<i>Learners guess the answers to questions asked in English.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

17	<i>Learners memorise classwork in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

18	<i>Learners repeat what is said or written in class in English.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

19	<i>Learners are able to learn in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

20	<i>Learners copy notes from the board in English.</i>					
	In every lesson	Usually	Frequently	Occasionally	Rarely	Never
	a	b	c	d	e	f

21	<i>The number of English words I know is enough to teach in the language well.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

22	<i>Learners understand English teaching.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

23	<i>Learners can communicate in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

24	<i>Learners enjoy learning in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

25	<i>Learners ask questions using English.</i>					
	Always true	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

26	<i>Learners teach me something using English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

27	<i>Learners understand English assessment.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

28	<i>Learners debate or argue in English.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

29	<i>Learners explain how they have solved problems using English.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

30	<i>Learners teach one another in English.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

31	<i>Learners ask for help in English.</i>					
	Almost always true	Usually true	Often true	Rarely true	Usually not true	Almost never true
	a	b	c	d	e	f

32	<i>Learners answer questions in a chorus.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

33	<i>I teach using English.</i>					
	Always	Usually	Sometimes	Not often	Rarely	Never
	a	b	c	d	e	f

34	<i>I am allowed to use isiXhosa and English while I teach.</i>					
	This is true	This is false				
	a	b				

35	<i>I use isiXhosa and English within sentences while I teach.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

36	<i>I switch between using isiXhosa and English sentences while I teach.</i>					
	In every lesson	Usually true	Sometimes true	Sometimes but not often	Rarely true	Never true
	a	b	c	d	e	f

37	<i>I know about bilingual education.</i>					
	Very true of me	True of me	Somewhat true of me	Somewhat untrue of me	Untrue of me	Very untrue of me
	a	b	c	d	e	f

38	<i>I know about second language acquisition.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

39	<i>I follow the school's LoLT policy.</i>					
	Strongly agree	Agree	Somewhat Agree	Somewhat disagree	Disagree	Strongly disagree
	a	b	c	d	e	f

40	<i>Teaching in English is a challenge for me.</i>			
	Big challenge	Moderate challenge	Small challenge	Not a challenge
	a	b	c	d

This is the end of the questionnaire. Please take a moment to check that you have accurately responded to each of the statements above by putting a cross (X) in the block of your response. Thank you!

### c) Teachers' LoLT Policy Interview Schedule

#### Teacher Interview Schedule

##### I OPENING

###### A: Establish rapport

Interviewer: 1) Introduces themselves 2) Shares sentiment of their passion for quality education in South Africa and how it developed 3) Shares common work situation in relation to Interviewee 4) Expresses appreciation to interviewee, thanking them for their time, reassuring them that by participating they are helping gain findings that will be used to improve education in South Africa.

###### B: Confidentiality

Interviewer: 1) Explains that the interview is conducted in confidentiality and that the interviewee's identity and school is to remain anonymous; that their name and as well as the name of the school that they work for will remain confidential and will never appear in any thesis or report resulting from this study 2) Explains that the interview will be recorded for the purpose of documenting what is said but that the recording will never be listened to by anyone except the Interviewer, but with their permission anonymous quotations may be used 3) Explains that the interview will be transcribed and sent to the Interviewee for them to confirm accuracy and clarify any points that they wish 4) Explains that if at anytime the Interviewee would like to stop the interview, they may do so, and that they are not obligated to continue with it at a later stage 5) Refers to *Research Participant Letter and Consent Form* signed beforehand, explaining that it gives the Interviewer consent to continue with the interview but is also the Interviewer's legal promise to honour the terms of confidentiality mentioned above 6) Provides Interviewee with a completed photocopy of their *Research Participant Letter and Consent Form*.

###### C: Purpose

Interviewer explains to interviewee that the purpose of the interview is to learn about their school's LoLT policy: 1) How it was formulated 2) How it is implemented 3) To reflect on how it affects teaching and learning.

###### D: Motivation

Interviewer explains to Interviewee that by talking about these questions in the interview they will be helping develop knowledge to be used in determining which LoLT policy models in disadvantaged South African schools may be conducive to learners' optimal performance in literacy. Interviewer commits to share a copy of the completed dissertation, should the Interviewee be interested in receiving it.

###### E: Timeline

The Interviewer informs the Interviewee that the interview will take approximately 45 to 90 minutes to complete.

###### F: Questions

The Interviewer asks the Interviewee if they understand all of the above, and if they have any questions regarding what has been explained. Before continuing with the interview, the Interviewer addresses any questions that the Interviewee may have.

## II BODY

Topic 1: The school's language policy: BACKGROUND

Question a) Does your school have an official language policy?

Question b) If so, what is the language policy that your school follows and is it available to read?

Question c) In your own words, how would you describe the language policy that your school follows?

Question d) Do you think that the language policy that your school follows suits your school's needs?

Question e) Are you familiar with the Department of Basic Education's language policy? If so, do you think that it suits the needs of schools like your own in South Africa?

*Transition to next topic: ...*

Topic 2: The school's language policy: FORMULATION

Question a) When was the decision to follow the language policy at your school made?

Question b) Who was part of the decision to follow this language policy at your school?

Question c) How was the decision to follow the language policy at your school a made?

Question d) What language policy options were available to the school when it decided to follow the language policy that it does?

Question e) What were the reasons for choosing the language policy that your school follows?

Question f) Which legislation, if any, was consulted when deciding on the school's language policy?

Question g) Which theory of language, if any, was consulted when deciding on the school's language policy?

Question h) Is the language policy at your school ever revised, and if so, how often?

*Transition to next topic: ...*

Topic 3:	The school's language policy: IMPLEMENTATION
Question a)	To what extent do you think that your school's language policy is implemented in its classrooms?
Question b)	Who, if anybody, is responsible for ensuring that your school's language policy is implemented in its classrooms? How do they ensure this?
Question c)	Are any procedures in place at your school that aim to ensure that your school's language policy is implemented in its classrooms? If so, how do these procedures work?
Question d)	What are the challenges preventing the full implementation of your school's language policy in its classrooms?
Question e)	How does your school's language policy influence how teachers teach?
Question f)	What positive effects does your school's language policy have on the quality of teaching and learning?
Question g)	What negative effects does your school's language policy have on the quality of teaching and learning?
Question h)	Is teaching in your school's LoLT a problem for you? If so, why?
Question i)	Do you feel comfortable speaking your school's LoLT during lessons? If not, why?
Question j)	Do you feel comfortable reading your school's LoLT during lessons? If not, why?
Question k)	Do you feel comfortable writing your school's LoLT during lessons? If not, why?
Question l)	Do you manage to teach enough of the curriculum using your school's LoLT in the required time? If not, why?
Question m)	Are learners required to use the school's LoLT during lessons? If so, what approach is taken in dealing with learners who do not do so?
Question n)	Do learners actively participate during lessons using the school's LoLT?
Question o)	Do you use any of the following teaching techniques during lessons? Chalk and talk? Memorisation? Repetition? Chorus-style teaching? If so, which ones, and why?
Question p)	Do you code switch during lessons that you teach? If so how, and why?

Question q)	Do you think your learners understand assessments they do in the school's LoLT? If not, why?
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Topic 4:	The school's language policy: REFLECTION
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Question a)	Do you think that learners' should be taught in their home language or in English? Why?
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Question b)	If learners are not taught in their home language, should the home language be taught as a subject? Why?
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Question c)	If learners are not taught in English, should English be taught as a subject? Why?
-------------	--

Question d)	If the language that learners are taught in changes from their home language to English, when do you think this change should happen? Why?
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Question e)	What do you think would be the most effective language policy for the quality of teaching and learning at your school? Why?
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### III CONCLUSION

Summarise	The Interviewer: 1) Explains to the Interviewee that the interview is now concluding 2) Asks the Interviewee if there is anything else that they would like to discuss.
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Rapport	The Interviewer: 1) Thanks the Interviewee for being interviewed and for their time in doing so 2) Welcomes further communication.
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Action	The Interviewer asks the Interviewee if they would be interested in receiving a copy of the completed dissertation, taking note for action as such, accordingly.
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## 7.2 Appendices B: Permission and consent documentation

### 7.2.1 UCT Ethical Clearance for Research Project UCT/EDN/4/2016/ii



#### SCHOOL OF EDUCATION

**Dr Carolyn McKinney**  
*Associate Professor*

University of Cape Town, Private Bag X3, Rondebosch, 7701  
Physical address: Neville Alexander Building, University Ave South, Upper Campus  
Tel: +27 (0) 21 650 2757 / 2772 Fax: +27 (0) 21 650 3489  
E-mail: carolyn.mckinney@uct.ac.za Internet: www.education.uct.ac.za

24 March 2016

Mr Alexander Molteno  
9 Ixia Street  
Hout Bay  
7806  
South Africa

Dear Mr Molteno,

#### **RE: Ethical Clearance for Research Project UCT/EDN/4/2016/ii**

I am pleased to inform you that ethical clearance has been granted by the School of Education Ethics Review Committee of the Faculty of Humanities for your project entitled: "The effect of LOLT on learner literacy performance"

I wish you all the best with your study.

Yours sincerely,

A handwritten signature in black ink that reads "Signed".

Associate Professor C McKinney  
**Chair, School of Education Research Ethics Committee**

## 7.2.2 WCED Permission to Conduct Research in Public Schools within the Western Cape



Directorate: Research

[Audrey.wyngaard@westerncape.gov.za](mailto:Audrey.wyngaard@westerncape.gov.za)

tel: +27 021 467 9272

Fax: 0865902282

Private Bag x9114, Cape Town, 8000

wced.wcape.gov.za

**REFERENCE:** 20160331-9100

**ENQUIRIES:** Dr A T Wyngaard

Mr Alexander Molteno  
9 Ixia Street  
Hout bay  
7806

**Dear Mr Alexander Molteno**

### **RESEARCH PROPOSAL: THE EFFECT OF LOLT ON LEARNER LITERACY PERFORMANCE IN DISADVANTAGED SCHOOLS IN THE WESTERN CAPE, SOUTH AFRICA**

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **13 May 2016 till 10 June 2016**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services  
Western Cape Education Department  
Private Bag X9114  
CAPE TOWN  
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

**Directorate: Research**

**DATE: 31 March 2016**

### 7.2.3 Information Letter and Consent Form

9 Ixia Street  
Hout Bay  
7806  
South Africa  
Date (Insert date)

Dear (Insert Participant's Name):

RE: Information Letter and Consent Form for Invitation to Participate in Research

This letter is an invitation to consider participating in a study I am conducting as part of my Masters in Education degree at the School of Education at the University of Cape Town under the supervision of Mr. James Gilmour. I would like to provide you with more information about this study and what your involvement would entail if you decide to take part.

This study aims to develop an indication of what language education policy is optimal for use in disadvantaged South African schools where the language of teaching and learning (LoLT) is not learners' or teachers' first language. The development of such an understanding is important if schools are to facilitate the quality education of disadvantaged South African learners.

Participation in this study is voluntary. It will involve a survey questionnaire of 40 multiple-choice questions and a 45 to 60 minute interview to take place in a mutually agreed upon location. You may decline to answer any of the survey or interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences.

Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide within the survey questionnaire and interview is completely confidential. Your name and the name of your school will not appear in any thesis or report resulting from this study. However, with your permission anonymous quotations may be used.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me 084 411-1234 or by e-mail at [alexandermolteno@gmail.com](mailto:alexandermolteno@gmail.com). You can also contact my supervisor, James Gilmour on (021) 650-3287 or e-mail him using [james.gilmour@uct.ac.za](mailto:james.gilmour@uct.ac.za).

I would like to assure you that this study has been reviewed and received ethics clearance through the Research Ethics Committee of the Faculty of Humanities at the University of Cape Town. However, the final decision about participation is yours.

Best regards

**Signed**

Alex Molteno  
Master's Student  
School of Education  
University of Cape Town

Consent Form to Participate in Research

I have read the information presented in the information letter about a study being conducted by Alex Molteno of the School of Education at the University of Cape Town. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that my responses to survey and interview questions will be kept confidential and I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses. Further, I understand that the name of the school that I work for will remain confidential, and will not appear in any report of thesis stemming from this research.

I am also aware that excerpts from the interview may be included in the dissertation and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time by advising the researcher.

This research had been reviewed by, and received ethics clearance through, Research Ethics Committee of the Faculty of Humanities at the University of Cape Town. I was informed that if I have any comments or concerns resulting from my participation in his study, you may contact the Chair of the Research Ethics Committee, Faculty of Humanities, University of Cape Town, Professor Marion Walton by email using [the.marion.walton@gmail.com](mailto:the.marion.walton@gmail.com)

With full knowledge of the above, I give consent and agree, of my own free will, to participate in this study by completing:

(Please tick ✓ as applicable)

a) The School Information Form

YES  NO

b) The Teacher / SMT Information Form

YES  NO

c) The Teacher Survey Questionnaire

YES  NO

d) The Teacher / SMT Interview

YES  NO

e) I give permission for the Teacher / SMT Interview to be audio recorded

YES  NO

Participant's Name (please print) \_\_\_\_\_

Participant's Signature \_\_\_\_\_ Date \_\_\_\_\_