A SCHOOL-BASED, BALANCED APPROACH TO EARLY READING INSTRUCTION FOR ENGLISH ADDITIONAL LANGUAGE LEARNERS IN GRADES ONE TO FOUR

By

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DECLARATION

I, the undersigned, hereby declare that the work contained in this dissertation is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

Signature

Date

26 February 2008
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ABSTRACT

Given that schooling is compulsory and that the quality of literacy instruction that children receive in the primary years lays the foundation for the rest of formal learning, management and teachers are under strong pressure to ensure the improvement of literacy in schools. This study reports on a literacy intervention directed at improving literacy instruction for seventy-two English Additional Language (EAL) learners in grades one to four. The intervention aimed to help teachers maximise teaching time through a theoretically sound approach that balanced language experience, shared and guided reading and writing, and embedded phonics and word level instruction within the context of reading and writing. In doing so, the approach breaks with the traditional position still held by many teachers that learners must first be taught to sound out letters and read words before they can be taught to read and write.

Daily features of the literacy programme included whole class shared reading and small group guided reading and writing. Whereas shared reading engaged learners in lively literacy experiences on challenging texts, small group guided reading enabled teachers to match instruction and texts more closely to individual learners' needs. During shared and guided reading sessions, teachers modelled behaviours and strategies on interesting texts, interacted with learners and provided direct instruction in phonics and word level work. Once a week, planned outings and practical activities created opportunities for developing the learners' language and extending their conceptual understandings.

In keeping with the theoretical position that assessment and diagnostic information are critical aspects of a teacher's profession and vital to promoting literacy learning, An Observation Survey Of Early Literacy Achievement (1993) was used in a pre-test post-test design to gather data on individual learners. In addition to quantitative data, the observation survey yielded descriptive data on children's literacy processing behaviours, which were used to monitor learner progress and as a source of feedback to guide teachers' instructional decision-making. Data were also drawn from observations of teacher-learner interactions within contexts in which these interactions took place.

A comparison of pre- and post-intervention data indicates that the alternative instructional approach leads to the establishment of constructive literacy environments and positive gains in the learners' reading and writing competencies, as well as in their motivation to learn English and engage with reading and writing activities. An overriding conclusion is that the project merits further research and support.
Inaggenome dat akademiese opvoeding verpligtend is en die kwaliteit van geletterdheidsonderrig wat kinders ontvang tydens die primêre jare die basis vorm vir die res van formele opleiding, is bestuur en onderwysers onder druk om verbetering van geletterdheid in skole te verseker. Hierdie studie verwys na 'n geletterdheidsintervensie gereg op die verbetering van geletterdheidsonderrig van twee en sewentig Engels Addisionele Taal leerders in graad een tot vier. Die intervensie het gepoog om onderwysers te help om onderrigtyd te optimaliseer deur 'n teoreties verantwoordbare benadering te gebruik, wat taalervaring, saam- en begeleide lees en skryf, fonetika en woordvlakonderrig binne die konteks van lees en skryf insluit. Hierdeur breek die benadering weg van die tradisionele standpunt wat steeds deur baie onderwysers gehandhaaf word, naamlik dat leerders eers geleer moet word om letters uit te klank en woorde te lees voor lees- en skryf onderrig kan plaasvind.

Daaglikse aspekte van die geletterdheidsprogram het saamlees deur die hele klas behels, asook begeleide lees en skryf in klein groepe. Tydens saamlees was leerders betrokke by interessante geletterdheidservarings met uitdagende teks terwyl kleingroep begeleide lees dit moontlik gemaak het vir onderwysers om instruksie en teks aan te pas by individuele leerders se behoeftes. Gedurende saamlees en begeleide leessessies, het onderwysers gedrag en strategieë op interessante teks gemonstreer, met leerders saamgewerkoen direkte opleiding gebied in fonetika en woordvlakwerk. Een maal per week was daar beplande uitstappies en praktiese aktiwiteite wat geleenthede gebied het vir die ontwikkeling van leerders se taal en uitbreiding van konseptuele begrip.

Aansluitend by die teoretiese perspektief dat assessering en diagnostiese informasie kritieke aspekte van die onderwysersprofsie is en ook noodsaklik is vir geletterdheidsonderrig, is An Observation Survey of Early Literacy Achievement (1993) gebruik as 'n voor- en natoets ontwerp om data van individuele leerders te versamel. Bykomend tot die kwantitatiewe data, het die "observation survey" beskrywende data oor kinders se prosesseringsgedrag gebied, wat gebruik is om vordering te moniteer en as bron van terugvoer op onderwysers se onderrigbesluitneming. Data oor onderwyser-leerderinteraksies is ook ingewin binne die konteks waar die interaksie plaasgevind het.

'n Vergelyking van voor- en natoetsintervensiedata blyk daarop te wys dat die alternatiewe benadering geleit het tot die daarstelling van konstruktiewe geletterdheidsomgewings en vooruitgang in die leerders se lees- en skryfvermoë asook hulle motivering om Engels te leer en aktief betrokke te wees in lees- en skryfaktiwiteite. Daar is tot die gevolgtrekking gekom dat die projek verdere navorsing en ondersteuning regverdig.
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CHAPTER 1

STATEMENT OF THE PROBLEM, RATIONALE FOR AND OBJECTIVES OF THIS INVESTIGATION

1.1 INTRODUCTION

The aim of this chapter is to lay the groundwork for the discussion in the rest of the dissertation which focuses on classroom-based research that describes the outcomes of a literacy intervention for English Additional Language (EAL) learners in three schools in the Western Cape. Given that English is an important resource for accessing knowledge and reading is an essential skill in any democracy, the question of how best to teach reading to EAL learners was one of the core concerns of the intervention.

In the interests of nurturing children's first languages and of facilitating access to meaningful, conceptual knowledge for the majority of South African learners, the current South African educational policy advocates an additive approach to language and literacy learning. Thus, in this dissertation the term English Additional Language (EAL) is used rather than English Second Language (ESL).

1.2 LITERACY AS A CENTRAL MEANS OF ERADICATING INEQUALITY IN THE SOUTH AFRICAN EDUCATION SYSTEM

International trends (including outcomes-based education) have played a significant role in shaping South Africa's new curriculum, which was introduced by the Minister of Education in 1995 as part of a national strategy to simultaneously eradicate the apartheid system of education and to equip South Africa's learners with the knowledge, competencies and attitudes needed for success in the information-driven global economy (Department of Education, 1997; Report of the Review Committee, 2000:1-2).

The empowerment paradigm in the new curriculum places a high premium on literacy as a means to both personal development and the nation's economic prosperity (Report of the Review Committee, 2000:vii). But despite ambitious goals to create a literate society, classroom-based research indicates that literacy and numeracy skills are not being adequately
developed in South African primary schools (Flanagan, 1995:xii; Report of the Review Committee, 2000:44). Thirty-five school-based studies found that "books were little in evidence" in classrooms, reading and writing activities were rare and non-mathematical tasks were "growing like a tumour" (Report of the Review Committee, 2000:41-44). The Scientific and Industrial Leadership Initiative (SAILI) and READ independently attribute lack of progress in mathematics and science to poor literacy skills (Coombe, Makhubalo & Smallbones, 2000:12; Prehn, 2000:1; Plüddemann, Mbude & Mati, 2000:4). It is evident from the above that poor reading abilities hold serious consequences for individual learners and, more generally, for the South African economy. A brief review of some figures reveals the waste of human and financial resources due to repeater rates and school dropouts. READ, an education trust committed "to help people throughout South Africa develop their reading, learning information and communication skills" (READ, 1999:1), found that high repeater rates cost South Africa R1,5 billion a year in the foundation phase alone. In 1992, the National Education Policy Initiative (NEPI, 1992:6) placed the failure and attrition rate at approximately 50% of the learner population in South Africa. Their research also shows that 25% of African children leave school illiterate, that is, without passing grade 5. These figures were confirmed by the 1996 Census, which shows that 24% of the coloured population and 25% of the African population in the Helderberg area are functionally illiterate (Statistics SA, 2000:1). More recently, READ reports that their studies in rural areas in the Eastern Cape show that the average 14,5 year old enters grade 8 with the reading age of a 7,5 year old. NEPI (1992:3) found that the following factors contribute to poor scholastic performance of children from less-developed communities: poor quality of schooling, lack of material resources, inadequately trained teacher, adverse social conditions, the 'unreadiness' of schools for children and a lack of responsiveness to local needs. These statistics indicate an urgent need to help strengthen primary schools through research-based interventions that focus on literacy in the early school years.

1.3 STATEMENT OF THE PROBLEM

Researchers such as Weaver (1994:294-299) and Bloch (2000:25) relate poor reading comprehension directly to an overemphasis on phonics instruction for children learning to read in both their first and additional languages. From her research in many South African classrooms, Bloch (2000:25-30) concludes that skills-based literacy instruction is pervasive and that the heavy emphasis on phonics takes "so much time and energy that learners become frustrated and never get to the point of reading authentic texts". Those that do read often do
not "become fluent, because they get stuck with decoding" (Bloch, 2000:25). Children who have little prior experiences with print may have no 'sense of story' to make learning to read a stimulating and productive experience. To quote Adams (1990:5): "If reading seems aversive, the individual will avoid it altogether".

My interest in finding better ways to teach EAL reading developed as a result of my work in teacher education and development. My observations in twenty primary schools in the Western Cape (over the past five years as part of my responsibilities as a lecturer at Stellenbosch University) made it clear that many teachers did not know how to provide young EAL readers with instruction and materials that would meet their individual levels of literacy development. This problem took on a new dimension when I was offered sponsorship to conduct research in selected EAL classrooms in three primary phase Afrikaans-medium schools in the Western Cape during a period of intense transformation in the South African educational system (see 2.1).

1.4 THEORETICAL PERSPECTIVE UNDERLYING THE RESEARCH

Based on my understanding of theories of literacy acquisition, I made some assumptions about what quality early literacy instruction for EAL learners entails. In the first instance, I assume that less proficient readers, be they English first or additional language speakers, need to acquire the same effective patterns of literacy learning that successful learners have acquired (Clay 1991a:2). Therefore, I believe reading teachers should emphasise the strategic mental activities that EAL learners should use in the act of reading continuous texts. This stance assumes that strategic activities for solving novel features in print are important in reading, because problem solving extends a learner's capacity to read new texts (Clay, 2002:35). With knowledge of some items (e.g. sounds, letters, words) and a strategic awareness of how to work on continuous texts, a reader can apply what he or she knows to working on new items. Clay (2002:35) calls the gradual increase in effective processing strategies a "self-extending" system. In this sense, learning a language and learning to read seem to share similar processes because both are self-extending systems (Fountas & Pinnell, 1996:11) (see 4.6.4). From this perspective, a teacher's task is to help each child to use all the mental operations that are necessary to comprehend a given text in the course of reading that text (Adams, 1990:9-10). This stance conflicts with the notion that reading should be delayed until the learner is ready for literacy instruction and with the idea that phonics-first instruction should be a prerequisite for reading (see 2.5).
If teachers in South African classrooms are to meet the literacy needs of EAL learners from diverse cultures, who vary in economic status, language, age and prior experiences with print, it stands to reason that they will have to adapt instruction as far as possible to meet the needs and progress of each learner within a whole class context (Adams, 1990:6; Clay, 2005:14). To determine what these needs are and how best to meet them, teachers need to assess individuals in ways that enable them to use the information to inform their instruction and to maintain learner progress. Therefore, they need practical and systematic observation procedures that "uncover what a particular child controls and what operations and items he could be taught next" (Clay, 2002:33) (see 3.7). This view of assessment places only a slight emphasis on quantifying progress in terms of scores (see 5.3.1 –5.3.2). Needless to say, this approach differs from traditional measurement theories that tend to conceptualise reading progress in terms of quantifiable categories (e.g. visual or phonological abilities) and reading difficulties in terms of learner deficiencies (Denton, Ciancio & Fletcher, 2006: 8; McEneaney, Lose & Swartz, 2006:118).

Alternative forms of assessments, such as Clay's (1993; 2002, An Observation Survey Of Early Literacy Achievement, quickly reveal the extent to which children in the same mainstream classrooms differ in literacy-related knowledge, e.g. oral language, phonological awareness, item knowledge and literacy processing strategies (see 4.6). For this reason, McEneaney et al. (2006:125) question the use of traditional research designs to investigate the education and development of reading teachers. They believe that a "natural-variability model" (i.e. one that rejects learner deficit models and accepts the natural variability of readers) is more appropriate for supporting reading educators and improving children's learning. They also point out that reading ability is not just a property of the reader, but that it may vary widely depending on contextual circumstances. Consequently, research designs that emphasise the natural variability of learners across environmental contexts have important pedagogical contributions to make (McEneaney et al., 2006:121).

In large classes, which are commonplace in South Africa, it is not easy to do justice to a 'natural variability model of instruction' that provides each learner with individual attention within a classroom context. However, if, in addition to whole class teaching, teachers work with small groups of children during guided reading who "use similar reading processes and who are able to read similar levels of text" (see 2.11.5), it is possible to provide instruction that is more sensitive to individual differences (Fountas & Pinnell, 1996:2; Clay, 2006:14). Needless to say, this approach conflicts with the traditional lock-step, 'one-size-fits-all'
approach to early reading in which individual differences are not considered (Lyons, 2003:188).

Cazden (1992b:42-49), Mitchell-Pierce (1994:29-34) and Foley and Thompson (2003:64-86) situate reading within complex social and cognitive contexts (see 2.7.3). They recognise the influential role classroom contexts play in EAL children's opportunities to learn, especially for children who enter school with weak preparation in English. Despite limited experiences, Clay found that children who did not grow up in literate environments can acquire literacy "very quickly if their brains are adept at taking on new experiences" (Clay, 2005:6). In this Clay endorses Vygotsky's (1978) socio-cultural perspective, namely that cognitive development is in large measure a result of social interaction with others and the environment and that learning is a constructive process, rather than a maturation process (Piaget in Slavin, 1994:32-34). Adams (1990:6-10) and Lyons (2003:30-31) point out that learners are only likely to invest attention and mental effort in reading activities that engage their interests and promote a sense of progress. Lyons (2003:1) contends that traditional skills-based literacy curricula have failed to stimulate novelty detection and interest in learning to read and that competitive, test-driven systems have promoted the progress of some learners at the expense of others – with the result that many learners have withdrawn from reading. This has wide-ranging implications for the classroom interactions, the view of reading taken, and the kind and quantity of literacy involved in making for a text-rich environment. While I do not agree with Adams' emphasis on phonics instruction, I support her forceful conclusion that "immersion – right from the start – in meaningful, connected text is of vital importance" in engaging learners in reading (Adams, 1990:10).

Finally, the 'natural variability of readers' in each class presupposes that each classroom should have a wide variety of different books that can accommodate the weakest to the strongest readers. Traditional phonics programmes and basal reading programmes use contrived language which ignores children's oral language patterns and distorts expectations that children may have developed from listening to stories. Such programmes also disregard research emphasising the value of providing beginning readers with many different books and reading experiences.
1.5 JUSTIFICATION FOR THE RESEARCH

It is clear from the discussion thus far that there is a need for research that investigates alternatives to the kinds of early literacy instruction provided in many South African schools. Slavin (1994: xviii) contends that helping children read depends on the application of well-understood theoretical principles in practice. As will be explained in Chapter 2 (see 2.4), the research provided me with an opportunity to implement a specific theoretical knowledge base (as an alternative to traditional, skills-based literacy learning theories) to assist teachers in helping primary phase EAL learners acquire literacy. It enabled me to integrate two professional identities, namely that of practitioner and researcher in the service of community development (De Vos, 2005a:365). The process of being engaged in research helped me discover my 'research niche' and gave me greater confidence to pursue theoretical accountable alternatives to traditional literacy instruction for learners from disadvantaged communities (see 5.6).

1.6 RESEARCH DESIGN AND METHODOLOGY

Chapter 3 provides a detailed description of the research design and intervention. In summary, the study may best be described as an observational case study that sought to utilise a specific theoretical knowledge base in the interest of improving the reading proficiencies of individual learners. The research took the form of a literacy intervention that focused on reading teacher education and development. My research addresses the following questions:

1. What progress did learners make on the observation survey tasks from baseline assessment to project exit?

   1.1. What evidence was there of 'change over time' in the literacy processing behaviours of individual learners on these tasks?

   1.2. What patterns of change in the literacy processing behaviours could be articulated for groups of learners?

2. What changes took place in instructional practices from baseline assessment to exit?

   2.1. Did observations indicate a change in teachers' instructional approaches that conformed to the training and support received?

   2.2. Did the theoretical approach that guided the early literacy intervention hold promise for improving literacy levels of low-socio-economic status (low-SES), EAL learners?
It was conducted in four broad, overlapping phases: a teacher training and development phase; a pre-testing phase in which Clay's (1993) *An Observation Survey Of Early Literacy Achievement* was used to assess selected learners' literacy behaviours; a classroom support and observation phase; and a post-testing and evaluation phase. The key data collection methods were the pre- and post-tests derived from the observation survey, which yielded both quantitative data (test scores) and qualitative data (literacy processing behaviours) and classroom observations of teacher-learner interactions during literacy lessons.

1.7 OUTLINE OF THE OTHER CHAPTERS

Chapter 2 reviews literature on early literacy acquisition. Particular attention is paid to the divisive influence of two main theoretical positions (part-centred versus holistic approaches) in the early literacy research base. It includes a brief consideration of the ideological tensions underlying the polarised positions in literacy education. In the interests of establishing a theoretically accountable approach, the chapter attempts to ascertain more precisely the knowledge and skills that are required to teach reading effectively. It concludes with a conceptualisation of literacy learning as a tentative and flexible 'processing system under construction' which requires contingent teaching that is responsive to learner needs and sensitive to complex variables that influence readers' performances (e.g. culture, teacher, classroom, school, resources) (Hill, 1999:14; Clay, 2001:294; McEneaney *et al.*, 2006:121).

In Chapter 3, I articulate the conceptual and theoretical framework of my study and I discuss the research domain and boundaries, the project implementation and the collection, management, presentation and analysis of data. Chapter 4 reports on the quantitative and qualitative findings of the research and attempts to interpret learner and teacher performances in the light of the research base and questions outlined in Chapter 2. In Chapter 5, I provide a reflective overview of the main research questions and findings and I make recommendations for further research.

1.8 SUMMARY OF THE CHAPTER

In this chapter, I laid the groundwork for the discussion in the following chapters. I argued that the inability of the South African educational system to retain large numbers of children in schools has serious educational, social and economic repercussions. For these reasons, priority should be given to ensuring that primary school children have access to the best literacy teachers, quality materials and excellent instruction.
CHAPTER 2

APPROACHES TO READING INSTRUCTION

2.1 INTRODUCTION

This literature review was undertaken to establish a theoretically accountable framework for the implementation of an emergent to early literacy intervention in three primary schools in the Western Cape (see 1.5). My observations in local classrooms had made me question the heavy emphasis many teachers placed on phonics and sight word approaches as a precursor to reading and I wanted to introduce teachers to alternative practices that were solidly grounded in credible theories of reading and learning.

I conducted my study at a time when, in the interests of democratising education, whole language principles were being introduced through the new outcomes-based literacy curriculum in South African schools (Naicker, 1999:69; Western Cape Education Department, 2000). In contrast, state legislature in America was mandating a return to teaching phonics intensively and systematically, also in the name of democracy (Weaver, 1998e:12; Pearson & Raphael, 2000:5). In the view of Weaver (1998e:15) view, the resurgence of the idea that phonics should be taught first and foremost, making for "a more balanced approach" to reading, was strongly influenced by Adams' (1990) scholarly work on word recognition. Weaver (1998c:xix) points out that Adams' (1990:15) statement that a "child's level of phonemic awareness on entering school is widely held to be the strongest single predictor of the success in learning to read" has been singled out and emphasised in the public and political arenas, and has been widely used to justify the view that phonics should be one of the first items in teachers' instructional programme. According to Weaver (1998c:xviii), Adams' perceived stance has regenerated the phonics versus whole language dichotomy.

2.2 STRUCTURE OF THE REST OF THIS CHAPTER

I begin by demarcating the literature covered and providing a rationale for focusing on the work of a core group of international researchers for my review. After emphasising the consequences of poor literacy instruction in the primary grades, as well as the negative effects of the polarisation between phonics and whole language theorists, I explore the theoretical
underpinnings of these literacy approaches as a means of establishing a sound theoretical rationale for the intervention I wished to undertake. Because effective early literacy instruction is the key to young children's future learning opportunities, I needed to be confident that I was working in a theoretically accountable way. In the last section, I argue for a 'balanced' literacy approach and I outline the implications of this for the instructional framework used in the literacy intervention.

2.3 DEMARCATING THE LITERATURE REVIEWED

Since the "mere speed at which scientific publications are generated" makes the task of reviewing every article or contribution written on a particular topic an "unattainable" goal, I have followed Mouton's (2001:90) recommendation to limit my literature review to literature that was relevant to my research goals.

Since the research was problem-driven (i.e. it sought to assist teachers to help children progress in literacy learning), the review in this chapter focuses mainly on studies covering the period from 1990 to 1999 that are most relevant to the timeframe in which the study was conducted and which determined the nature of the research design and intervention. However, where required, contributions from older studies (i.e. 1955-1989) are cited to show their historical significance. Some recent studies (2000-2007) that support key aspects of my research intervention, as well as my current research interests, have been included to update the study, fine-tune my understanding of the processes of literacy acquisition and emphasise that the problems the research sought to address in 1999 are still highly relevant to South African education.

As mentioned, my discussion gives particular attention to the seminal influences of a core group of international theorists who have pioneered major changes in the domain of early literacy. Their work has shaped my views about initial literacy instruction. I believe that these theorists, who have worked extensively in field-based research projects in various countries, can make a valuable contribution to research and classroom practice in South Africa. It is true that particular social contexts have a strong influence on children's opportunities to learn and that care must be taken not to apply approaches developed overseas uncritically in South African schools. Nevertheless, I believe that practices that have proved successful in different countries should be examined for points of wider intersection. Clay (1991: 2) endorses this view. She explains that her work on literacy processing aims to help,
… not only New Zealand children with the transition into formal education, nor is it directed to those who work mostly with children who are struggling with literacy tasks. From my background in developmental psychology I judge the matters … I am addressing to apply to children learning about literacy in any country or language, or in any programme of instruction.

2.4 ETHICAL AND MORAL RESPONSIBILITY TO IMPROVE LITERACY LEVELS

The South African National Literacy Initiative (SANLI, 2000:1) estimates that there are at least three million people in South Africa who are completely illiterate (i.e. unable to read or write). There are millions more (estimates range from five to eight million) who are functionally illiterate (i.e. unable to function adequately in the modern world due to poor reading and writing skills) (SANLI, 2000:1). High failure and dropout rates in schools therefore continue to perpetuate a cycle of illiteracy, which has far-reaching economic and social consequences.

According to statistics released by WCED (2005:10), drop out and success rates are directly tied to effectiveness (or otherwise) of the literacy instruction received in the first few years of schooling. Adams (1990:374) states that the soundest investment reformers can make in poverty reduction and the future well-being of societies is an earnest commitment to early literacy. Given that schooling is mandatory, Clay (2001:256) contends that if researchers and educators know how to ensure that children will learn to read in the early grades, they "have an ethical and perhaps moral responsibility to see that they do so". Finding ways that will ensure this is however not easy. The theoretical research base on early literacy is "littered with polarised protagonists for whole language, phonics and programmed reading schemes", which complicates the search for best practice (Bickley, 2004:10).

2.5 POLARISING INFLUENCE OF TWO MAIN THEORETICAL POSITIONS

At present, theories of how best to teach initial reading "cluster around two main views" that continue to compete for support (Clay, 1991a:14). One group of theories sees reading as "an exact process of seeing and saying words" and a "competing group of theories sees reading as a questioning or problem-solving process in which we search for meaning" (Clay, 1991a:14). The first group of theories include code-emphasis and other part-centred approaches (i.e. instruction progresses from letter to words to sentences) such as phonics, linguistic, sight word and basal reader approaches (emapenstall, 2000:3; Moats, 2000:4; Behrmann, 2004:1; Bedell, 2005:1-2). The second group of theories include socio-psycholinguistic approaches,
whole language and cognitive processing approaches (Goodman, 1967; Clay, 1991a; Weaver, 1994; Fox, 1999:3-8; 2002). Adams (1990:25) aptly summarises ways in which proponents of code-emphasis and meaning emphasis characterise each others’ views:

To some, the very terms 'whole language' is translated to mean an uninformed and irresponsible effort to finesse necessary instruction with 'touchy-feely' classroom gratification – and worse. The term 'code-emphasis' is translated by others into an unenlightened commitment to unending drill and practice at the expense of the motivation and higher-order dimensions of text that make reading worthwhile – and worse.

In view of the revival of phonics versus whole language dispute in literature, the following sections discuss phonics and whole language respectively in order gain a deeper understanding of the main theoretical underpinnings of each approach and to arrive at a more informed view of the debate (Artley, 1996:10-13; Baumann, Hoffman, Moon & Duffy-Hester, 1998:636-649). Additionally, the discussion offered me the opportunity to reflect on the methodological practices that define my professional identity (Haley, 2004:1).

2.6 PHONICS AS A SYSTEM THAT EMPHASISES LETTER-SOUND CORRESPONDENCES

According to Wren (2002:1) and McInnis (2004:1), the renewed interest in phonics has been accompanied by a lack of understanding of what exactly phonics entails. Wren (2002:1) attributes part of the problem to the number of similar terms that have to do with the sounds of spoken language and that share the same 'phon' root. Owens (1996:462) defines some of these 'phon' terms as follows: phone (actual produced speech sound), phoneme (smallest linguistic unit of sound that can signal a difference in meaning when modified) and phonology (aspect of language concerned with the rules governing the structure, distribution and sequencing of speech-sound patterns). Since there is often confusion in this area (see Sensenbaugh, 1996:1), I shall first outline how phonics differs from two other important concepts frequently referred in literature on emergent reading, namely phonological and phonemic awareness.

Wray (1994:1) distinguishes between three types of phonological awareness, namely the awareness that words consist of syllables, onsets/rimes and phonemes. Thus, in Wray's view, phonological awareness is a general term that refers to "the child's understanding that spoken words are made up of sounds", including sound-related word divisions such as syllables, onsets/rimes and phonemes. Phonemic awareness, on the other hand, is a sub-category of
phonological awareness which refers to the specific understanding that spoken words and syllables are composed of a specific sequence of individual speech sounds that can be manipulated to make different words (Ball & Blachman, 1991:49-52; Owens, 1996:21; Wren, 2002:1). Whereas phonemic awareness is an aural/oral skill that can exist without contact with print, phonics involves linking an awareness of phonemes to a knowledge of written letters or graphemes (Hempenstall, 2000:2; White, 2000:1).

Weaver (1998d:6-7) defines phonics as "the relationship between the spelling systems of a language (the orthographic system) and its sound system (the phonological system). Wren (2002:1) describes it as a method of teaching that emphasises letter-sound relationships and that explicitly teaches the English spelling-sound "rules". Other theorists distinguish between implicit and explicit phonics (Adams, 1990:49; White, 2000:1; McInnis, 2004:1). Explicit phonics is "the provision of systematic instruction on the relation of letter-sounds to words" and implicit phonics is "the philosophy of letting students induce letter-sounds from whole words" (Adams, 1990:49). From these descriptions, it is evident that theorists view phonics from different perspectives, e.g. a linguistic perspective (the relationship between graphemes and phonemes in an alphabetic script), a methodological perspective (phonics as a method of reading instruction) and a belief-system, i.e. a philosophy of learning.

Adams (1990:52-53) and McGuinness (1997:239) point out that, apart from the central tenet that a working knowledge of letter-to-sound correspondences is important, phonics represents not just one, but a multitude of theories often based on incompatible assumptions and principles. Adams (1990:52) notes that phonics programmes differ "in starting point as well as stopping point … They differ in the methods, materials, procedures and progression for everything taught in between". After studying the host of theories surrounding phonics, Adams (1990:53) concludes that "intensive, explicit phonic instruction is a valuable component of beginning reading programs". She acknowledges that this statement neither solves the "global issue" of how much phonics is the right amount nor answers the question of what constitutes the necessary sequences for phonics learning. As a result, there is no operational definition that can be extracted to determine a single, agreed upon, best way to teach phonics (Adams, 1990:51; Clay, 2001:14). Given that there is no straightforward definition of phonics, the next section explores theories underpinning phonics in more detail.
2.6.1 Theory of reading underpinning a phonics approach

Although Weaver (1998d:5) cautions that it is incorrect to characterise phonics as an approach to reading, because it is "less than a complete approach to reading", phonics is often used as a synonym for a method of teaching children to read an alphabetic script (Wren, 2002:1). Accordingly, Iversen (1997:10) defines phonics as "a method of teaching reading, especially beginning reading that stresses the systematic acquisition of sound-symbol relationships". Likewise, Adams (1990:50) states that phonics refers to "a system of teaching reading that builds on the alphabetic principle, that is, a system of which a central component is the teaching of correspondences between letters or groups of letters and their pronunciations". Central to phonics is the question of how best to teach children to read an alphabetic script.

An uncomplicated alphabetic script would have one written symbol (grapheme) for each phoneme and letter-sound correspondences would be an easy skill to acquire (e.g. by sounding out words). Even though English is fundamentally an alphabetic system, it is not strictly phonetic in that the match between phonemes and graphemes are often not one-to-one, i.e. there are multi-alternatives in representing phonemes in print and vice versa, which makes 'sounding out' an unreliable reading strategy and learning to read in English difficult for beginners (Adams, 1990:50; Weaver, 1994:186). Additionally, the complex syllabic structure of the English language makes the English alphabet code one of the most complex writing systems in the world to master (Adams, 1990:18-20; McGuinness, 1997:55).

The complexity of the orthographic structure of English has led to contradictory views on whether letter-sound correspondences should be directly taught or not. Some conflicting theoretical views related to the development of letter-sound awareness are discussed next under the headings phonics-first approaches, immersion and intrinsic approaches, whole word approaches and non-traditional or alternative approaches.

2.6.1.1 Phonics-first approaches

Strict adherents of 'phonics-first' instruction argue that, because the orthographic system is an unnatural, manmade code, it has to be taught systematically and explicitly as a prerequisite to reading. Children cannot be expected to decipher such a complex code on their own through immersion in reading and writing experiences (McGuinness, 1997:55; Moats, 2000:3). Strict phonic advocates endorse an "item and skills-based theory", which emphasises letter identities, spelling patterns and word recognition skills (Clay, 2001:235). They assume that
reading is a matter of learning correspondences between letters and groups of letters and their pronunciations (Weaver, 1994; Clay, 2001; Moats, 2000; McInnis, 2004). Because of their assumptions, phonics-first-and-foremost theorists insist that direct instruction in phonemic awareness ought to be one of the earliest items in an instructional programme (Adams, 1990:3; McInnis, 2004:1). To support their views, these theorists cite a body of research that shows a strong positive correlation between phonics knowledge as a precursor to reading and reading achievement (Adams, 1990; McGuinness, 1997; Moats, 2000).

2.6.1.2 Immersion and intrinsic phonics approaches

By contrast, critics of the phonics-first approach contend that standardised spelling is an arbitrary, socially constructed convention that evolved over time (Moustafa, 1998:146). Given the arbitrary nature of standardised English spelling, they argue that it is futile to search for reliable letter-sound correspondences on the mistaken assumption that phonics knowledge is amenable direct instruction (Goodman; 1967; Cambourne, 1988; Moustafa, 1998). Strict advocates of the whole language approach endorse the view that the phonics system can be inferred through immersion in print-rich environments (Weaver, 1994:197). Moderate whole language theorists employ intrinsic phonics methods, which develop phonics knowledge less rigorously and as a sideline in the course of teaching reading and writing (Adams, 1990:38; Weaver, 1994:197). Theorists who support immersion or intrinsic approaches point out that, since correlation does not establish cause and effect, the body of correlational research that is touted in support of phonics-first can just as legitimately be used to show that phonics knowledge develops as a consequence of learning to read (Yopp, 1992; Wray, 1994; Ayres, 1998; Krashen, 1998b). Unlike researchers whose studies focus primarily on a single concept such as letter-sound correspondences, advocates of intrinsic phonics support their views with naturalistic research in print-rich environments, which indicates that phonics is best learned in the holistic context of reading and writing (Strickland & Cullinan, 1990; Moustafa, 1998; Weaver, 1998c). Adams (1990:143), Ridge (1996:137) and Gunning (1996:9) endorse the view that children extend their reading vocabularies from words that reappear often in a variety of different contexts and build a knowledge of language through extensive reading.

2.6.1.3 Whole word approaches

Whereas Adams (1990:38) draws a contrast between whole word approaches and phonics, Weaver (1994:53) states that whole word approaches have become increasingly intertwined with phonics approaches. She categorises both whole word and phonics as "part-centred"
approaches, because, in practice, both are more concerned with word identification than with meaning (Weaver, 1994:54). McInnis (2004:1) highlights the prevalence of whole word approaches in reading education by noting that "the great majority of training programmes over the last fifteen to twenty years have only stressed whole words approaches". The whole word hypothesis derives from the observation that a salient characteristic of skilful reading is that readers act as if they recognise words holistically. This hypothesis has led to the notion that it might profit children to attend to the overall shape of words – as opposed to internal word units (Adams, 1990:96-97). An alleged additional benefit of the whole word method derives from the assumption that learning to recognise whole words is easier than learning letter-phoneme correspondences, because it bypasses the problem that the English language is phonetically inconsistent (Weaver, 1994:54; Flanagan, 1995:30). Another rationale for teaching children to recognise specific words on sight seems to derive from the fact that approximately one hundred words make up about fifty per cent of the text in most publications and, by virtue of their frequent occurrence in print, it is deemed important that children learn to read them holistically. Thus, teaching high frequency words through flash-card drills has become common practice in many phonics instructional programmes (Weaver, 1994:54; Flanagan, 1995:30). The belief that word knowledge should be committed to memory through drills derives from information processing theory, which has dominated research on human memory for decades (Slavin, 1994:186). One of the main tenets of the theory is that the memory system is composed of short-term and long-term storage devices, and that information can be transferred from short-term memory to long-term memory through the process of rehearsal (e.g. flash-card drills) (Slavin, 1994:191).

2.6.1.4 Non-traditional or alternative approaches

A number of theorists challenge traditional assumptions about how children acquire an awareness of grapheme-phoneme correspondences that enables them to read English scripts. They offer theoretically grounded alternatives to traditional phonics instruction, such as onset-rime analogy (Moustafa, 1998), visual familiarity with individual letterforms and legal letter strings (Adams, 1990), sound-to-letter links, which can be developed through writing (Clay, 1991a) and parallel distributed processing of continuous texts (Rumelhart & McClelland, 1986). Each of these propositions will be discussed next.

Adams (1990:54) and Moustafa (1998:148-149) question the common assumption that the ability to 'sound words out' is the basis of reading acquisition. They found that, even with direct instruction, children have difficulty segmenting spoken words into phonemes. This
difficulty stems from two sources. First, at the acoustic level, phonemes are encoded in larger, syllabic size units so that they do not have clear, physically definable boundaries and, second, they are highly influenced by phonological context (Adams, 1990:246-247; Yopp, 1992:696; Owens, 1996:21). Based on their research findings, they conclude that the abstract nature of letter-sound correspondences makes traditional phonics instruction a developmentally inappropriate starting point for teaching reading.

To overcome some of the difficulty of segmenting words into phonemes, Moustafa (1998:135) presents onset-rime analogy as a "successor theory" to letter-phoneme instruction. Based on her research, she argues that children who are just beginning to read prefer to use an analogy strategy (the use of familiar words to work out unfamiliar words rather than a phonemic strategy to figure out unknown words). Moreover, in contrast to the phonemic irregularity of the alphabet, rimes are more stable, i.e. there are thirty-seven dependable rimes (i.e. the rime in different words has the same rhyme, e.g. back, track). From these thirty-seven stable rimes, children can make more than five hundred words (Iversen, 1997:47). Moustafa (1998:135) concludes that "whole-to-parts" phonics instruction is "a theoretically grounded alternative to traditional parts-to-whole phonics instruction".

Adams (1990:54), on the other hand, puts forward the possibility that it is the reader's visual familiarity with each individual letter pattern as well as with legal letter strings that is essential to fluent reading, as opposed to the ability to "sound words out". Her argument is based on the principle that it is critically important for children to instantly recognise spelling patterns that are smaller than words, because different words share the same 'smaller-than-word' units. Children's ability to read long words depends on the skill with which they can parse words into recognisable parts (e.g. syllables; onsets and rimes). She believes that poor readers' difficulties with long words are due most of all to a poorly developed visual knowledge of individual letters and spelling patterns (Adams, 1990:128). In her view, it is vitally important that phonics activities should be directed towards children's visual abilities to recognise each letter form as well as likely letter sequences (Adams, 1990:54-56).

The whole word approach is another traditional approach that has drawn criticism on the grounds that it relies far too heavily on visual memory for individual words that are difficult to remember because they are unrelated and decontextualised. Goodman (1965) demonstrates that contextually embedded learning makes reading and remembering easier. He shows that first graders are able to read words within the context of a story better than words in lists, because context gives children access to other word-solving information, such as syntactic...
and semantic cues, and to words that were connected in meaningful patterns of discourse. Even though Adams (1990:99-101) downplays the role of contextual predictability in word recognition, Goodman's finding that words that are well organised and connected in mental schemata will be easier to retain and recall is supported by schema theory (Slavin, 1994:214-216).

Clay (2005) and Adams (1990) are also very critical of the effectiveness of whole word approaches to beginning reading instruction. Clay found that word learning is highly individual and personal, and that children are therefore more likely to learn words that have personal meaning for them, rather than words imposed on them from the teachers' and publishers' stores of knowledge. Adams (1990:340-346) makes the important point that exposure to whole words does not develop children's knowledge of individual letterforms or their orthographic knowledge of smaller-than-word units. As noted earlier, she believes that memory for visual patterns depends on the interrelated parts of words and that growth in orthographic competence depends on visual recognition and discrimination of the individual letters and likely letter strings.

In her addition to her severe criticism of whole word approaches, Clay (1993:65) queries the conventional phonics practice of "tediously teaching one letter-sound link after another" on the grounds that it slows down progress. Likewise, McCarrier, Pinnell and Fountas (1996:12-13) question the assumption that children should learn letter-to-sound correspondences. They believe that it is more profitable to teach children to control sound-to-letter links. These theorists state that children already know how to use most of the sounds of their language and they can utilise this knowledge to help them relate spoken languages to messages in print. They stress the reciprocity of reading and writing, and offer the view that knowledge of the phonological and graphemic identities of letters and letter clusters are developed most effectively through authentic writing activities. They endorse inventive spelling that encourages children to listen to and record sounds in their own speech during writing activities. The act of writing forces a child to direct conscious attention to individual letters in sequence, thereby turning these into objects of cognition (Elkonin, 1971 in Iversen, 1997: 52-54; Clay, 2005).

One of the biggest challenges to conventional thinking about the mind as a storage device for memorising isolated, decontextualised letter identities and words comes from neuro- and developmental psychologists, who have presented new theoretical concepts and images about the way the human mind processes and recalls information. Rumelhart and McClelland
(1986) propose that the mind is a parallel processor in which different regions and components of the brain interact simultaneously. They claim that the brain uses a variety of knowledge sources that are decision-making devices, not storage devices. Based on the task at hand, the brain momentarily assembles neural communication networks (i.e. brain structures or working systems) that interact to facilitate problem solving and decision taking. These working systems are dynamic and flexible, and can be reorganised and changed according to the learner's purposes (Rumelhart & McClelland, 1986). The speed and power of the neural networks in reading can be improved by exposure to print-rich environments, coupled with instruction that increases the integration and inter-facilitation of the neural systems and that "engages the entire physiology of the brain at once" (Lyons, 2003:171). Research in neuroscience indicates that children's home and school experiences produce "actual changes in brain function and anatomy" (Lyons, 2003:170). An important point that can be gained from neuro-psychology is that item-focused instruction in impoverished learning environments is unlikely to result in learning that involves the integration and growth of the brain as a whole working system (Dryden & De Vos, 1994; Lyons, 2003). Lastly, Clay's (2005:2) argument in favour of establishing neural networks in reading exposes the inappropriateness of a phonics-first method of teaching reading:

Most written language occurs as continuous text, so the focal task for the learner is to problem-solve the message(s) of continuous text … teaching a child 100 words, or 26 letters, in isolation, before you allow him to read a text does not seem like the appropriate learning context for laying down the foundational neural networks.

2.6.2 Theory of learning underpinning a phonics approach

The transmission model of learning underpinning traditional phonics instruction was based largely on general theories of learning that derive from behavioural psychology (Weaver, 1994:365; Hornsby, 2000:8). According to Slavin (1994:153), behaviourism evolved from the work of Pavlov (classical conditioning, i.e. associating a neutral stimulus with an unconditioned stimulus to evoke a conditioned response), Thorndike (the law of effect, i.e. the consequences of one's present behaviour play a crucial role in determining one's future behaviour) and Skinner (operant conditioning, i.e. using consequences to control the occurrence of behaviour).

Skinner's behaviourist principles focus on learning as a process of habit formation. Effective learning is critically dependent on the establishment of good habits and the prevention of bad
habits. Habit formation depends on three crucial learning principles: a stimulus, which elicits behaviour; a response triggered by the stimulus; and reinforcement of responses (Ellis, 1985:20; Slavin, 1994:150; Richards & Rodgers, 2001:50). From these general learning principles, language acquisition is regarded as a set of associations between meanings and words, which are learned through conditioned association between stimulus-response bonds (Ellis, 1985:293). Likewise, learning to read is viewed as a set of associations between words and phonemes, utterances and responses (Owens, 1996:31). Thus, behaviourist models of learning to read are characterised by drilling skills, memorising facts and habit formation (Hornsby, 2000:8).

A behaviourist view of learning is consistent with a structural view of language as a system of hierarchical elements in which the aim of learning is the mastery of the elements of this system, e.g. phonological units (such as phonemes), lexical items and grammatical units (Owens, 1996:17-18; Hornsby, 2000:9; Richards & Rodgers, 2001:17). According to Cambourne (1988:206), this has resulted in "fragmentationist theory" of learning in which one of these linguistic systems is "pulled free from the complex web of the other linguistic systems" and taught as a system in its own right. Consequently, in the traditional phonics lesson, the grapho-phonetic system is divorced from the complex network of other language systems that work interactively to enable meaningful reading (Rumelhart & McClelland, 1986; Cambourne, 1988; Clay, 2005).

The behaviourists see motivation to read simply as a product of reinforcement history that can be controlled through external incentives or disincentives. Others theorists like Slavin (1994:349), Pressley (1998:238) and Lyons (2003:76) assert that behaviourist notions of motivation can undermine effort and emotional commitment, promote feelings of failure and cause children to disengage from critically important learning tasks such as reading and writing. Ladd (1996), Elmore, Ablemann and Fuhrman (1996) and Lyons (2003) point out that the externally motivated, competitive nature of schooling guarantees failure relative to other learners, with potentially devastating impact on the motivation of learners who attribute their failure to lack of ability.

Recent socio-cognitive views place greater value on intrinsic motivators, such as the impact of stimulating environments on the child's natural inclination to learn. Slavin's (1994:369) review of research "on the effects of extrinsic rewards on intrinsic motivation does counsel caution in the use of material rewards for intrinsically interesting tasks". He states that classroom instruction should seek to enhance intrinsic motivation as much as possible.
Teachers should try to develop learning environments that convince children that learning rather than grades is the purpose of academic work (Lyons, 2003:79-82). This means that reading teachers should create stimulating, print-rich environments, emphasise the interest value of materials and de-emphasise grades and other external rewards (Lyons, 2003:79-82). In particular, the use of static ability groupings, competitive grading and incentive systems should be avoided (Lyons, 2003:79-82; Fountas & Pinnell, 1996:97). Lyons (2003:79-81) and Slavin (1994:361-363) recommend that teachers should instead focus on personal effort and the progress individual learners are making in exceeding their own past records. In reading, individual progress can be recorded and monitored by the use of non-competitive assessment measures, such as running records (see 3.7.1). Static ability-based reading groups can be replaced by dynamic grouping procedures, and the intrinsic motivation to learn can be enhanced by the use of interesting and appealing books and variety of interesting presentation modes (Davidson, 1991a; Calkins, 2001; Clay, 2005).

2.6.3 Internal and social contexts for learning

In describing contexts for literacy learning, Cazden (1992b:42) distinguishes between internal literacy contexts (i.e. contexts-in-the-mind) and external literacy contexts (i.e. social contexts), and highlights the influence the interaction between these two contexts has on learners' conceptualisation of literacy and their motivation for learning. Likewise, Weaver (1994:1) and Bloch (2000:11) emphasise that a teacher's definition of reading determines her instructional approach and her choice of reading materials, which, in turn, profoundly affect her learners' understanding of the nature and purposes of reading.

Cazden (1992b:49) and Weaver (1994:1) describe the most usual social context for literacy in conventional classrooms as the formal reading lesson (i.e. pre-teaching phonics and words from basal readers, round robin reading in small groups) and the kinds of teacher-learner interactions that go hand-in-hand with this. As a result of these kinds of instructional approaches, children who are most in need of experiences that provide them with holistic, meaningful "contexts-in-the-mind" for literacy learning conceptualise reading as a matter of seeing and saying words (Cazden, 1992f:10; Weaver, 1994:1).

The social contexts for literacy learning described by Cazden (1992b:49) and Weaver (1994:1) are similar to the kinds of literacy contexts described by some researchers in South Africa (Rensburg, 1999:2; READ, 1999:4; Plüddemann, Mati & Mbude, 2000:5; Bloch, 2000:10-14). Bloch (2006:9, 12) sees phonics as "the hegemonic model in Africa today" and
suggests that the overemphasis on phonics may be due to the "misconception that literacy learning must be formal learning". Flanagan (1995:14-15), Nathanson (2000:9) and Abel (2000:15) describe formal reading instruction in many schools in the Helderberg basin as follows: teacher controlled, behaviourist and phonics-based. In a typical reading lesson, children are first taught pre-reading skills such as the alphabet and letter-sound relationships. New words are introduced through flashcards before children are allowed to read them in their basal readers. Children take turns in reading aloud to their teacher, who assesses their reading proficiency based on their ability to read words accurately and fluently with the correct pronunciation. Reading lessons are usually followed by written exercises on worksheets, which are designed to consolidate word recognition skills. Given the widespread acceptance of phonics instruction, which consists of letter-sound tuition, flashcard drills and worksheet activities, few teachers seem to be aware that phonics programmes represent not just one but a multitude of theories often based on incompatible assumptions and principles (see 2.6).

Hart (2000:3) and Bloch (2006:9) argue that the print environments in local phonics-driven classrooms send powerful messages to learners about the nature of literacy, their relative status as learners and the status of the languages they speak. Writing on the classroom walls (in the form of teacher's messages and published posters) reinforces the power-control relationships that dictate classroom life and gives prominence to the particular authoritarian paradigm within which literacy instruction is located (see 4.4).

Dahl and Freppon's (1998:273) research indicates that phonics-based, teacher-controlled environments have a demotivating effect on learners. Significantly, they draw the conclusion that many children in the phonics classrooms do not develop a sense of self as reader/writer and are more apt to disengage from literacy instruction and embark on patterns of turning away from school than children in whole language classrooms (Dahl & Freppon, 1998:272). They hypothesise that, in the long run, it may be the personal engagement in literacy or lack thereof that makes the critical difference for individual learners. The long-term prognosis of this for children who disengage from literacy in primary school was described earlier in 2.4.

2.7 WHOLE LANGUAGE AS AN ON-GOING PROCESS

Whole language is seen by some as a "comprehensive vision" of reading, teaching and learning that builds a strong foundation in literacy and provides language rich alternatives to phonics (Calkins, 2001:6). Weaver (1994:332) argues that whole language is best understood
as a comprehensive, continually evolving philosophy, not only about reading development, but also about learning and teaching. Because whole language is a continually evolving belief system, it tends to defy exact definition (Weaver, 1994:332; Moats, 2000:6). However, there is general agreement that the essence of whole language represents a shift away from authoritarian, transmission and behaviourist models of learning, typically associated with phonics instruction, to transactional models, in which reading is viewed as transaction between a reader and a text within a particular cultural and social setting (Weaver, 1994; 1998; Flanagan, 1995; Fountas & Pinnell, 1996; Hornsby, 2000; Bloch, 2006). Given that whole language is rooted in humanist approaches and constructivist learning theories, it accords with the theory which underpins the new outcomes-based curriculum in South Africa. As such, it offers a practical framework for turning "new thinking" into good practice (Naicker, 1999:15) (see 2.11).

2.7.1 Theory of reading underpinning a whole language approach

Although whole language developed from the field of socio-psycholinguistic research, Weaver (1994:58) distinguishes between socio-psycholinguistic approaches and whole language on the grounds that whole language is more than an approach to reading instruction, since it has developed into a "comprehensive philosophy of education" which draws upon research that encompasses more than the development of literacy. Nevertheless, both whole language and socio-psycholinguistic approaches can be contrasted to part-centred approaches in the emphasis they place on the individual's efforts to construct meaning through the use of the individual's "unique constellation of prior knowledge, experience, background and social context" (Weaver, 1994:57).

Whole language attempts to integrate the linguistic, psychological and social dimensions of reading and learning (Cazden, 1992f; Weaver, 1994; Goodman & Goodman, 1998; Hornsby, 2000). From a linguistic point of view, reading is seen as an interactive set of parallel processes in which the reader has to attend simultaneously to different levels of text (e.g. syntactic, semantic and orthographic levels) (Rumelhart & McClelland, 1986; Cazden, 1992b; Clay, 2001). From a socio-psychological perspective, whole language theorists place high value on cultural diversity and 'multiple literacies', and on the social and cultural settings in which literacy events take place (Goodman, 1967; Smith, 1978; Van Allen, 1982; Cazden, 1992b:42). Within this context, emergent literacy is regarded as a developmental process in which children construct their own literacy in personally useful and meaningful ways, much in the same naturalistic way children learn to speak (Bloch, 2006:8). It is therefore evident
that whole language theory stresses personal investment in constructing meaning, because the reader has to bring meaning to the text in order to gain meaning from it. Reflecting this, Weaver (1994:42) summarises the whole language view of reading as follows: "Reading is a transaction between the mind (schemas and personal contexts) of the reader and the language of the text, in a particular situational and social context".

Whole language theorists maintain that reading depends on continuous, coherent texts; it cannot be developed by attending to letters or words in isolation (Cambourne, 1988; Clay, 1991a; 2005; Weaver, 1994; 1998a; Hornsby, 2000). Therefore, a theory of text reading cannot be developed from experiments with single letters or words (Clay, 1991a:262). It is important to bear this in mind when interpreting research results, because different reading theories lead to different elicitation conditions and different interpretations of the same research data (Adams, 1990; Weaver, 1998b; Moats, 2000; Clay, 2001).

Because whole language theorists are concerned with literate behaviours, they emphasise longer-term outcomes, whereas code-emphasis theorists focus on short-term gains, namely the mastery of skills (Weaver, 1994; Dahl & Freppon, 1998). Lyons (2003:1) contends that conventional, skills-based instruction operates on "the theory that cognitive and academic achievement are synonymous and distinct from emotion. As mentioned in 2.6.3, Dahl and Freppon's (1998:272) study illustrates what can happen when the emotional side of literacy learning is ignored. They found that learners on a diet of phonics do not get involved personally in reading and writing, and that instruction focused on literacy skills (i.e. phonics) tends to produce learners who do not "weave together the cloth of literacy, nor move beyond their role as answer makers". Neither do they see reading and writing "as going beyond something for school". In contrast to this, Dahl and Freppon's (1998:272) findings indicate that children in whole language classrooms learn encoding and decoding skills in the process of becoming "engaged in literate behaviours". Bloch's (2000:20) summary of the debates on approaches to literacy instruction echoes these sentiments:

"The debate which has raged for many years about approaches towards literacy have included arguments over whether children benefit from learning to read using simplified, graded readers or real storybooks … Central to this is recognising … that prospective readers and writers must grasp that literacy is something useful and enjoyable for their lives."
2.7.2 Theory of learning underpinning a whole language approach

Whole language proponents see no merit in behaviourism since they are concerned with higher-order learning (Weaver, 1994:334; Onukaogu, 1999:5; Hornsby, 2000:9). Instead, they espouse a constructivist model that acknowledges the complexities involved in language learning, respects each individual's own personal store of literacy learning, provides open-ended opportunities for individual learners to expand any aspect of their existing knowledge and supports this development in natural settings that allow them to transact with others and with books without fear of being penalised (Onukaogu, 1999:5; Clay, 2001:13; Lyons, 2003:117).

Central to constructivist approaches is the idea that learners must take ownership of their own learning by discovering and transforming complex information for themselves (Palinscar & Brown, 1984:118; Slavin, 1994:225; Dorn & Soffos, 2001b:88; Miller, 2002:54). This means that instruction should be directed at helping learners develop autonomy by teaching them to think for themselves (Chamot & O'Malley, 1996:262-263). Rather than transmitting knowledge to learners, teacher work collaboratively with learners to help them construct meaning within their shared context (Weaver, 1994:65-68; Hornsby, 2000:9; Richards & Rodgers, 2001:109). Teachers should therefore encourage learners to become life-long, independent learners by gradually releasing responsibility for doing tasks to the learners, and by helping them construct effective cognitive structures by strategic processing of texts (Hornsby, 2000:22; Bickley, 2004:18-19).

Teachers can also help readers understand that reading is not built up from isolated items of knowledge. It is rather a holistic process in which readers need to interact with the text (e.g. through questioning, clarifying, predicting, restructuring) and to use strategies to problem-solve difficulties and to derive meaning (e.g. activate prior knowledge and incorporate new knowledge in existing mental schemas, monitor and restructure information) (Palincsar & Brown, 1984; Wray & Lewis, 1995; Miller, 2002).

2.7.3 Internal and social contexts for learning

In her discussion of "contexts-in-the-mind", Cazden (1992b:42) foregrounds the importance of conceptualising reading as a higher order skill. Even when the reader's focal attention shifts momentarily to the technical aspects of texts (e.g. solving an unknown word), it is the mental schema that the learner has of the entire reading act that provides "not only the motivation, but also the source of integration of all the separate operations … into a complex whole"
Since learners who have had little prior experience with print may not have the contexts-in-the-mind for understanding meaningful text wholes, they need to meet language in its social context. They need opportunities to develop a sense of themselves as readers and writers, to make personal connections with print and to understand the purposes and joys of reading (Dahl & Freppon, 1998:272). For this reason, whole language advocates stress the importance of fostering both cognitive and affective aspects of human learning (Calkins, 2001:14; Richards & Rodgers, 2001:117; Miller, 2002:49; Lyons; 2003:1-3).

These affective and cognitive outcomes can be achieved by applying the following principles derived from whole language approaches and cognitive theories of learning: expanding cognitive networks through instruction that emphasises strategies rather than items of knowledge; engaging and involving learners through approaches such as the language experience and shared reading (see 2.11); building a 'sense of self' through 'ownership' of learning tasks; and establishing a community of learners by emphasising co-operation rather than competition (Weaver, 1994:331-363; Hornsby, 2000:8-17).

Whole language educators aim at creating collaborative classroom communities in which children have space to develop their identities as readers and writers (Fountas & Pinnell, 1996:1; Calkins, 2001:18). Calkins (2001:18) refers to this as the process of building "richly literate lives". Consequently, literacy activities in classroom are centred on the teaching of reading and writing. Speaking and listening skills are integrated in the conversations about reading and writing that take place on a daily basis (Weaver, 1994; Hornsby, 2000; Calkins, 2001).

Within these social classroom communities, teachers facilitate literacy learning by demonstrating, explaining, observing and encouraging. One of the key constructs of whole language instruction is the notion of the learner as an apprentice (Dorn, French & Jones, 1998:16; Calkins, 2001:6; Lyons, 2003:152). In an apprenticeship approach, the teacher and learner work together in meaningful interaction around a shared literacy event (Dorn et al., 1998:3). The teacher takes on a "scaffolding" role in demonstrating the qualities of good reading to help learners grow towards those qualities (Clay & Cazden, 1992:131; Fountas & Pinnell, 1996:18; Calkins, 2001:11). The concept 'scaffolding', which is derived from Vygotsky's theories, is a 'construction-site' metaphor, which means "providing a child with a great deal of support during the early stages of learning and then diminishing support and having the child take on increasing responsibility as soon as he or she is able" (Slavin,
Another important contribution made by Vygotsky's theories, which is relevant in whole language classrooms, is his emphasis on the social nature of learning – learners develop frames for thinking alone through interacting with others. Shared "conversations-in-the-air" become internalised "conversations-in-the-mind" (Calkins, 2006:19). Calkins (2006:19) explains that reading and discussing literature in the social world of the classroom is important for personal and interpersonal as well as intellectual reasons. By engaging in 'reading conversations', learners learn to engage in 'accountable discourse', i.e. they learn to learn from one another by listening to, connecting with and responding to one another and using what others say in their own discourse (Cazden, 1992f:10; Calkins, 2006:15).

While acknowledging the overall value of whole language activities, Clay (2001:220-221) and Calkins (2001:42) caution that whole language classrooms are complex environments in which children can become confused if teachers are not consistent and if care is not taken to monitor each child's progress. In this regard, Calkins (2001:42) warns that whole language teachers can become so caught up in planning, innovating and scheduling various curriculum components that they forget the value of being consistent. Time in such classrooms can become "a kaleidoscope" of activities: readers' and writers' workshops, response groups, role play, reading projects, author and illustrator studies, word work and art work. In such "kaleidoscopic environments in which everything is always changing and complex", children do not know what to expect from one lesson to the next (Calkins, 2001:42). They fail to develop "their own rhythms and strategies" because they are too controlled by the teacher's. In the interests of consistency, Fountas and Pinnell (1996:41-42) and Calkins (2001:42) underscore the importance of keeping the instructional framework predictable and consistent to allow for the unpredictable and complex interactions around the work at hand.

2.7.4 English Additional Language learners in whole language

Whole language was created by educators who were concerned with the "destructive fragmentation" inherent in skills-based, phonics approaches to teaching reading and writing (Cazden, 1992f:3). Although it was originally developed to help young children learn to read and write, it has extended to intermediate and secondary levels and to the teaching of English as an additional language (Freeman & Freeman, 1994:558; Fountas & Pinnell, 1996:196; Richards & Rodgers, 2001:108). Because reading plays a key role in additional language
instruction in whole language classrooms, the next section discusses some of the controversies surrounding reading instruction for young additional language learners (EAL).

When considering reading instruction for young additional language learners, research appears to be fraught with limited data and much contradictory advice, especially when it involves the timing of additional-language reading instruction (Owens, 1996:424-425; Linquanti, 1999:1; Lenters, 2005:328). Lenters's (2005:335) review of research highlights three major stances in EAL instructional approaches, namely teach reading in the first language before attempting EAL reading; teach first-language reading concurrently with second-language reading; or teach only EAL reading. Lenters (2005:329) and Chamot and O'Malley (1996:261) support linguistic interdependence theory (i.e. children transfer what they know about reading in one language to reading in another language). Lenters (2005:329) emphasises, however, that research evidence does not imply that there is a critical order in which bilingual learners must learn to read either their first or additional language. On the contrary, transfer of literacy skills between two languages can proceed in two directions, i.e. from first to additional language or vice versa (Clay, 1991a:2; Verhoeven, 1994:381). However, Lenters (2005:330) cautions that the success of young EAL readers will only continue if they are also enabled to develop a level of reading proficiency in their first language that allows interdependence between the two languages throughout the primary school years. Thus, provided that instructional programmes promote proficiency in both languages, the language of initial reading instruction need not be the child's native language (Linquanti, 1999:1; Lenters, 2005:330).

There is some evidence to suggest that important cognitive and affective gains can be achieved through fostering bilingualism (Owens, 1996:424-425; Lenters, 2005:328). As mentioned above, the key to maintaining these gains seems to be the simultaneous development of both the first and additional language (Lenters, 2005:330). For this reason, whole language educators embrace interdependence theory (Weaver, 1994; Freeman & Freeman, 1994; Fountas & Pinnell, 1996). Fountas and Pinnell (1996:39-40) and Lenters (2005:334) believe that family literacy programmes are a positive way of developing and maintaining both languages. Lenters (2005:334) and Cooter (2006:699) stress that, even in families with limited EAL proficiency, parents can become children's literacy partners, provided parents are taught how to do this (e.g. picture book dialogic reading). Forming strong home-to-school links through literacy programmes is invaluable, because, to quote Lenters (2005:334), such programmes recognise "the parent as the expert in the first language
and the child as the expert in the additional language, simultaneously honoring both languages".

Another area of controversy in EAL research is whether or not additional language reading should be founded upon oral fluency in the target language (Dlugosz, 2000:284-291; Case & Taylor, 2005:130; Lenters, 2005:331). Lenters (2005:331) contends that one cannot read with comprehension in a language one cannot speak. She argues that reading is founded on oral proficiency, which, in turn, is dependent on word knowledge and vocabulary development. Whereas Weaver (1994:227) warns against the sole use of word knowledge as a criterion for effecting reading, researchers such as Clay (1991a) and Lenters (2005:331) recommend that readers should be familiar with a minimum of 95% of the words in a text for comprehension to occur at independent reading level. Although high levels of word knowledge is important for independent reading, there is some research that suggests that the relationship between word learning and reading is reciprocal, i.e. learning to read in a additional language can assist both word knowledge and oral development in an additional language, even at kindergarten level (Dlugosz, 2000:284-291; Lenters, 2005:332).

In whole language classrooms, word knowledge and orality are developed through meaningful interactions and discussions about whole texts, rather than through direct teaching. Consequently, vocabulary acquisition is fostered on the semantic level through extensive reading and multiple exposures to language in a variety of contexts, genres and learning areas (Fountas & Pinnell, 1996; Gunning, 1996; Owens, 1996). The deployment of reading approaches such as the language experience approach and shared and guided reading in second-language literacy instruction not only extends experiences, but also fosters orality, vocabulary development and comprehension (see 2.11-2.12). During shared and guided reading sessions, whole language teachers make extensive use of literature to support additional language learning (Freeman & Freeman, 1994; Weaver, 1994; Fountas & Pinnell, 1996). In their review of the whole language approach, Richards and Rogers (2001:111) emphasise that the use of literature is not just an incidental item in a whole language curriculum, but it forms "part of an overall philosophy of teaching and learning that gives a new meaning and purpose to such [authentic reading] activities".

Elley's (1970-1999) large-scale international studies of additional language learners from disadvantaged communities provide strong support for whole language principles and for a strong focus on reading in additional language learning. He found that "book-based programmes, using good quality illustrated stories have proved themselves in cultures as
diverse as Fiji, Niue, Singapore, Brunei, Sri Lanka, South Africa and low-income schools in New Zealand" (Elley, 1998:2). Elley notes that the "South African story is particularly encouraging" (1998:1). Using a control-group design (i.e. a book-based group versus traditional textbook control group), he obtained research results that indicate that the book-based group improved their reading skills at twice the normal rate (Elley, 1998:2). Qualitative results showed improvement in motivation and attitudes, i.e. children became avid readers, attendance improved and parents were keen to place their children in book-based project schools (Elley, 1998:1). Thus, his studies confirm the positive effects of reading on additional language acquisition. He attributes the success of the 'book-based' reading programmes to three important concepts – the shared book approach, a modified language experience approach and a book flood of high-interest, illustrated storybooks – all of which are widely used approaches in whole language classrooms (Elley, 1998:1; 1999:6-7; Depree & Iversen, 1994:31-44; Flanagan, 1995:37; Calkins, 2006:43-45).

The whole language perspective that reading is a powerful language acquisition resource and that additional language learners do not have to be proficient English speakers to benefit from both reading and writing, presents a significant shift away from conventional additional language teaching practices (Freeman & Freeman, 1994; Weaver, 1994; Goodman & Goodman, 1998; Prehn, 2000). Freeman and Freeman (1994:572) argue that there is a convergence of whole language and additional language teaching as additional language teachers begin to "adopt practices more consistent with whole language" (use authentic language for purposes of social interaction and incorporate more meaningful reading and writing activities in their lessons).

To conclude, what began as a holistic way to teach reading has become a movement for change and has developed into a comprehensive philosophy of not only reading theory and practice, but of language learning and teaching within which reading and writing are significant parts (Cambourne, 1988:1-5; Rigg, 1991:521-522; Weaver, 1994:xv). For these reasons, critics see the whole language approach as an anti-skills, anti-direct teaching approach, which rejects widely-used English Additional Language (EAL) approaches and methodologies (Moats, 2000:1-3; Oxford, 2001:1; Richards & Rodgers, 2001:113). In response to criticism that whole language has ignored the EAL research base, Freeman and Freeman (1994:560) contend that "whole language teachers benefit from an understanding of the theories and supporting research in additional language acquisition, methods of teaching an additional language, and bilingual education". Weaver (1994:xv) takes the position that the
assimilation of ideas from other disciplines, including additional language acquisition (EAL), is consistent with the principle that whole language is an evolving process that is open to new insights and that whole language approaches to literacy continue to be shaped by other disciplines, e.g. linguistics, psychology, socio-linguistics and critical theory, to name a few. As scholars from many different fields of inquiry join whole language researchers in studying the reading process, the convergence of ideas inevitably leads to changing conceptions of both reading and language acquisition. Pearson and Stephens (1998:79) refer to this as an "interdisciplinary quest" from which the field of reading, and by implication language acquisition, would never return. They sum up the position regarding reading instruction as follows (Pearson & Stephens, 1998:83):

The work done in second language acquisition had a major impact on the thinking of reading educators. It occurred to several of us in the field that it might be useful to adopt something like a nativist framework in studying the acquisition of reading. And we began to ask questions like, what would the teaching of reading and writing look like if we assumed that children can learn to read and write in much the same way as they learn to talk?

2.7.5 Influence of the Natural Approach

The Natural Approach that was developed by Krashen and Terrell (1983) had a major impact in the domains of literacy and additional language acquisition. In many ways, the Natural Approach is consistent with whole language principles. Both stress that naturalistic language learning is important for successful additional language acquisition, i.e. they emphasise that children and adults learn an additional language in the same way that children learn their first language (Cambourne, 1988:29-30; Lenters, 2005:328). Freeman and Freeman (1994:575) explain that when whole language teachers provide "comprehensible input by embedding language in rich context, they help all their students, not just their additional language learners, develop both academic content language proficiency". This holistic approach to language learning differs sharply from the context-reduced texts and practices that characterise traditional instruction outlined in 2.6.3. Other similarities between the Natural Approach and whole language include the following: learners are immersed in language-rich environments, lessons are designed to provide large quantities of comprehensible input, affective factors are taken into account, teachers strive to create anxiety-free learning environments and students are encouraged to monitor and self-correct their output by checking their reading and writing processes (Freeman & Freeman, 1994:568-70; Weaver, 1994:68; Lyons, 2003:60-66).
However, whole language differs from the Natural Approach in a number of ways. In the Natural Approach, the focus is on oral language development (i.e. listening and speaking), and reading and writing are de-emphasised. In contrast, reading and writing are central processes in whole language learning (see 2.7.4). Learners read from a wide variety of literature and write for a variety of purposes. Whereas the Natural Approach emphasises the language that is being acquired (e.g. vocabulary acquisition), whole language focuses on the content (e.g. in narratives, poetry, non-fiction texts) and language develops as students engage in learning conversations, problem solving or carrying out inquiries (Weaver, 1994; Calkins, 2001).

The traditional sequence outlined in the popular four-part language-learning model (i.e. listen, speak, read and write) stems, in part, from the observation that babies listen before they try to speak. This has led to the notion that additional language learners need a prolonged period of listening before they attempt to produce language. Weaver (1994:578) disagrees. She points out that babies have different learning needs to school-going children, i.e. while written language does not serve a purpose for babies, both reading and writing serve important purposes for school-age learners. She argues that waiting until schoolchildren develop oral fluency before introducing reading and writing delays the academic progress of many children most in need of acceleration.

Foley and Thompson (2003:258) agree that a major shortcoming in Krashen's natural theory of additional language acquisition (EAL) is that it does not include the influencing power that written texts play in widening the range of social contexts learners encounter (see 2.7.6). They agree with Larsen-Freeman (2000:1-3) that EAL theorists are generally too preoccupied with communication, which they claim leads to a neglect of grammar and an unbalanced understanding of additional language acquisition (Foley & Thompson, 2003:2). In contrast to both whole language and the natural approach to EAL, they stress the importance of linguistic structure at the communicative and discourse level (Larsen-Freeman, 2000:3; Foley & Thompson, 2003:2). Nevertheless, they agree with whole language educators in recognising the complexity and interrelatedness of language learning, and they endorse the value whole language educators place on written texts. They underscore the necessity of moving away from a focus on 'bits and pieces' approaches to language acquisition to authentic discourse, which includes reading and writing continuous texts. They adopt the stance that "it is necessary to think beyond oral language, speaking and listening and to consider how children
learn to communicate through different channels including written texts" (Foley & Thompson, 2003:12).

There are many other researchers who contest Krashen’s Input Hypothesis. Extensive studies in Canada have shown that meaningful input is not sufficient (Lapkin, Hart & Swain, 1991; Tseng, 2007). Towell and Long (1994), Spada and Lightbown (2006) and Tseng (2007) argue that even though people have the potential to learn a second language throughout their lives, they are generally not as successful at doing so as they were at learning a first language. Clay (1991a:176, 305) is another theorist who questions some of the practices based on 'natural acquisition' which underestimate the challenges and confusions children face in learning new things. For this reason she is sceptical of the two-stage theory of reading, which divides reading into 'natural' reading acquisition and formal reading to learn from texts.

2.7.6 Influence of sociolinguistics

Sociolinguists helped pave the way for viewing variations of Standard English as linguistic differences, not deficits, and heightened awareness of language as a social and cultural construction. They emphasised that linguistic behaviour should be interpreted accordingly (Pearson & Stephens, 1998:90-92). Heath (1983) and Wells (1986) demonstrate that communities differ in the way they acquire oral and written language, and draw attention to the role prior experiences with print play in later school success. Halliday (1975) and Mitchell-Pierce (1994) demonstrate that people learn to speak and write to achieve social functions. In doing so, they foreground the role of the community in language learning, emphasise the parallels between first and additional language learning, and highlight the contrast between the purposes language serve in schools and in out-of-school communities.

Another important contribution made by sociolinguists is their redefinition of the notion of context in reading (Pearson & Stephens, 1998:91; Foley & Thompson, 2003:254). Whereas, previously, reading was narrowly conceived as a fairly straightforward oral/aural process of translating written symbols on a page into sounds, sociolinguists underscored the idea that the context of reading should move beyond the written page to include contexts-of-the-mind as well as instructional, non-instructional and community contexts. In contrast to the notion that language is an abstract structure that is "internalised identically by each individual", sociolinguists view reading as a social process in which language development is a dynamic interchange between active, growing individuals and "the changing properties of their immediate settings as well as the larger contexts in which the settings are embedded" (Foley
& Thompson, 2003:14). Thus, they regard both language learning and human development as a life-long, dynamic process which is influenced by external factors such as immediate settings as well as wider societal structures (Weaver, 1994:332; Foley & Thompson, 2003:258). Within this sociolinguistic perspective, reading is a social transaction that is embedded in multiple contexts (Mitchell-Pierce, 1994:39-34; Pearson & Stephens, 1998:93; Foley & Thompson, 2003:249-266). In whole language classroom, shared book reading is a clear example of how first and additional language learners can be supported socially in their reading (see 2.11.3).

Foley and Thompson (2003:14) call attention to the fact that language has a central place within a coherent social theory, because language is the primary means of cultural transmission. They point out that written texts make it possible to transmit language, ideas, culture and ideologies across space and generations. Accordingly, sociolinguists helped whole language educators understand that even solitary reading can be characterised as a social act (Foley & Thompson, 2003:13-15; Mitchell-Pierce, 1994:31). Foley and Thompson (2003:261) make this clear by explaining that cultures establish traditions that are simultaneously shared events, but that are also created and recreated in unique ways within each individual's cultural schemata. Therefore, both writers and readers shape and are shaped by their contemporary social and historical contexts (Cazden, 1992d:139-140; Mitchell-Pierce, 1994:31). In this way, solitary reading becomes a social transaction as the reader engages in dialogues with the author and the characters created by the author, who then "assume almost the same potential for influencing the reader as real people" living in the present (Mitchell-Pierce, 1994:35).

The social nature of solitary reading is enhanced by electronic communication and mass media, which make it possible for one text to interact with a large number of people. This adds the influence of a global context to additional language reading and learning, and expands the potential field of additional language research. The emerging role of English as a global language raises the important role educators need to play in making English accessible to non-English speaking learners (Cates, 1999:1; Alexander, 2000:12-15). It also highlights the reality that language consists of "socially and politically situated practices that are differently distributed on the basis of gender, class, race, ethnicity and other phenomena" (Foley & Thompson, 2003:259).

From this discussion, it is evident that the sociolinguistic perspective had a strong influence on reading instruction in whole language classrooms. Whole language theorists advocate
language-rich contexts for learning that respect diversity and counteract marginalisation and disempowerment of other cultures and languages (Freeman & Freeman, 1994:560; Van der Walt, 1997:183; Alexander, 2000:12). Davidson (1991c:5-7) cautions that special care should be taken to select reading materials for children that avoid cultural bias and stereotypes, and that have characters and situations with which children can identify. Similarly, Davidson (1991b:7) recommends that teachers can inculcate "sensitivity for difference" by introducing learners to texts that present their own cultural worlds and those of other cultures. Bruti (1999:1) recommends fairy tales, because they are about many basic human themes that "touch a place deep within our subconscious". As such, they are not just stories, they are "teachings that have been handed down from generation to generation, from which people learn about both the dark and bright sides of life", which explains why they are so widespread around the world (Bruti, 1999:1). Fox (1999:2) argues that children from all cultures need "rhyme, rhythm and repetition" in their early texts to "reassure children that written language is as predictable and sensible as spoken language, that it has the same rules and purposes, the same vitality and reality, the same sense of fun". In addition to providing the reader with reassurance and motivation to read, Rasinski (2006:705) believes that rhythmical texts, such as poetry, songs and chants, improve fluency, which aids comprehension.

In addition to the above-mentioned recommendations, research on children's responses to literature documents the importance of providing readers with many different kinds of books and classroom reading experiences to broaden their horizons and challenge familiar or conventional responses to texts (Clay, 1991b; DeFord, 1991; Flanagan, 1995). Therefore, book selections should include a variety of book designs, authors, illustrators, genres and registers, i.e. "many books for many purposes" (Davidson, 1991a:5). Meek (1988:21) affirms this standpoint. She notes that "the most important single lesson that children learn from texts is the nature and variety of written discourse".

### 2.7.7 Influence of socio-psycho linguistics

The sociolinguistic version of language and literacy as constructed social processes was consistent with the cognitive-constructivist theories that were beginning to emerge from psychology in the 1970s and which broaden whole language philosophy (Biehler & Snowman, 1993:245-246; Weaver, 1994:364-365; Pearson & Stephens, 1998:91). Whereas behaviourists tended to avoid any speculation about the inner workings of the human mind, socio-psycho linguists and cognitive researchers emphasised human intellectual processes (Slavin, 1994; Chamot & O'Malley, 1996; Weaver, 1998e; Lyons, 2003). The emphasis in
cognitive and constructivist learning theories were epitomised in concepts such as "information-processing models", "schema-theory", "learning strategies", "learner styles", "constructivism" and "miscue analysis" and "language cueing systems", all of which are still commonly used concepts in whole language circles.

Goodman (1965) contributed to whole language philosophy by introducing the concept of "miscue analysis" in oral reading to study the cognitive processes involved in reading and to demonstrate that the errors children were making were indications of the inner workings of their comprehension processes, rather than mistakes to be rooted out. Children's miscues reveal their efforts in trying to make sense of what they read. Thus, researchers and teachers began to give closer attention to analysing error and self-correction behaviour to uncover how learners were processing texts (Clay, 2002:69). Importantly, researchers using miscue analysis documented evidence of the progress additional language learners were making in classes where they had early access to and opportunities for reading (Weaver, 1994; Goodman & Goodman, 1998; Clay, 1991b, 2003; 2006; Hornsby, 2000).

Goodman (1967) and Smith (1978) advanced the hypotheses that constructive readers make use of strategies such as prior knowledge, prediction and three cues systems (i.e. syntactic, semantic and grapho-phonemic cues) in continuous texts to reduce uncertainty about unknown words and their meanings. They believe that it is important to teach readers to use both contextual and extra-contextual cues to minimise their visual dependence on texts. Adams (1990:988-100), whose work was instrumental in triggering a return to intensive phonics instruction, challenged their hypotheses on the grounds that skilled readers process every single letter they read. She contends that teaching learners to rely on contextual cues reduces the amount of orthographic processing they do and prevents them from building the orthographic knowledge they need to become skilled readers. Nevertheless, Goodman's (1967) and Smith's (1978) views have affected contemporary ideas of teaching and learning in fundamental ways, and challenged educators to re-think "the relationship between teaching and learning" (Pearson & Stephens, 1998:86).

Most importantly, in the same way that behaviourism provided literacy educators with a means (reinforcement and habit formation) and a theory (reading as discriminating letter symbols and learning the visual code and translating them into a verbal code), psycholinguists and cognitive processing theorists gave educators a new means (miscue analysis and observational methodologies) and a more complex theory (reading as a cognitive and constructive process) which, to quote Pearson and Stephens (1998:86), "were remarkably distinct from previous
ideas about reading". In doing so, they changed the language and literacy learning landscape permanently and challenged educators to re-examine their assumptions about language and literacy learning. They placed greater emphasis on the "active, intentional role of language users" and extended "constructs such as human purpose, intention, motivation to a greater range of psychological phenomena, including perception, attention, comprehension, learning memory and executive control of all cognitive processes" (Pearson & Stephens, 1998:86). As mentioned earlier, their work paved the way to a gradual convergence of whole language (which includes reading and writing) and additional language instruction (Weaver, 1994:572).

Two key theorists whose work emphasise cognitive-constructivist approaches and who have had a profound impact on the field of early literacy for first and additional language learners are Weaver (1994; 1998) and Clay (1975-2006). Because their theories were fundamental to the literacy intervention discussed in Chapter 4, core aspects of their theories are discussed next.

2.8 WEAVER'S CONSTRUCTIVIST VIEWS OF LEARNING TO BECOME LITERATE

Weaver (1994:xv) describes the whole language view of reading as "a socio-psycholinguistic process in which the mind (psyche) transacts with the language (linguistics, the study of language) of a text, in a particular context and influenced by various social factors (the socio-part of the term)". However, she emphasises that whole language encompasses far more than just the development of reading or even literacy (Weaver, 1994:58). Whereas Richards and Rogers (2001:108) compare whole language to communicative language teaching (CLT), Weaver (1994:332) contends that whole language has developed beyond the four-part language-learning model (i.e. speaking, listening, writing and reading) associated with CLT to include additional social and psychological dimensions. Like Foley and Thompson (2003:18), who argue that conventional theories of language learning should be extended to include reading and writing authentic texts, Weaver (1994:332) argues that reading and writing can only be understood within the broader context of learning itself. Accordingly, her language-based theory of learning concurs with Foley and Thompson's (2003) complex view of language learning, one in which language components are rarely learnt as discrete aspects (except perhaps in formal language learning situations or in foreign language classrooms) and one in which both human development and language acquisition are mutually accommodating, continually evolving, life-long processes.
Because she views whole language as a comprehensive, albeit evolving philosophy of education, Weaver (1994:58-59) emphatically states that whole language cannot be classified as a method of teaching reading, because it does not focus exclusively on reading or literacy (Weaver, 1994:101). It is a belief system that guides instructional decision-making. Accordingly, she defines a whole language teacher as someone who believes that "humans fundamentally construct their own knowledge" (Weaver, 1994:341). So defined, she claims that whole language teaching is "obviously not confined to the language arts", because the constructivist concept of learning on which it is based permeates curricular reform efforts in every major discipline (Weaver, 1994:341).

Drawing from naturalistic research into language acquisition, Weaver (1994:61) argues that one of the most important observations from naturalistic research is that adults do not directly teach children how to talk. Children learn to talk by being immersed in "a community of user experts" and by transacting with people in a language-rich environment, which enables them to construct rules for oral language that increasingly reflect or approximate those being used by the adults around them (Cambourne, 1988:32). In the same way that parents do not teach children to talk by abstracting linguistic rules from oral language and teaching them one-by-one, teachers do not need to teach children to read by dissecting language into discrete items and teaching these sequentially. Rather, learning to talk, read and write involve children in the construction of increasingly sophisticated strategies and rules (Weaver, 1994:69). This constructive process can be observed in classrooms that use children's authentic written messages to track the development of their written language. Additionally, children's attempts at constructing interacting neural networks in reading can be captured and analysed through the use of miscue analysis or running records (Weaver, 1994; Iversen, 1997; Clay, 2002).

Weaver utilises Cambourne's (1988:33) model of learning to explain how children acquire literacy naturally. While acknowledging that the conditions for learning to talk cannot be precisely replicated for learning to read and write, Cambourne (1988:45) believes that some of the conditions for acquiring oral language can be successfully transferred to teaching reading and writing. Key features of Cambourne's (1988:32-45) model for language learning from which parallels with reading acquisition can be derived are briefly outlined in the next paragraph. His conditions for natural learning are printed in bold.

From the moment they are born, infants are immersed in the language they are expected to learn. Adult members who are "expert" language users act as models: they provide thousands of demonstrations of language and its meanings and functions. Cambourne (1988:47) defines
demonstrations as "artefacts and/or actions from which people learn", for example, one can learn to tie a shoelace by watching a demonstration of how shoelace tying is done. In literacy learning, shared reading is a demonstration that models how quality reading is done. In Cambourne's model, adults have high expectations that children will learn to talk. Similarly, Slee (1991:77) found that teachers in effective schools have high expectations that all learners can learn. In addition to demonstrating the belief that all children can learn, Seldin (1992:3) stresses that it is particularly important for teachers to demonstrate their belief that "all children can think" critically about the texts they read. Cambourne (1988:35) points out that expectations are "subtle and powerful coercers of behaviour". The literature on school learning is replete with examples of how conventional school cultures and teacher expectations work against the kinds of learning advocated by Cambourne and other like-minded researchers (Ysseldyke & Algozzine, 1982; Seldin, 1992; Pressley, 1998).

Within their preschool home environments, the expectations of parents and significant others motivate children to engage with the oral traditions of their culture. Dahl and Freppon's (1998:273) study underscores the importance of engagement for learning. Lack of engagement can cause children to disengage from literacy and begin a pattern of turning away from school early in their school careers, most probably unaware of the devastating impact their aversion to school will have on their lives in the long run.

In talking to children, parents provide demonstrations of oral language, but they do not dictate or sequence what children have to learn. Rather, parents leave the responsibility to the child to decide what parts of the demonstration they want to engage with (Cambourne, 1988; Weaver, 1994). Learning is essentially a constructive process in which new concepts are incorporated in previously learnt information. Because each child brings different prior experiences to the learning task, conceptual knowledge is developed within a constructive process that is unique to each child (Lyons, 2003:182). Parents and teachers cannot do the constructing for them. Importantly, in learning to talk, children are not expected to wait until they have all the language systems and sub-systems intact so that they can speak correctly. Parents accept children's approximations as part of the language acquisition process. Parents know that young learners need time to use and practice their developing language skills. In this regard, Cambourne (1988:41) stresses children's use of language for purposes other than learning it. A consequence of this is that they learn to talk as a by-product of using language for communicative purposes.
The final condition for learning in Cambourne's (1988:32) model is response on the part of parents to the child's attempts at learning to talk. Cambourne (1988:38) prefers the term 'response' to 'feedback', because the latter term has "mechanistic and behaviourist overtones" and it implies a predetermined purpose on the part of the feedback provider. The kind of response he refers to serves the function of "sharing of information" between a child and an adult language user. Parents generally respond positively to their children's attempts. Moreover, their responses are typically meaning-centred, not form-centred.

The applicability of Cambourne's learning model to whole language learning environments is evident. In optimal whole language classrooms, learners are immersed in a variety of texts and literacy activities. Whole language teachers continually provide demonstrations of how reading, writing and thinking (e.g. through shared reading, learning conversation and 'think alouds') are done. Repeated engagements with the same demonstration provide opportunities for children to internalise new aspects of the demonstration and refine old ones, which enable them to perform the demonstration independently with greater degrees of competence. An important point is that demonstrations need to demonstrate "language wholes", i.e. they have to provide enough information for the learner to be able to work out how all the different language systems interact and fit together (Cambourne 1988:48). Towell and Hawkins (1994:265-266) agree that, in order to provoke hypothesis creation and revision, additional-language learners need access to multiple kinds of information that gives the best chance of interaction between internal cognitive and external sources. Demonstrations that emphasise only one or two sub-systems of language while de-emphasising other systems deprive the child of multiple knowledge sources available for learning (Cambourne, 1988; Goodman, 1976). During shared reading demonstrations, in particular, teachers engage learners in authentic responses to and discussions of the books they read. Thus, in whole language classrooms children are immersed in a wide variety of literacy activities in non-competitive and supportive literacy learning environments. Importantly, they do not have to wait until they have mastered all the sub-systems involved in literacy learning before they begin reading or writing. They construct these 'on the job' as they learn to read by reading and write by writing.

2.8.1 Constructivism and the transactional nature of reading

Both Weaver (1994:341) and Hornsby (2000:9) support transactional models of literacy learning. Contrary to transmission models that seek to 'teach' reading, transactional models seek to 'develop literacy' and inculcate lasting literate behaviours (e.g. developing enquiring
minds and an appreciation of literature). Whereas transmission models derive from behaviourism, transactional models stem from cognitive theories and from constructivist approaches to learning (Slavin, 1994:222-225; Weaver, 1994:86-87).

Cognitive-constructivist approaches operate on the assumption that school-going learners already have rich cognitive schemas and abundant experiences in using their schemas, along with an innate inclination to construct their own knowledge (Weaver, 1994; Clay, 2001; Lyons, 2003). Weaver (1994:24) points out that a discussion of schemas leads naturally into discussion of Rosenblatt's (1978:10) concept of the transactional nature of reading, i.e. each learner brings his own, unique, interpretive schema to the task of constructing meaning from texts. Consequently, meaning arises as a result of a transaction that occurs between the learner and the text, which alters the learner's schemata. As a result, no two readings of a text are likely to be the same. Furthermore, because of the unique nature of each learner's schemata, different learners are likely to interpret the same text differently.

2.8.2 Emergent reading versus getting ready to read

Emergent reading is an important concept in whole language classrooms (Weaver, 1994:81). According to Strickland and Cullinan (1990:426), the term 'emergent' reading was coined by Clay in 1966 to describe the developmental process of becoming literate. It assumes that there is no identifiable point at which literacy begins that suddenly calls for the introduction of formal reading instruction to replace the everyday experiences with print from which literate behaviours emerged naturally (Strickland & Cullinan, 1990; Weaver, 1994:81-85; Ayres, 1998:243). As such, the term 'emergent' contrasts sharply with terms that reflect a transmission model of reading acquisition, e.g. 'reading readiness', 'non-readers', 'systematic phonics' and 'prerequisite skills'. Thus, differences in the terminology reflect critical differences in thinking about reading acquisition. Teachers operating from a transactional paradigm understand that learning is a constructive process, not a maturation process (Lyons, 2003:184). Consequently, they realise that children may perceive their environments very differently from that intended by the teacher and their prescribed programmes (Lyons, 2003:183). Because they "reject the notion that children can incorporate exact copies of adults' understanding for their own use", teachers operating from a transactional paradigm offer 'demonstrations' and 'invitations' to learners to try out negotiated understandings on their own (Lyons, 2003:184). These constructivist perceptions conflict with the view that children are either ready or not ready for literacy instruction and that opportunities for reading and writing should be delayed until readiness has arrived (Clay, 1991b:56). Thus, teachers
operating from an emergent literacy perspective will interpret their roles very differently from teachers operating from 'reading readiness' perspective (Strickland & Cullinan, 1990:427).

2.8.3 The whole language process: Growing into whole language

The aforementioned principles of whole language make it clear that no one can become a whole language teacher simply by using sets of materials labelled 'whole language' (Weaver, 1994:339; Elley, 1999:6). For reasons outlined previously, becoming a whole language teacher is a process of continuous growth (Weaver, 1994:409). Growth is a critically important concept among whole language advocates. Failure to understand that whole language is a continual growth process has resulted in many criticisms and caricatures of whole language (Weaver, 1994:331). In the first instance, critics who do not understand that whole language is an evolving philosophy of education incorrectly characterise whole language as certain kinds activities (e.g. shared reading/guided reading) and associated materials (e.g. big books/levelled readers). According to Weaver, none of these activities or related materials is inherently whole language. What makes literacy events whole language is the spirit in which they are conducted. Second, critics call whole language an implicit approach that does not teach children how the written code works. They accuse whole language teachers of being laissez-faire, because they neglect direct instruction (McGuinness, 1997:72; Pressley, 1998:128-129; Moats, 2000:5). As mentioned earlier, although Weaver (1994:367) acknowledges that earlier whole language practices offered learners too little guidance and instruction, she attributes this to personal growth, not laissez-faire attitudes. She points out that the first whole language practitioners were pioneers. As they grew in understanding they realised the limitations of some of their earlier practices and changed (e.g. they helped learners transact with texts by incorporating mini-lessons and literature discussions in their instructional frameworks). Third, many teachers have co-opted the label 'whole language' without shifting their traditional belief systems. Whole language teachers should be committed first and foremost to promoting learners' ownership over their learning. Weaver (1994:400-411) found that there is a typical pattern of growth among teachers who want to change from traditional approaches to a whole language approach. Their first step is letting go of the basal and of their concern for pre-teaching vocabulary and questions to follow the reading. Next, they adopt a modified perspective in which they activate learners' schemas as an introduction to text and they develop more open-ended questions, based on their own understanding of texts. Gradually, they move away from question-answer sessions
to support readers in actual discussions about their reading, which is more characteristic of authentic whole language practices.

Calkins (2001:31-43) endorses the point of view that whole language is a growth process. By way of illustration, she documents her own growth as a reading educator as someone who "once upon a time" believed that the solution to teaching reading lay in the independent reading workshop … then she came to understand the intimacy of shared reading … then she discovered the power of response groups … next came guided reading groups and strategy lessons, then she delved into word study and finally, after whole-heartedly embracing and promoting each individual approach, she came to realise the value and limitations of each of these approaches and that it was important to provide learners with a balanced literacy experience within a consistent instructional framework.

2.9 CLAY’S COGNITIVE PROCESSING THEORIES

Although Clay does not categorise herself as a whole language educator, her ideas are foundational to many whole language educators and many of the assessments, instructional techniques and materials she developed are used in whole language classrooms in New Zealand, Canada, Australia, England and the United States (Pinnell, Fried & Estice, 1990; Dunkeld, 1991; Gnagey Short, 1991; Calkins, 2001; Lyons, 2003).

Following her first training as a teacher, Clay entered upon her exploration of early literacy learning because of her work in developmental psychology. Her prime interest lay in literacy processing and how acts of processing change over time. To study development in children's literacy behaviours she made use of a methodology often used in developmental psychology, namely the meticulous recording of surface behaviours and how these change over time. These records enabled her to make inferences about the psychological processing that produces literacy behaviours (Clay, 2001:287). From these, she developed the Observation Survey (1993), which was the core research methodology used in this study (see 3.6). From her observational work, she developed a "complex theory", which assumes that readers make use of complex cognitive networks working in parallel to construct meaning from a text. Because her theories aim to accelerate reading progress and prevent reading failure, her work is particularly relevant to the educational situation in South Africa where high levels of illiteracy are endemic.

In deciding on a theoretically accountable approach from the arguments put forward by early literacy theorists, Clay (2001:215-216) contends that the best option is one that is most likely
to have long-term effects on the literacy development of children. Thus, in her view, a preventive approach must also be a development approach. Clay's (2001:216-218) view on the long-term scenarios of an 'item banks' approach, a 'critical variable' approach and a literacy processing approach are discussed next. The first two approaches correspond to 'part-centred' approaches in whole language terminology.

2.9.1 Item banks

Clay (2001:216-218) uses the term 'item banks' approach for part-to-whole instruction that builds up the learners' "item banks of letter, sound and word knowledge". According to Clay (2001:215), part-centred models limit what children are able to learn, with the result that many children fail to construct the necessary links between various items of knowledge that "are essential for reading harder texts later in their schooling". Consequently, many learners on part-centred programmes do not construct a foundation for literacy that is broad and flexible enough to support more complex learning. She concludes that any programme that limits the range and kinds of reading and writing tasks learners are exposed to cannot be "considered to be preventive of subsequent difficulties" (Clay, 2001:219). Thus, she claims that 'items banks' approaches do not provide sound theoretical arguments for explaining how later integrations between items would emerge (Clay, 2001:219). Rather, these kinds of programmes "virtually predict subsequent difficulties", because their narrow focus does not lay a rich enough foundation that enables young readers to handle texts of various kinds and difficulties (Clay, 2001:216).

2.9.2 Critical variable

The 'critical variable' approach refers to instruction that helps learners to construct links with only those variables (e.g. phonological awareness, core vocabulary) that a curriculum designer or publisher deems to be most critical for learning to read. Clay's (2001) problem with a 'critical variable' theoretical approach is that it emphasises a major variable in reading acquisition. However, low achieving readers as a group encounter different sources of difficulty. Some may have physical impairments, others lack experiential opportunities, and others have constructed "a system of interacting deficits as a product to their learning experiences", which take them into a negative learning cycle (Clay, 2001:220). Based on her extensive experience, Clay (2001:225) is adamant about one thing: low-achieving readers also need to build the kinds of self-extending systems that competent readers typically construct. Competent readers learn to work on texts in ways that foster a gradual expansion of
neurological networks. They do this by first constructing an effective processing system for simple texts, through which they learn to "link up each and every component into an effective complex processing system" (Clay, 2001:225). Given the complex, constructive and interactive nature of the task, Clay (2001:224) concludes that the low achiever's problem is unlikely to be a "blackout in one sector of the complex system requiring the installation of a single component, such as phonemic awareness". To overcome their difficulties, young and struggling learners also need to construct a well-functioning neural network. They first need to learn to operate effectively at a simpler level of text reading and work their way through an interacting cycle of skills that gradually expands their effectiveness at text levels of increasing difficulty (Clay, 2001:216-217). Again, this emphasises the importance of exposure to literature-rich contexts for reading.

2.9.3 Cognitive processing approach

Clay (2001:219) proposes that the literacy processing approach, which is grounded in field research on successful learners, has theoretically sound arguments for preventing subsequent reading failure. In her view, two aspects critical to a preventive approach are (a) a "complex theory" and (b) a "developmental perspective" (Clay, 2001:235-236). In contrast to the part-centred approaches mentioned earlier, a complex theory assumes that success in learning to read and write depends on different cognitive systems working in parallel rather than acting alone (Clay, 2001:237). It encourages a constructive approach to literacy learning, because it assumes that the child is constructing interacting competencies in reading and writing in ways that "extend both the searching and linking processes as well as items knowledge repertoires" (Clay, 2001:224). From a developmental perspective, the model aims to enable emergent readers to develop a strategic base for the complex literacy processing that they will engage in several years later. Clay (2001:224) describes this process as follows:

Learners pull together necessary information from print in simple ways at first (crudely imaged as several blocks of competencies connected by weak links), but as opportunities to read and write accumulate over time the learner becomes able to … construct a somewhat complex operating system.

Although teachers can facilitate children's construction of neural "working systems" by initially assuming responsibility for the linguistic and cognitive requirements in learning to read, "a teacher phase-out from this responsibility and a phase-in of students" as they learn to mobilise their own resources are necessary to enable them to take over responsibility of the reading task (Chamot & O'Malley, 1996:261; Clay, 2001:113-114). This theoretical view has
led to the development of models for instruction, such as the 'gradual release of responsibility' model, to help teachers to 'let go' of their control (DePree & Iversen, 1994:25; Hornsby, 2000:22). However, Clay (2001:222) points out that the most effective teachers are not driven by the prescriptions of others. Rather, they base their instruction on "knowing precisely what the child knows well, knows tentatively and does not know" (Clay, 2001:222). In this, the use of running records to record reading behaviours is invaluable (see 4.6). It gives teachers insight into the problem-solving individual children are doing and enables them to adjust instruction to increase the efficiency of the 'working systems' children are constructing. By using information captured in the records, a teacher can gradually lift a child's performance by increasing the level of challenge in texts and by prompting the child to engage in constructive reading work.

All in all, Clay (2001:236) argues that a "complex theory in the developmental perspective" provides the most preventive thrust in early interventions. She cautions, however, that any theory of complex learning inevitably works with an incomplete description of processing, because there are many things about the brain that humans do not know. From Clay's general theory of learning to read, two distinct sets of implications for teaching can be derived: one for classroom practice with mainstream children learning to read in a first or additional language and another for children who are the lowest achievers in their age group and who need a supplementary intervention, such as Reading Recovery. Although Reading Recovery is an intervention programme designed for individuals and "delivered only to the hardest-to-teach children" (Clay, 2005:1), whole language teachers in mainstream classrooms share many goals and approaches with Reading Recovery teachers (Fountas & Pinnell, 1996; Calkins, 2001; Lyons, 2003). Some of these are highlighted by Fountas and Pinnell (1996:197):

- Base instructional decision-making on a strong theory of learning;
- Provide rich exposure to high-quality reading materials and resources;
- Create abundant opportunities for reading and writing continuous texts;
- Select text from a gradient in order to match texts to children;
- Teach the use of strategies in reading and writing;
- Observe, analyse and monitor progress (e.g. by means of the observation survey); and
- Participate in continuous professional development.
Researchers who use Clay's theories and instructional model claim that these have proved highly effective in accelerating the development of reading competence (DeFord, 1991; Fountas & Pinnell, 1996; Clay, 2001, Lyons, 2003; Caswell, 2007b). Even though Clay's philosophy reflects a whole language philosophy in several ways, Weaver (1994:522-525) captures a number of frequently expressed concerns that some whole language educators have with regards to Clay's instructional approach. These include an overemphasis on letter and word identification and accuracy, a push for accelerated progress that may not take developmental stages and 'maturation' into account, and the belief that meaning resides in the text (a view that is contrary to transactional theories of reading). Clay's (1991a:1-3) interest in a gradual increase in a child's effective processing strategies as opposed to "items of knowledge" makes these arguments hard to sustain. With regards to transactional theories of reading, Clay (1991a:2) observes that, in her view, meaning is paramount in reading, but that different readers bring different meanings to texts, "just as one theorist interpreting another's theory brings a different meaning to it".

Adams (1990:419-421) promotes Reading Recovery as an effective programme from which mainstream reading educators can learn much, because, in her view, it was "designed to provide a sensitive balance of reading instruction". On the other hand, she claims that that Reading Recovery is over-rated and that it does not differ significantly from a number of other programmes that "are designed to develop a thorough appreciation of phonics" (Adams, 1990:421). Clay (2001:234-235) replies that there are fundamental theoretical differences between Adams' (1990) conceptualisation and understanding of reading and her own, which reveal themselves in the language used by Adams to describe the thinking underlying Clay's approach.

In a comprehensive, critical review of the studies examining the effectiveness of Reading Recovery, Shanahan and Barr (1995) report positively that students in Reading Recovery made greater than expected gains and conclude that Reading Recovery's instructional approach merits continued support. However, they also express concerns over inflated claims and programme costs. Hence, they encourage educators to experiment locally to identify reading approaches that are even more effective than those used in Reading Recovery. Clay (2001:258) responds that, until experiments and innovations have been trialled and tested at several different sites, Reading Recovery professionals "do not gamble with children's treatments by discarding tested effectiveness for an untested possibility".
While the list of concerns and responses continues, the stance taken in this dissertation is that Clay's instructional approach is solidly grounded in credible theories of reading and learning (see 2.1). However, while Reading Recovery procedures emphasise supportive intervention for individual learners who have not engaged with classroom reading instruction, the literacy intervention discussed in Chapter 4 emphasises supportive classroom instruction, using a balanced, whole language framework (Holdaway, 1992:2; DePree & Iversen, 1994:25-27). Within this literacy framework, the literacy intervention uses instructional procedures that have much in common with Reading Recovery, as explained in the following sections.

2.10 EXPOSURE TO A BALANCED LITERACY EXPERIENCE

According to Fountas and Pinnell (1996:197), all children, including those who require support services, need a sound, balanced classroom literacy programme that engages all learners in a variety of literacy experiences. Some researchers have questioned the appropriateness of the term 'balance' on the grounds that it is simply a new term for disguising the old whole language versus phonics controversy. Moats (2000:3), for instance, argues that 'balance' is simply a term whole language advocates use to "mask" "unscientific" literacy instruction. Weaver (1998c:xv) expresses concern that the concept of balance will perpetuate the idea of a balance scale with phonics and word identification skills on one side and whole language on the other. She recommends that the concept of a 'balanced approach' be reconsidered within the context of a coherent theoretical framework, i.e. a theory-driven balanced approach (Weaver, 1998c:xv-xxiii). Strickland (1996:2) contends that avoiding instructional extremes is the essence of a balanced programme of reading instruction. She offers the term "informed balance" to signify that achieving balance is an ongoing endeavour that requires knowledge, time and thoughtfulness. Lenter (2005:334) suggest that EAL educators should seek to balance instruction with texts that are culturally sensitive to additional language learners. Pearson and Raphael (2000:6) take a more complex view of balanced literacy and build a case for "the rich knowledge bases teachers need to implement a truly balanced curriculum". This includes trying to balance contextual continua (i.e. authenticity, classroom discourse, teacher roles and curricular control) as well as content continua (i.e. skill contextualisation, text genres and response to literature). They put forward the concept of an "ecologically-balanced curriculum" to promote reconsideration of the term 'balance' and to "emphasise a system that works to support each individual component, rather than a system which pits one curricular aspect against another" (Pearson & Raphael, 2000:12). DePree and Iversen (1994:7-10) agree with Weaver (1998:4) that a balanced
literacy programme should reflect a coherent integration of the best research available. They describe a whole language approach to 'balanced literacy' as one that

- Integrates language and literacy across modes of language (e.g. listening, speaking, reading, writing, viewing, presenting) and across disciplines;
- Recognises the reciprocity of reading and writing; and
- Attends to literacy, broadly defined, and other skills and strategies (including decoding and comprehension) in the context of reading, writing and learning from whole and meaningful text.

2.11 A FLEXIBLE FRAMEWORK TO SUPPORT BALANCED LITERACY

Based on their extensive research and practical experience in helping teachers develop balanced literacy programmes, Fountas and Pinnell (1996:22) and Calkins (2001:43-45) recommend that teachers use a flexible organisational framework that includes reading aloud, shared reading and writing, guided reading and writing, and independent reading and writing. This allows teachers to structure their time according to the needs of learners. Teachers may include other literacy events in the framework mentioned above. For example, Davidson (1991a:20) and Weaver (1994:58) argue the importance of including language experience in English additional language classrooms. Although teachers can use the framework flexibly, Clay (1991a; 2001), Weaver (1994) and Calkins (2001) argue that it is important for each teacher to keep her instructional framework fairly consistent and predictable to prevent confusion in the complexities of learning that typify whole language classrooms. Based on the literature review, the events that were included in the literacy intervention as part of a theoretically balanced literacy approach are discussed next.

2.11.1 Building experiential knowledge: Language experience

Davidson (1991a:32) calls language experience an approach that provides children with 'hands-on' experiences for exploring, understanding, talking, reading and writing about their social environments. As such, it provides "clearly established links between the real world and the symbols of language" (Iversen, 1997:32). A well-known motto that underscores these links is, "Anything I can say, I can write; anything I can write, I can read" (Weaver, 1994:58). Theorists who advocate the language experience approach (LEA) are interested in helping learners develop and extend their conceptual knowledge through practical experiences, while simultaneously valuing the contribution of their home language (Weaver, 1994; Dorr, 2006). They use their own linguistic and practical experiences to write and construct meaning from
the printed word (Weaver, 1994:57; WCED, 2000:7). Lenters (2005:333) points out that the language experience approach is not only suitable for helping young EAL learners to understand the encoding of oral language into written language, but it is also an important aid to comprehension because it provides opportunities for learners to use concepts and natural language patterns that are important to them.

Writing is based on shared classroom experiences such as field trips, cooking or gardening (Davidson, 1991c:32; DePree & Iversen, 1994:33). Because children learn concepts by participating in purposeful activities and demonstrate their understandings by using language to talk to others about ongoing events, the language experience approach supports the "social origins" of language learning (Lyons, 2003:44-45). Russian psychologist Vygotsky (1978) highlighted the central role language plays in helping learners internalise socially constructed knowledge, a process that occurs in the "zone of proximal development" (ZPD) (i.e. the distance between actual and potential development). Language experience creates zones of proximal development in naturally occurring contexts that provide opportunities for conversations to maximise the child's development (Lyons, 2003:46-48; Dorr, 2006:138). During these conversations, supportive adults can 'scaffold' the child's learning, for example by providing prompts or hints that help the child move from assisted to unassisted performance (Slavin, 1994:52; Fuhler, Farris & Nelson, 2006:647).

To establish the link between speaking, reading and writing, the teacher records children's dictated stories about their experiences. Because of its relevance and natural language patterns, such writing produces a highly predictable text that young learners find easy to read (Davidson, 1991a; Gunning, 1996). Weaver (1994:58) points out that LEA is particularly successful with older 'non-readers' and with both children and adults learning English as an additional language.

As outlined above, language experience both broadens learners' experiences and offers them opportunities to use many words that are familiar to them in out-of-school settings. Thus, it has strong potential for integrating language used in the home and in the school domains or, to quote Foley and Thompson (2003:162), for "helping them develop the sophisticated translating skill of communicating ideas from one language [i.e. language used out of school] into another [i.e. language used in school]".

Weaver (1994:97), however, raises the concern that dictated texts, if over-used, can easily convince beginners that they are not yet ready to write for themselves (Weaver, 1994:97).
Another potential limitation is that the language used in dictated texts can be imperfect and limited by the current level of a learner's language proficiencies. Given its possible limitations, LEA should be used in conjunction with other literacy approaches (Davidson, 1991b:20; Weaver, 1994:97; DePree & Iversen, 1994:32-34).

2.11.2 Listening to stories read aloud

The importance of reading to preschool children is supported by research that indicates that preschool experiences with books contribute significantly to school success (Heath, 1983; Krashen, 1998b, Calkins, 2001). Adams (1990:86-87) is convinced that "the most important activity for building the knowledge and skills eventually required for reading is that of reading aloud to children". Likewise, Weaver (1994:97) maintains that learning to read begins when children listen to stories. Schema theory supports the important role reading aloud plays in developing the literacy base for "education literacy [that] will frequently require learners to engage in the canon of literature" (Foley & Thompson, 2003:13). Through pre-reading experiences, children construct schemas or semantic maps for understanding what it means to be literate individuals. In the first instance, reading to children shows them how readers behave and enables them to conceive of themselves as readers (Weaver, 1994:23-24; Hornsby, 2000:23; Calkins, 2001:55). Second, reading to children lays significant foundations for children's future understanding of the language patterns and social purposes of texts (Elley, 1998; Cazden, 1992a; Mitchell Pierce, 1994). In this regard, reading to children plays an important role in developing socially shared concepts and specialised functions of texts, such as narrative structure, genre, vocabulary and syntax. For example, knowledge of fairytale genres enables children to predict the likelihood of upcoming events, recurring themes, stereotypical roles and 'happy-ever-after' endings. Furthermore, read-alouds make children aware of all kinds of emotions and life events: humour, sorrow, adventure, sports, space-travel and family life (Hornsby, 2000:28; Calkins, 2001:56-57). In doing so, it broadens children's conceptual base and provides them with the opportunity to enjoy books whose vocabulary and syntax are beyond their independent ability to read (Hornsby, 2000:28).

Cazden (1992a:105) reviewed some interesting studies that indicate that reading to children improves the interactions between preschool children and adult caregivers. Observations of early mother-child interactions indicate that a mother's speech is more complex in book reading than in a free-play situation (Cazden, 1992a:105). These studies suggest that the presence of books in adult-child (teacher-child) interactions serves to focus joint attention and
determine topics, which frees the adult (teacher) to make more sophisticated comments (Cazden, 1992a:105; Cooter, 2006:699).

Foley and Thompson (2003:54) point out that individuals build up expectation structures or schema of future events on the basis of their past experiences. Viewed from an anticipation perspective, children begin to construct expectations about subsequent reading experiences based on whether or not they enjoyed prior reading experiences. Thus, "early [reading] experiences form long lasting and influential impressions" (Foley & Thompson, 2003:54). For this reason, it is important that early reading should delight children in reading and motivate them to become readers.

Researchers such as Calkins and Weaver believe that reading to children should continue in school. This is especially important in classrooms with children who lack prior experiences with print (Cazden, 1992b:44). Weaver (1994:97) suggests that each teacher should embrace the motto "a story a day keeps the remedial program away". Classroom research indicates that the greatest progress occurs if teachers use a large number and a rich variety of books that are levelled slightly above the reader's current reading ability for read-alouds (Adams, 1990:87; Weaver, 1994:415; Hornsby, 2000:28). Weaver (1994:415) and Davidson (1991a:9) recommend that teachers use audiotapes as a valuable form of reading aloud. It allows listeners "to savour the richness of literature dramatised by the human voice" and exposes them to natural speech patterns and rhythms (Weaver, 1994:415). Consequently, the use of recorded books is especially valuable for additional language learners and children whose reading ability falls short of their interest level. These books help them to become more fluent readers through the support provided by listening and reading along with the tape (Davidson, 1991b: 32; Weaver, 1994:97).

Finally, Adams (1990:87) and Calkins (2001:57-63) stress the point that, although reading aloud is an essential preschools and classroom activity, it is not just the act of reading that makes the difference to future literacy progress; it is enjoying books and discussing their form and content with children. In a similar vein, Foley and Thompson's (2003:148-149) review of reading sessions at home indicates that mothers who make more sophisticated comments, provide additional information and expand on their children questions during picture book reading provide their children with more explicit preparation for school-type learning than mothers who do not.
2.11.3 Shared reading

Davidson (1991a:8) defines shared reading as a story time activity that "involves the teacher with a whole class … sitting close together while they share in the reading and rereading of appealing rhymes, songs, poems and stories". It was initially developed by Holdaway and his colleagues in New Zealand in 1965. They based the shared reading teaching procedure on the emotional intimacy and enjoyment that preschool children experience during bedtime story book reading. Shared reading, therefore, aims to address the essential, albeit frequently neglected, emotional side of literacy learning, which, according to Lyons (2003:1), is rarely mentioned in educational research and practice. She warns that the dichotomy between affective and cognitive factors has become more pronounced in recent years, despite an extensive body of neurological and psychological research that demonstrates that emotions are essential to thinking and are an inseparable part of the literacy learning process (Lyons, 2003:1). Cazden (1992b:52) is another researcher who cautions against the practice of teaching reading as if it were a cognitive process divorced from emotions. She emphasises its social nature and the powerful motivational worth of encouraging collaborations over texts, especially for children from communities where book reading is not encouraged. Foley and Thompson (2003:149-150) make the important point that many preschool children spend a great deal of time with caregivers other than parents, which limits the range of activities that parents and children share together and which impacts on the emotional and social development of children. Their point is equally applicable to the South African situation and it underscores Lyons's and Cazden's appeals to educators to attend to the emotional side of literacy learning.

Because shared reading engages learners in the joys and pleasures of reading, it is also valuable for teaching English additional language learners (Elley, 1999:1; Lenters, 2005:333). In addition to the benefits already mentioned, it provides comprehensible input in the form of illustrations, story contexts and conversations, and enables children to learn about language through listening, reading, speaking and authentic written responses to texts (Depree & Irversen, 1994:35; Freeman & Freeman, 1994:572; Elley, 1999:1; Nathanson, 2000:9).

To conduct shared reading lessons, teachers use big books or any other text written in large fonts. All children need to be able to see the text clearly, so that they are intimately engaged in the reading process (Hornsby, 2000:29; Weaver, 1994:95). In shared reading, a "picture walk" is an instructional strategy that is widely used as a pre-reading activity to introduce novice readers to concepts and vocabulary they will meet in the story on first reading. Lenters
(2005:333) suggests that discussing the illustrations of a story prior to reading it plays an important part in promoting oral language development. However, Dougherty Stahl (2004:605) claims that, at present, there is insufficient research to substantiate the effectiveness of picture walks and suggests that more research needs to be done on the use of this widely-used procedure. Nevertheless, Davidson (1991b:25) suggests the following teaching sequence for shared reading in which teachers should

- Select an appropriate book and decide on the focus of the lesson, i.e. one that arises naturally out of the text;
- Set the scene by providing a lively introduction to the book that familiarises children with the story idea and encourages them to want to share-read the book (e.g. a picture walk);
- Read the text to demonstrate the joys of reading and encourage children to participate in reading;
- Reread the text – rereading provides the teacher with opportunities to engage learners in contextualised word and sentence level work;
- Give learners opportunities to respond to the text, e.g. through independent reading, listening to recorded stories, role-play or writing activities; and
- Allow learners to share responses by giving them opportunities to clarify and explain their understandings of the story with their peers.

From Holdaway's (1979) and Davidson's (1991b) descriptions it is evident that shared reading lends itself to many possibilities, such as enjoying a story, having fun with language, introducing an author, topic or theme, teaching concepts about print (basic book handling and reading skills), word and sentence levels skills and exploring a new genre. Although it has similar advantages to reading to children, it differs from read-alouds in that children do not only listen, they are also encouraged to participate in reading along with their teacher (Davidson, 1991b:25). Because shared reading takes place in the company of others, it "exploits the social nature of reading" and creates a "social bond" that makes reading more enjoyable and meaningful (Mitchell Pierce, 1994:29; Weaver, 1994:97).

Because it typifies the transactional learning model, Weaver (1994:95) highly recommends the use of shared reading in whole language classrooms, provided it is conducted according to whole language principles. The underlying premise is that learners will use their mental
schemas to help them construct their own meanings from the text (Weaver, 1994; Hornsby, 2000). Because different readers bring different schemas to the reading, they will transact uniquely with the text and consequently they will not all interpret the same text in the same way (Rosenblatt, 1978:10). Therefore 'transactional teachers' do not assume or insist that all readers will create the same meanings; rather, the teacher's role is to model higher order thinking skills, such as encouraging cooperative decision-making, withholding judgment, acknowledging differences, demonstrating empathy for others and for their ideas, and believing all children can read and think (Fuhler et al., 2006:647).

Weaver (1994:92) states that Cambourne's (1988) natural learning model, discussed earlier, is exemplified in the shared reading experience. In the first instance, in shared reading the teacher immerses children in a wealth of rich literacy experiences by selecting a wide range of materials and genres that provide different learning experiences. During the first reading, the teacher's enthusiasm and presentation style demonstrate the joys of reading, as well as proficient reading behaviours. By creating an emotionally safe environment, the teacher invites children to participate in reading without fear that errors or approximations will result in unpleasant consequences. As a result, children are more willing to engage with reading.

During the second reading, the teacher uses the enlarged text to demonstrate and discuss reading strategies and to develop the learners' word and sentence level skills. Through the teacher's explicit articulation of reading strategies, children gradually learn to articulate and internalise those strategies. In this sense, shared reading is the precursor to guided and independent reading: in shared reading, the teacher teaches reading strategies as well as word and sentence level skills; in guided and independent reading, children are expected to use the strategies and skills they learnt during shared reading sessions (Hornsby, 2000:30). Thus, shared reading incorporates two Vygotskian (1978) ideas, namely the important roles social speech (which becomes internalised, i.e. inner speech) and assisted learning play in developing the mind and leading learners to independent performance.

Through participation in reading and re-readings of favourite stories, shared reading provides learners with plenty of practice. Repeated readings build children's confidence in their reading abilities, which encourages them to take on increasingly more responsibility in becoming independent readers. By treating all children as readers during shared reading, teachers communicate the expectation that children are 'potential doers', i.e. they will learn to read. Thus, as the 'significant other', the teacher's high expectations allow children to believe that they can take ownership of the reading process.
Finally, shared reading procedures offer many opportunities for children to respond to texts in personal ways and to share their responses with others. Sharing responses is a learning experience in itself, because it makes children clarify and explain their own thinking processes. It also provides opportunities for children to discuss and share personal meanings they are constructing as they transact with the text. By sharing the reading act with other readers, all participants learn more about reading and learning, and about one another and one another's cultural worlds (Weaver, 1994; Calkins, 2001). Since shared reading is a mixed-ability group activity, it stands to reason that different children bring different levels of expertise to the reading task, which enhances the opportunity for learning (Stannard, 1998; Hornsby, 2000:29). Thus, the learning that takes place in a mixed-ability group is a critically important reason for using shared reading, because it gives low achievers access to higher-level strategies (through interactions with teachers and peers) that they would otherwise not have access to on their own (Stannard, 1998; Lyons, 2003). Shared reading thus integrates the affective and cognitive aspects of learning.

2.11.4 Phonics and word recognition

In contrast to traditional phonics lessons, whole language educators work from the principle that children do not have to know all the letters or sounds before they can begin to read (Smith, 1978; Clay, 1991b; Dorn et al., 1998). As alternatives to traditional phonics lessons, whole language teachers incorporate rhymes, letter and word identification, and spelling into shared reading and writing sessions to develop phonological awareness and phonics knowledge within the context of authentic, coherent texts (Depree & Iversen, 1994; Clay, 1993a; 2006; Weaver, 1994). They design instructional mini-lessons that shape phonemic awareness around continuous texts (Dorn et al., 1998:89). These lessons are generally five to ten minutes long and they take place after shared or guided reading lessons. For example, learners may respond in writing to a reading text by 'sharing the pen' with the teacher (i.e. the teacher and the children take turns to write). During these shared writing sessions, children learn to refer to and make use of various 'tools', such as ABC charts, magnetic letters and picture books to assist them in composing messages (Fountas & Pinnell, 1996).

Instead of developing phonemic awareness by learning individual letter-to-sound correspondences for reading purposes, they use a sound-to-letter strategy, i.e. teacher teaches children "how to say a word, listen for the sounds, and write letters for the sounds they hear" (Fountas & Pinnell, 1996:ix). Clay (2002:111-114) explains that children's sound awareness is
developed in writing rather than reading or phonics, because "getting to sounds from oral language rather than from letters, builds on the resources children bring to literacy tasks".

Another difference between whole language and traditional phonics lessons is that whole language develops multiple ways of learning about phonics. They use name charts, alphabet charts, magnetic letters, onset-rime analogy and they exploit rhymes in poems. Importantly, they teach children strategies for learning (as opposed to items), for example, using personal access points, such as the letter starting a friend's or brother's name (Clay, 1991a). Building on research by Goswami and Bryant (1990) and Moustafa (1998) which argues that it is more economical for learners to work with word parts than with individual letters in a word, whole language educators teach children to use an onset-rime analogy strategy. Dorn et al., (1998:90) emphasise the learning 'leverage' that can be gained from knowing a set of only thirty-seven dependable rimes: approximately five hundred primary-grade-level words can be derived from them. Adams (1990) and Clay (1991a) confirm that working with letter patterns shared by different words requires less learning effort than working with individual letters.

2.11.5 Using strategies: Guided reading

Fountas and Pinnell (1996:2) define guided reading as

a context in which a teacher supports each reader's development of effective strategies for processing novel texts at increasingly challenging levels of difficulty. A teacher works with a small group of children who use similar reading processes and are able to read similar levels of text with support.

They recommend that, in guided reading sessions, the teacher should first offer a brief introduction to the book and then allow the children to read the book silently (or softly if they are emergent readers) and independently. During silent reading time, the teacher may 'listen in' by asking a specific learner to read aloud softly. She intervenes if needed to support the learner's problem solving. After reading, she invites personal responses to the story, engages in 'learning conversations' about the story and assesses children's understanding of what they read. She may revisit the text for one of two teaching points that will help the readers process more effectively, e.g. finding evidence to support points of view or creating awareness of strategy use (Fountas & Pinnell, 1992:8).

Dorn et al. (1998:ix) view guided reading as 'apprenticeship in literacy'. In an apprenticeship approach, the child is a novice who learns to read under the guidance of the teacher. Initially, the teacher takes full responsibility for structuring the reading task and guiding interactions.
In her interactions with the child, the teacher engages in 'learning conversations' with the child and uses language to articulate learning and to demonstrate problem-solving skills. Through this learning process, the child internalises social speech (speech used by adult teacher) so that language (in the form of private speech) becomes a strategic cognitive tool for transforming basic cognitive processes into higher intellectual functions (Vygotsky, 1978; Lyons, 2003:53). The potential for learning is greatest when verbal interactions between the teacher and the child occur within the child's zone of proximal development (Vygotsky, 1978). Through interactions that occur in the ZPD, the child moves from other-regulatory to self-regulatory reading behaviours (Lyons, 2003; Hornsby, 2000). As this process unfolds, the teacher gradually transfers full responsibility for reading to the child (Dorn et al., 1998:3; Hornsby, 2000:11-13; Lyons, 2003:48-50). Thus, the teacher helps the child's transition from apprenticeship status to independent reader by providing quality interactions in the child's zone of proximal development, using a 'gradual release of responsibility' model (Hornsby, 2000:21).

The apprenticeship approach emphasises the role that adult guidance plays in helping children gain understandings they could not have created on their own. In other words, learners are apprenticed into existing knowledge by 'experts' (Hill, 1999:13). While not discounting the invaluable role of adult assistance, Hill (1999:13-14) points out, however, that the adult-guided view overemphasises cultural conformity. She therefore proposes a more dynamic view of learning to explain how children think novel thoughts, contribute actively to knowledge creation and reach similar outcomes by different paths. Her dynamic view emphasises the child's agency in the child's own development, and requires the teacher to modify instructions based on the child's changing understandings and active contributions to learning: to do effective guided reading, teachers should draw on both adult-guided and dynamic views of literacy instruction (Hill, 1999:14).

Fountas and Pinnell (1996:4) emphasise that the ultimate goal of guided reading is independent, silent reading. Hornsby (2000:87) observes that many children simply do not realise that reading can be silent because they have mostly been exposed to read aloud demonstrations when parents and teachers read to them. Hornsby (2000:87-88) found that there is an absence of current research on the development of silent reading, but states that experience indicates that children are capable of silent reading if they are encouraged to 'read with their eyes' in the first year of school.
The above-mentioned descriptions make it clear that there are a number of essentials in successful guided reading. First, teachers' actions are theory-driven and anchored in observation of children as they read and write. Based on their theoretical perspective, they select reading materials, and study and analyse texts so that they can match learners and texts appropriately (Fountas & Pinnell, 1996:7; Hornsby, 2000:62). Second, in order to group children with similar reading needs and to move readers to new groups according to reading progress, teachers need information that enables them to monitor each reader's reading level and progress. Clay's *Observation Survey* (1993; 2002) is widely used by both teachers and researchers to assess and monitor both reading levels and progress (see 3.7). Third, in guided reading each child in the group must have his or her own copy of a book. Hence, it is essential to have multiple copies of books available for effective group teaching (Hornsby, 2000:64-65). In addition, the books should be interesting short stories that can be read in one session. The use of 'whole' stories is very important, because it allows children to enjoy 'real' stories. In addition, it enables them to construct meaning and to develop and use strategies for predicting, confirming, modifying and self correcting within the context of a whole story (Hornsby, 2000:43-45). Fourth, guided reading texts have to be levelled according to known criteria (Fountas & Pinnell, 1996; Hornsby, 2000). Hornsby (2000:64) points out that different countries use different procedures for levelling books, but levels are always on continuum of support in accordance with a reader's strategic reading development, e.g. emergent, transitional, early, fluent reading/text levels. Hornsby (2000:45) recommends the use of published books specifically designed and levelled for guided reading programmes. Alternatively, teachers can create a gradient of text difficulty by following the procedures outlined by Fountas and Pinnell (1996:113-115) in *Guided reading: Good first teaching for all children*.

Teachers doing guided-reading work face a number of challenges, such as becoming familiar with assessment and guided reading procedures, obtaining a range of suitably levelled books, becoming expert at knowing books and matching children to books, doing book introductions well and managing the rest of the class while they are busy with a particular guided reading group (Calkins, 2001; Diller, 2003). Guided reading cannot take place successfully in the absence of systematic observations procedures, theory-driven instruction, informed decision making and a wide range and variety of sets of levelled texts (Clay, 1991a; Fountas & Pinnell, 1996; Hornsby, 2000). For these reasons, careful consideration was given to the selection of
assessment procedures (i.e. the observation survey) and appropriate books on a gradient of difficulty for guided reading purposes in the literacy project.

2.11.6 Independent reading

Calkins (2001:9) observes that if educators want children to learn to "compose richly literate lives" in which they take ownership of reading, they need daily opportunities to read books that "they choose for themselves for their own purposes and pleasures". To whole language educators, classroom libraries are a 'bottomline' condition. Booth's advice (cited in Calkins, 2001:31) to hundreds of teachers demonstrates this belief aptly: "If you are a teacher and you have no classroom library, sell your shoes. Wrap newspaper around your feet. People will see you, shake their heads, and say, 'Ah! There goes a teacher.'"

Numerous researchers have pointed out that many children do not become avid readers because they do not have access to books (Hornsby, 2000:46; Calkins, 2001:27; Diller 2003:35). Pachtman and Wilson (2006:682) and Krashen (1998b:426-427) endorse this argument. They recommend that the most feasible option for developing literacy is the provision of a rich supply of high-interest books in classrooms. In Krashen's view, "better libraries mean more access to reading and more reading means better literacy development" (1998b:427).

2.12 LITERACY LEARNING CENTRES AND TASK MANAGEMENT BOARDS

A greater emphasis on small group teaching, such as guided reading groups, creates a need for effective classroom management and clear classroom routines, because children who are not in guided groups will be working independently or collaborating with their peers without recourse to the teacher. Literacy learning centres and task management boards provide teachers with an effective means to manage children within a structured classroom environment (Davidson, 1991a; Cummings, 1996; Hill, 1999; Diller, 2003).

Learning centres are areas for small group and independent work not directly facilitated by the teacher. They free the teacher to work uninterruptedly with at least one small group per day, thereby ensuring that each small group receives a fair share of the teacher's time (Davidson, 1991c:50). To make sure that learning centres do not just become places for keeping children busy while the teacher is occupied elsewhere, the teacher needs to plan work at the centres carefully (Hill, 1999:60). Activities at the centres should be linked to other parts of the literacy curriculum and should provide opportunities for learners to practise and extend
the knowledge and skills they gained from shared and guided reading sessions (Cambourne, 1988, Hill, 1999).

Task management boards are useful classroom management tools that even young children can use (Davidson, 1991c:50-51; Cummings, 1996:14). They cover the teacher's daily planning, e.g. agenda, organisation of groups and resources. The task management board shows blocks of time and the choices (at the centres) that are available for children during those times, including the time in teacher-guided groups. The activities and the children's names are on removable cards (see Addendum A-iv). This enables the teacher to match children to activities and to change groups throughout the day when necessary (Davidson, 1991c:50-51). There are a number of benefits attached to using literacy centres and task management boards (Davidson, 1991c; Cummings, 1996; Hill, 1999; Diller, 2003). For example, they teach children the following:

- self-management skills;
- ownership and independence from the teacher;
- responsibility; and
- collaboration and social skills.

2.13 SOME PERSONAL REFLECTIONS

As a result of the literature review, my own position and understanding underwent some significant transitions, which altered the research 'lens' through which I viewed the literacy intervention discussed in Chapter 3. At first, I thought of the intervention as a fairly straightforward matter of replacing one instructional programme, a phonics programme, with a balanced literacy programme, which combined the best of whole language and phonics. However, insights gained from theorists such as Clay (1975-2006), Weaver (1994; 1998d), Fountas and Pinnell (1996), Calkins (2001; 2006) and Lyons (2003) shifted my thinking away from a programme-orientated view to an understanding of literacy as a philosophy of teaching and learning (see 2.8). Weaver (1994:331) quotes Watson who emphasises this point in relation to whole language: "Whole language is not a program, package, set of materials, method, practice, or technique; rather, it is a perspective on language and learning that leads to the acceptance of certain strategies, methods, materials, and techniques".
Consequently, my reasons for selecting certain "methods, materials and techniques" and for advocating literature-rich learning environments were based on their 'agreement' with my beliefs about the nature of literacy learning and cognitive development.

As I gained knowledge of cognitive-processing accounts of early literacy acquisition, my thinking underwent another significant shift, which deepened my research interest in naturalistic observation as a means of capturing and interpreting the cognition underlying the literacy behaviours of individual children (DeFord, 1991; Lyons, 2003; Clay, 2006). This was the main reason for the incorporation of Clay's observational methodology in the intervention. Moreover, Clay's conceptualisation of literacy learning as a tentative and flexible "processing system under construction" shifted my focus from the phonics-whole language dichotomy to an alternative description of progress in literacy as the learner's "power to go beyond prior performance" by temporarily mobilising cell assemblies (i.e. working networks or interacting groups of neurons) in the brain to perform a particular literacy task at particular point in time (Clay, 2001:294). According to Clay (2001:294), the latter description provides a means of moving beyond the divisive polarity inherent in conventional top-down (e.g. whole language), bottom-up (e.g. phonics) explanations of literacy acquisition. Hill (1999:14) agrees that a dynamic view of development can "erase the either-or dualities" in theories of literacy development:

In the dynamic view of development there are multiple and continuous interactions at all levels of the system from the smallest cell to the wider culture. A dynamic view shifts the focus from a simplistic 'A causes B' to a focus on how a whole system works … In a dynamic view 'actions done in this moment, in turn, set the stage for behaviours in the next second, minute, week and year' (Hill, 1999:14).

The intervention provided me with an opportunity to test and refine my theoretical perspective in local classrooms. The experience I gained gave me the confidence to move away from traditional phonics-first theories and paved the way for a collaborative, international literacy intervention aimed at providing street and at-risk children with alternative approaches in literacy education, which can make valuable contributions to school and research communities (see 5.6). Finally, in reflecting on changes that have occurred in my understanding of literacy acquisition as a result of the intervention, further study and research, I find that the ideas I gained from cognitive processing views of reading still form the foundational core of the theories I work with (Clay, 1975-2006; DeFord, 1991; Fountas & Pinnell, 1996; Calkins, 2001 and 2006; Lyons, 2003).
2.14 SUMMARY AND CONCLUSION

In this chapter, I sought a theoretically accountable approach to support an early literacy intervention for English additional language learners. Given that schooling is mandatory and that in South Africa it is characterised by poor literacy levels and high drop-out rates, I believe that educators, researchers and politicians have to take up the ethical and moral challenge posed by Clay (2001) to ensure excellent literacy instruction in the first few years of school before children begin the pattern of turning away from school. My personal views about literacy learning and my observations in many local classrooms made me question the heavy phonics and word identification focus in teaching reading. Although I was drawn to whole language alternatives, the fierce partisanship in debates on beginning reading instruction concerned me and I needed confidence to trust the research base on alternative approaches. After studying the literature, I positioned myself in a cognitive constructivist framework and adopted a dynamic approach that makes allowance for professional growth. In applying my theoretical beliefs in practice, I adopted a balanced approach, which immerses children in rich language experiences (including and reading and writing) from the start of literacy learning and teaches letter, word and sentence knowledge within the context of reading and writing continuous texts (Ray & Cleaveland, 2004: Calkins, Hartman & White, 2005). In addition, I incorporated Clay's assessment procedures to enable a more individualised and informed approach to instruction. Thus, the literature review provided me with a sound theoretical base and gave me the impetus to implement the literacy intervention described in the next chapter.
CHAPTER 3

RESEARCH DESIGN
AND PROCESS

3.1 INTRODUCTION

In the interests of achieving the democratic ideal (i.e. equal education for all) in education, I argue that educational policy makers and literacy theorists should see improving literacy instruction in primary schools as a priority (see 2.4). In a similar vein, De Vos, Shulze and Patel (2005:13; 21) make the case that research aimed at bringing about social change and enhancing human potential should be an international and national priority. They also underscore the importance of theoretically accountable research based on the values of professionalism. In this chapter, I describe an early literacy intervention that sought to improve literacy outcomes in selected primary classrooms by combining research, theory and practice. The values of professionalism, namely commitment to public service, ownership of an integrated, theoretical body of knowledge and professional autonomy, played an integral role in the type of research problem I selected and also shaped my research design (De Vos et al., 2005:9-25).

Authors such as Nunan (1992:55), De Vos (2005e:35-40) and Huysamen (1994:2) set two conditions for professional research to qualify as a scientific endeavour. The first is that researchers should explicitly identify conceptual frames and articulate their biases early in their studies. As explained in 3.2, this is important because the researchers make assumptions based on their beliefs, which 'colour' their interpretations of research data. Hence, two researchers viewing the same data through different conceptual lenses may draw different conclusions. The second condition is that a research project should be conceptually linked to one or more theories, because of the universally valid nature of theories. To meet these two conditions, I use Mouton's (2001:137-139) "Three world's framework" in the next section to articulate the conceptual and theoretical framework of my study.

3.2 THREE WORLDS FRAMEWORK

The "Three worlds framework" distinguishes between three hierarchical levels, namely real-life problems that are located in World 1, research problems that are located in World 2 and
philosophical and ideological considerations that belong in World 3. The three levels of the framework indicate that a real-world problem (World 1) can only be 'translated' into a research problem by making it the object of systematic enquiry and reflecting on it in the light of theoretical bodies of knowledge (World 2). Theoretical bases of knowledge have links with certain epistemological positions (World 3). Consequently, as Cohen (1996:122-123) argues, the epistemological assumptions of researchers will determine whether they contribute to conservative or progressive traditions of knowledge. Their epistemological assumptions also influence the methodological paradigm within which they operate (Mouton, 2001:138).

The next section elaborates on my conceptual framework and explains how my commitment to community service led to the implementation of the theoretically grounded literacy intervention mentioned earlier and to a research design that was based on the principle of professional autonomy (Clay, 2001:5; De Vos et al., 2005:9).

3.2.1 Pragmatic framework: A World 1 problem

My research addresses a real life (World 1) problem – the unacceptable levels of illiteracy in state schools (see 2.4). After observing literacy instruction in many local primary schools, I was struck by the discrepancy between what I observed in actual classroom practice (see 4.4) and what I understood from the research-base on early literacy to be good practice (see 2.7). In particular, many teachers adhere to traditional phonics and sight word-based models of literacy instruction and seem to lack knowledge of alternative, research-based methods that could result in better reading instruction. The different levels in Mouton's (2001:137-141) "Three worlds framework" appeared to offer a means of explaining these phenomena. To clarify, at grassroots level (World 1) teachers use a phonic method because their teachers used this method. Phonics is supported by a strong behaviouristic learning theory (World 2) and many children (and their teachers) have learned to read that way. It is grounded in 'scientific' views of language (e.g. because English is alphabetic, phonics is the only 'scientific' way to teach it) and it is supported by a conservative view of knowledge that, to use Cohen's (1996:122) words, "respects academic and divine authority" (World 3). Skills-orientated phonics instruction has often become entrenched in traditional educational systems and conservative modes of thinking, while whole language is often associated with progressive worldviews underlying outcomes-based education (Weaver, 1994:293-298; Naicker, 1999:95). In South Africa, for example, skills and content-based methodologies are associated with Fundamental Pedagogics and a "functionalist paradigm", whereas "transformational outcomes-based instruction" is associated with a "Radical Structuralist framework" (Naicker,
In keeping with this binary approach, the new progressive literacy curriculum in South Africa, which Bloch (2000:33) states is "in complete accord" with whole language principles, has been designed to replace conservative, skills-based instruction (Naicker, 1999:95; Report of the Review Committee, 2000:10-12). By mandating adherence to the new curriculum, reformers assert that they intend to bring about a paradigm shift from the former Calvinist and Christian National Education system to a new, liberating belief system on the grounds that "the Calvinist notion of the child as born in original sin and thus deficient … contradicts the tenet of OBE and the general ethos of Curriculum 2005" (Naicker, 1999:76). In advocating a "radical restructuring of consciousness" that conforms to ideological paradigms and progressive traditions of knowledge without respecting divisions in culture, identity and personal opinion, reforms may be prolonging the "persistent, popular ideological polarisation around education" (Cohen, 1996:123). I agree with Clay (1991a:3) that ideologically driven reading debates are divisive, "for people feel obliged to take up opposing positions" on matters such as phonics and whole language.

Underlying my intervention programme was a conviction that the kinds of literacy curricula and teaching approaches learners are exposed to in the early years have a considerable influence on the cognitive processing systems that they construct. I therefore saw the need for research aimed at improving early literacy instruction. The intervention, therefore, embodied a commitment to contingent teaching (i.e. teaching that emphasises the transactional nature of reading in which a teacher makes instructional decisions based on careful observation of what individual children can do within a balanced, whole language framework (i.e. one that balances instruction with learner needs and incorporates phonics instruction within authentic learning situations) (see 2.11.4).

My literature review indicated that particular approaches to early literacy in other parts of the world, such as the Literacy collaborative which was started in 1998 at Ohio State University, and small group instruction based on Clay's theories and observational methodologies, were very successful in raising literacy levels in primary phase education (DeFord, 1991; Fountas & Pinnell, 1996; Dorn et al., 1998). Although I found the theory persuasive, I had no tangible evidence of how successfully it would translate into actual practice in South African classrooms. Given my desire to use best practice, as an educator of primary phase teachers and a literacy consultant on sponsored projects, such evidence was essential.

Delport and De Vos (2005:54-55) recommend that, instead of being "only action orientated", researchers should be motivated to match data with data from prior instances of comparable
practice. Linking data to previous data leads to deliberate knowledge building, because it promotes "an abstraction and generalising process" (Delport & De Vos, 2005:54-55). Even though I realised that the small amount of data from an exploratory study could not be generalised across settings, I nevertheless felt it could provide the direction for further research and knowledge building (see 5.6). As researchers such as Clay (2001:3) and De Vos (2005b:395) have argued, small research studies could collectively contribute to the existing body of knowledge in the field, which could lead to a deeper understanding of reading acquisition and hence to the alleviation of the problem of illiteracy.

My research rested on two assumptions: first, that high levels of illiteracy could be reduced through theoretically accountable teaching aided by good reading materials, lesson plans and ongoing classroom support; and, second, that both teaching approaches and the literacy curricula significantly influence learners' construction of cognitive systems.

3.2.2 Theoretical framework: World 2

In my literature review, I studied the question of how best to teach beginners to read by comparing and investigating the theoretical underpinnings of traditional methods, such as phonics-first, and alternative approaches, such as whole language, in order to construct my own theoretical explanation of reading acquisition. Reviewing differences in conceptualisations of reading is important because the assumptions researchers have about reading have implications for the ways in which they conduct and interpret research (McEneaney et al., 2006:117).

The review revealed that research methodologies in early literacy acquisition often follow a binary approach, i.e. they are divided into traditional approaches that assume 'within reader' abilities and alternative approaches that locate reading acquisition within broader social and instructional contexts (Denton et al., 2006:8; Fuchs & Fuchs, 2006:92; McEneaney et al., 2006:117). The traditional view has given rise to categorical models of reading (which focus on discrete categories, e.g. visual perception, word recognition and phonics, and are supported by conventional information processing models) as well as to statistical models (which view readers as making up a normally distributed curve, with most readers falling in the middle of the distribution and small numbers of readers in the tails) (Denton et al., 2006:8; McEneaney et al., 2006:119). Whereas research methodologies based on statistical and categorical models are grounded in statistics and scientific studies of the brain, alternative research methodologies emphasise the "individual character of responsive teaching" and endorse a
"transactional view of ability" (McEneaney et al., 2006:122). This view assumes a complex theory of teaching that "can never be mastered; it needs to be constantly developed and refined in the context of working with children" (McEneaney et al., 2006:123).

De Vos (2005a:357) emphasises the need for researchers to use designs that are methodologically appropriate to their investigations. In pursuing my research interests, I needed an appropriate and flexible research design that would allow me to explore the implications of "complex theories" on literacy learning and to use an unconventional observational methodology to observe, capture and interpret "change over time" in the cognitive networks that learners were in the process of constructing during reading (Clay, 2001:5). Given time and budgetary constraints, my research design combined elements of different methods (i.e. qualitative and quantitative) and aspects of different types of case studies (many to single-subject case studies, descriptive case studies). The case(s) under study involved teacher-learner interactions and determining the progress of learners at individual (6-8 learners in each class), grade (grades 1-4) and cohort level (a whole group of 64 EAL-learners and a small group of 8 grade 1 learners in an English mainstream class). Although all the learners in each class participated in the literacy intervention, the research monitored the progress of only 72 learners (i.e. 64 learners in grades 2-4 and 8 learners in grade 1).

3.2.3 Ideological framework: Key concepts from World 3

Cohen (1996:123) points out that educational reforms can be read as an ongoing argument between conservative and progressive ideologies, which results in different views of knowledge, authority and instruction (De Vries, 1978; Weaver, 1994:296; Cohen 1996:125; Naicker, 1999:76). Within this binary approach to research, methodology is organised around two distinct traditions, quantitative and qualitative research, each of which assumes alternate worldviews. The one tradition links to an epistemology in which truth is deemed to have objective, external existence, whereas the second holds the point of view that truth is subjective and negotiable, depending on the psychological, social and cultural perspectives and contexts in which data are embedded and observed (Nunan, 1992:3; Huysamen, 1994:18).

I agree with Cohen (1996:125) and Clay (2001:3) that, in linking research traditions to worldviews and issues such as 'values' (see Elmore et al., 1996:89), religion (see De Vries, 1978; Weaver, 1994:296; Naicker, 1999:31; 76) and 'absolute truth' (see Nunan, 1992:10; 55), research debates have intruded values that are family prerogatives and entrenched educational reforms in the realm of faith, which, to date, have only served to provoke controversy and
instil opposition to reforms. As Cohen (1996:124) points out, reformers and researchers should work towards de-politicising and de-popularising ideological polarisations in education.

My research was not conducted using a binary Fmodel of either ideological assumptions or research methods or instructional approaches in which opposing values are placed on competing ends of a continuum. As Robbins (1986:247) points out, adherence to the continuum model inevitably leads to "a zero-sum game" in which one side's victory is the other side's loss. Therefore, in considering qualitative methods I did not feel obliged to make "an anti-positivist confession", and in utilising quantitative methods I did not thereby submit to a "positivist initiation rite" (Huysamen, 1994:165). From this, it is evident that my research was not undertaken from a methodologically purist stance. I do not believe that one research tradition has more scientific status than the other does, because both research traditions are prone to subjective human assumptions and misrepresentations (Gish, 1990:4-5; Bell, 2006:38-40).

In sum, I agree with Clay (2001:3) that the methodological purist stances and ideological polarisations in education are divisive and unhelpful. I share Weaver's (1998c:xvi) concern that the 'back to basics' reform movements could perpetuate an either-or, phonics versus whole language perspective, which ignores the well-researched base on alternative models or reading and learning (see 2.1). I also endorse McEneaney et al.'s (2006:121) stance that "characterisations of science solely in terms of traditional experimental and quasi-experimental methodologies create unproductive divides between research and practice".

3.3 RESEARCH DESIGN AND METHODOLOGY

Having clarified the conceptual frameworks underpinning my approach to language teaching and research methodologies, I describe the research design and methodology, including the planning and implementation phases of the literacy intervention described in this section.

3.3.1 Research domain and boundaries

The research domain was early literacy (see 2.1). The literacy intervention was supported by theories of cognitive processing that derived primarily from research conducted by Clay (1989; 1991; 1993; 1999) and a group of theorists who understand the conceptual base underlying Clay's work (see 2.7). In addition, it incorporated insights and instructional approaches from whole language philosophy (see 2.7-2.9). As mentioned in 3.2.2, the research data were limited to 72 learners.
3.3.2 Aims

The literacy intervention aimed to change reading instructional practice from behaviourist, phonics-based instruction, using skills-based literacy materials to instruction more consistent with cognitive-constructivist approaches and materials supporting whole language instructional framework. The research aimed (a) to describe acts of cognitive processing in ways that could inform teachers' decision-making based on careful observations of what children can or cannot do; (b) to assess learners' progress in book levels and on literacy tasks; and (c) to record and analyse 'change over time' in the early literacy behaviours of primary phase readers and writers.

3.3.3 Justification for research

The primary justification for my research was the urgent need for theoretically accountable early literacy interventions that have potential for improving literacy outcomes in primary schools in the Western Cape (Flanagan, 1995:xii; Bloch, 1997:3; Coombe et al., 2000:12; Prehn, 2000:4; WCED, 2005:10). In 2.4 to 2.5, I made the point that many learners leave school because traditional methods of instruction fail to meet the needs of children from a low economic context, who lack sufficient prior experiences with print. If learners leave school early and have little English proficiency, their future career prospects and their opportunities to participate fully in society may be jeopardised (Alexander, 2000; Bloch, 2006). All this adds urgency to the need for improving the teaching of both EAL and literacy at primary level (WCED, 2005:10; Bloch, 2006:6-7). The literacy intervention has strong potential for reducing the possible negative effects of low-SES variables (e.g. lack of early literacy experiences) on learners' progress in English literacy learning if teachers match, as closely as possible, their interactions and their selection of learning materials with the learning pace and strengths of individuals or groups of learners (Freeman & Freeman, 1994:572; Clay, 2001:279). Clay (2001:208) contends that the "interactive option" offers the greatest potential for reducing the incidence of literacy learning problems of individual children, because, although teachers do not have any control over their learners' prior home experiences, they do have a large measure of control over the learning materials they select and the moment-by-moment instructional interactions with their learners (see 2.9).
3.3.3.1 Opportunity to use Clay's observational methodology

The research offered an opportunity to use Clay's (1993a) research methodology for gathering observational data on changes that occur over time in the literacy behaviours of children engaged in reading and writing continuous texts. (I obtained Clay's permission to use the observational methodology that she developed and I applied it meticulously—see Addendum A-i.) The value of using her research methodology lies in the unconventional research 'lens' it provides for obtaining and analysing data on both learners' processing behaviours and their progress. Teachers can use the observational data to inform their instruction and to place learners on appropriate texts. Additionally, obtaining data of each learner's strengths and weakness enables teachers to interact effectively with individual learners in the same class who are at different levels of literacy learning.

3.3.3.2 Sponsorship for research

Another justification for conducting research in early literacy learning in English was that I received two sponsorships for undertaking research in teacher training and development work in three schools in the Western Cape. The first sponsorship was provided by a private business concern that offers support to a primary school on their farm premises. They wanted to upgrade the EAL resources and instructional methods in the school. An initial survey showed that the school's reading materials were outdated (i.e. basal readers published in 1978 and 1981) and unsuitable for accommodating learners at different reading levels. I identified and sourced appropriate materials that could support instructional approaches, such as shared and guided reading. My search led me to contact Shortland Publications in New Zealand, who offered to sponsor research and materials on the literacy project. In addition to providing resources and materials for the farm school, Shortland Publications decided to sponsor two other schools from disadvantaged communities.

3.3.3.3 More observational research needed

Research involving systematic, sequential observation is needed to discover and articulate patterns in observational records that can improve instruction (McCarrier et al., 1996; Calkins, 2001:3-5; Clay, 2001:269). Clay (2001:256) challenges researchers to go beyond discovery under controlled research conditions to develop flexible research designs for improving understanding that will bring about 'life-saving' changes for the young children who are being left behind. In my opinion, research aimed at undercutsing literacy problems
before they have long-term consequences in the lives of children is a most worthwhile endeavour.

3.3.4 Research questions

The following two main research questions with sub-questions were formulated:

1. What progress did learners make on the tasks in *An Observation Survey Of Early Literacy Achievement* (Clay, 1993) (see 3.6) from initial assessment (base-line data) to project exit level?

   1.1 What evidence was there of 'change over time' in the literacy processing behaviours of individual learners on these tasks?

   1.2 What patterns of change in the literacy processing behaviours could be articulated for groups of learners?

2. What changes took place in instructional practices between initial assessment and exit level?

   2.1 Did observations indicate a change in teachers' instructional approaches that conformed to the training and support received?

   2.2 Did the theoretical approach that guided the early literacy intervention hold promise for improving literacy levels of low-SES, EAL learners?

3.3.5 Type of research and design classification

The research was an empirical case study that used primary data that were both numerical and textual (Leedy, 1993:145, Mouton, 2001:144). In keeping with the nature of the data, quantitative methods were used to assess end products (e.g. progress in accuracy scores on books levels) and qualitative methods (e.g. coding and analysis of field notes and descriptive records) were used to describe observed changes in attitudes and teacher-learners interactions. In addition to observation during fieldwork, pre- and post-tests were conducted using Clay's observational methodology (i.e. *An Observation Survey Of Early Literacy Achievement*, 1993), which consists of a number of assessment tasks (see 3.5.2.1-3.5.2.5). The observation survey combines qualitative and quantitative data collection procedures (see 3.7). The data collection methods ensured methodological triangulation (the use of one or more methods of data collection procedures within a single study). Other forms of triangulation in the study were: theoretical triangulation (use of several perspectives, e.g. behaviourist, cognitive processing, constructivist); data triangulation (use of a variety of assessments to ensure data
are observed in more than one way); and investigator triangulation (use of several observers) in the study (Leedy, 1993:139; 143).

I find it difficult to place my study within a standard methodological package. In 3.2.2 to 3.2.3, I outlined some of the reasons for this difficulty, namely my rejection of (a) the binary model of research approaches and the resulting practice of linking methods to irreconcilable ideological assumptions; and (b) the elevation of the natural scientific method as the vehicle for discovering truth, on the one hand, and postmodernists views that all reality is socially constructed, on the other. Confusions and ambiguities within the literature on research methodology itself regarding terminology (e.g. in some instances design refers to an overall plan and in others it refers to experimental designs or formulas), definitions (e.g. case studies are classified and defined differently by different authors), approach (difference in opinion as to whether case studies are predominantly qualitative, quantitative or combination) and scope (i.e. there is no consensus as to what constitutes the scope and boundaries of a case study) also made it difficult to define the study accurately (Nunan, 1992; Huysamen, 1994; Leedy, 1993; Mouton, 2001; Fouché, 2005:272).

My study could be described more aptly as a "hybrid variation" because it fits some, but not necessarily all of the criteria in some of the standard, methodological packages (Leedy, 1993:139). For example, in keeping with the social development priorities of the study, I thought the nature of my research reflected Nunan's (1992:78; 88-89) statement that case studies are particularly suited to research projects that focus on tracing the language development of learners, on enhancing practitioners' understanding of issues associated with their own workplace and on providing feedback for teaching institutions and policy-makers. However, I feel that this classification does not emphasise the central focus of the study, namely its cognitive processing view of literacy progress as well as its constructivist thrust and the links between this and prevention (Clay, 2001:213). In other words, the strength of the study lies in its theoretical knowledge base (i.e. cognitive processing theories) and the application of this knowledge in developing the kinds of lessons that foster self-generative learning that prevents failure.

Largely, the study conforms to a "core endeavour" in intervention research, namely "the utilisation of knowledge" to "enhance or maintain the functioning and well-being of an individual, family, group, community or population" (De Vos, 2005b:394). In gathering and synthesising information, researchers do not need to "reinvent the wheel": it is essential to discover what others have done when planning an intervention (De Vos, 2005b:398-399).
Thus, knowledge acquisition involves identifying and selecting relevant types of knowledge, and using and integrating appropriate sources of information. The study did not develop new approaches or measurement instruments; nevertheless, it was innovative in the sense that it introduced teachers to theories and approaches in early literacy assessment and learning with which they were unfamiliar.

The study involved the following aspects of intervention research: needs analysis and identification of social problem; collaboration with other interested parties; information gathering and synthesis; identification of functional elements of successful models and developing an intervention; implementation in real-life contexts; collecting and analysing data; and disseminating findings, obtaining funding and implementing a longer-term vision for expanding the intervention (see 5.6). It did not use a formal control group. Apart from the difficulty of controlling the variables, there were two reasons for not doing so. The first is that the focus of this study was on the progress of individual learners, not on the group. Second, it would have been unethical to withhold effective literacy instruction from learners (see 2.4).

The aspects involved in the intervention will be expanded upon in the remaining parts of this chapter.

This study may best be described as an observational case study in which I used the criterion of appropriateness to allow me to combine elements of different methods and different types of case studies in a flexible design which suited the data under study as well as my research interests and objectives, i.e. to implement an early literacy intervention aimed at improving EAL literacy instruction (Nunan, 1992:78; 88-89; Huysamen, 1994:18; De Vos, 2005a:359).

### 3.3.6 Planning the literacy intervention

The literacy project was a study undertaken in selected classes in three primary schools in the Western Cape. Building on the insights gained from the literature review, it was designed to deliver literacy instruction based on a coherent theory of how constructive learners process continuous texts in reading and writing (Clay, 1991a; 2001; Fountas & Pinnell, 1996; Dorn & Soffos, 2001b; Lyons, 2003). Due to its cognitive-constructive focus, its thrust was developmental and preventative, rather than item-driven and remedial (Clay, 1991a:45; 2001:236-238; Lyons, 2003:22-23). As mentioned in 3.3.5, the research involved phases of intervention research.

I undertook a literature review to study unsuccessful and successful theories, and to identify best practice. My interest in cognitive, constructivist views (see 2.8 and 2.9) led me to
conclude that a preventative, developmental approach was the best answer to overcoming literacy failure. From my review, I identified the following functional elements of successful models: diagnostic assessment that informs instruction and monitors learner progress; instruction that focuses on constructive learning that encourages the effective formation of cognitive processing systems; a developmental approach; a rich learning environment with an abundance and wide range of high-quality reading materials that support the theoretical underpinnings of the approach; and a consistent framework for literacy instruction. This led to a complete restructuring of the contexts for literacy learning in participating classrooms.

Another task was to identify and select books that supported the theoretical focus underpinning the intervention (see 3.3.7). In keeping with a constructivist theoretical focus, it is critically important to choose a range of materials that are enabling, i.e. it should meet the needs of the weakest to strongest readers in a class and it should "help children to read harder and harder texts with more and more independence" (Clay, 1991a:177). My classroom observation had highlighted an urgent need for books and materials that could replace the basal reading schemes used in classrooms. Although there is a danger that texts can be seen as the focal issue in learning to read (instead of quality of teacher-child interactions), some texts are more facilitative than others in fostering constructive reading.

3.3.7 Materials: Selection and characteristics

Phonics-first reading programmes usually have reading and teaching materials that "support a predetermined sequence of things to be learned" and that "specify a particular path" that all learners must take (Clay, 1991a:177). In contrast to this, some whole language theorists take an extreme view that only authentic literature should be used for literacy instruction, without regard to the complexity of vocabulary or syntax (Waterland, 1985; Weaver, 1994). Neither of these views was adopted for the project. In the light of the intervention's theoretical underpinnings, skills-based materials were clearly inappropriate. The extreme whole language view was also unsuitable, partly because the teachers in the intervention were not expert in supporting learning on literature without any assistance from some kind of gradient of difficulty in the texts (Clay, 1991a:201; Petersen, 1991:119). Secondly, the extreme whole language stance that uses only authentic literature without considering possible discrepancies between the child's oral language and written text "ignores the fact that a particular child may use very simple language that is nothing like the author's" (Clay, 1991a:179). Clay (1991a:195) points out that optimal reading environments that do not control for complexity may be appropriate for high-progress readers, but may inhibit the progress in the poorest
achievers. Since most children in the intervention were not well prepared for literary texts, the whole language advocacy for 'real' literature that disregards any gradient of difficulty was not the preferred starting point on the project. Instead, I decided to adopt a multi-faceted, balanced literacy approach used in New Zealand, which uses different kinds of texts for different purposes, and which individualises by matching learners and books during guided reading. Based on this approach, the intervention planned to include children's own messages in the form of the language experience approach (see 2.11.1); a variety of big books, rhymes and poems for shared reading (see 2.11.3); and a range of 'little' readers (fiction and non-fiction) levelled for guided reading (see 2.11.5).

In selecting levelled books for guided reading in the intervention, there were other important factors to consider (Clay, 1991a:176-201; Petersen, 1991:122; Hornsby, 2000:44). Some of these have been mentioned already, e.g. books that avoid stereotypes and bias, as well as multiple copies of little books that provide learners with a 'sense of story' (Petersen, 1991:122; Hornsby, 2000:44). First, having decided to use levelled guided readers, I avoided an approach that expects teachers to level their own books. In the first place, the project teachers had little experience with children's responses to a variety of new books. Secondly, there was not enough time or available books for creating a gradient of difficulty in a series of reading books. Rather, I opted for reading materials where the developers had determined difficulty based on extensive use of their books in multicultural settings (Davidson, 1991a; Hanifin, 1998; Martin & Hyden, 2006). However, I accepted that the most effective criterion for selecting a particular book is the child's response to it (Clay, 1991a:201). Thus, teachers could assign books to new levels based on their observations of the readers in their classes. The reason for keeping the levels flexible is that there is no simple recipe for assigning a book to a particular level. Good books are creative works, so they vary in style and characteristics within each level (Petersen, 1991). Some books may be more appropriate than others are, depending on regional and cultural differences (Clay, 1991a; Petersen, 1991). For example, at a very basic level, the book *Waves* accommodates the life experiences of children participating in the intervention, because they reside near the coast, while *We ski* is likely to be foreign to the direct experience of all of them.

Having decided on the multi-faceted approach to materials, I contacted the managing director of Shortland Publications in New Zealand telephonically. As mentioned before, she decided to sponsor the research, materials and training in approaches appropriate to the use of various materials (e.g. big books for shared reading, levelled books for guided reading). She
appointed their literacy consultant, Ms Jamison, to assist me. Ms Jamison from Shortland Publications and I combined various reading series to meet the needs of the learners on the project. For shared reading, we chose big books from the *Literacy links* collection (Shortland Publications, 1991). The levelled guided readers (which included twenty-four non-fiction titles) and interactive story cards for emergent to early/fluent (i.e. transitional) readers came from the *Story tellers* collection (Shortland Publications, 1997). Finally, we added a variety of high-interest books (topics included science and technology, people and places, sport and action, myths and misconceptions) from the *Wild cats* (1998) collection for fluent readers.

### 3.3.8 Schools: Selection and characteristics

Three primary schools in the Western Cape participated in the sponsored research project, which was aimed at improving the literacy levels of EAL learners. The three participating schools were Afrikaans medium schools that served historically disadvantaged children from low socio-economic backgrounds. Because the project learners were in Afrikaans-medium classes, they started learning English more formally only in grade 2. For this reason, the literacy project was implemented in grades 2, 3 and 4. However, in the year that the project was implemented, one of these schools launched an English-medium stream, starting with grade 1. Because most of the learners in the grade 1 class were not English speaking, they were included in the project to improve their English proficiency at the headmaster's request.

Thus, the project was implemented in grades 2 to 4 in two of the schools and in grades 1 to 4 in one school. The average age of the learners was grade appropriate, hence the average age ranged from seven years in grade 1 to ten years in grade 4. Class size varied on average from 25 learners per class in school A to 50 learners per class in schools B and C. All the learners in all the grades received the literacy intervention. Initially, ten learners from each classroom were selected for pre- and post-tests, but time constraints reduced the number of learners who could be re-assessed at post-testing to between six to eight per class.

There were no library corners in any of the project classrooms. School B was the only school that had a school “library” i.e. a room with shelves, which contained an odd assortment of books that were donated to the school. It did not have enough space for learners to sit down and read and there was no formal system in place by which learners could take books out to read. Most of the time it was locked. According to the staff this was so that learners’ could not steal books (or read them).
The key information on the learners participating in the literacy project is summarised in Table 3.1.

3.3.9 Learners: Selection and characteristics

The sample of children for which complete data were obtained consisted of 72 learners, aged between seven and ten years (appropriate to grade level, i.e. grades 1 to 4). To facilitate the management of data, these learners were divided into two groups. The first group was the English First Additional Language group, which was comprised of 64 learners from grades 2, 3 and 4, drawn from schools A, B and C (see Table 3.1). The group consisted of 29 boys and 35 girls. Forty-seven of these learners were Afrikaans speaking and 17 were Xhosa speaking. Due to time constraints, the number of learners to whom pre- and post-tests were administered varied from six to eight per grade.

The second group consisted of the eight grade 1 learners from School B, which was running an English-medium grade one class (see school B in Table 3.1) for the first time. Although the learners were not English speaking, because of their parents' decision, they received instruction in all their learning areas through the medium of English. In the group selected, there were four boys and four girls. Five were Afrikaans speakers and three were Xhosa speakers.

The learners from both groups were selected by their classroom teachers according to informal criteria, i.e. two learners from the high, three from the middle and three from low-progress groups.

3.3.10 Teachers: Gender and home language

Nine teachers (eight female and one male) participated in the project. All the teachers were qualified primary school teachers. With the exception of one, all had more than five years of teaching experience. However, none of them had any experience with the teaching methods that were adopted on the project. Seven teachers had a three-year college teaching diploma (OD III) and two had a four-year Higher Education Diploma (HOD IV). They were between 30 and 50 years of age. They were all non-mother-tongue speakers of English.
### Table 3.1. Information on learners in the literacy project

<table>
<thead>
<tr>
<th>Number of schools</th>
<th>Type of school community</th>
<th>Medium of instruction in school</th>
<th>Grades</th>
<th>Language learning area: English: First (1st) or First add. (1st A)</th>
<th>Number of learners pre- and post tested</th>
<th>No. of girls</th>
<th>No. of boys</th>
<th>Home language</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No. of Afr</td>
</tr>
<tr>
<td>School A</td>
<td>Farm school in a rural community</td>
<td>Afrikaans</td>
<td>Grade 2</td>
<td>1st A</td>
<td>8</td>
<td>3</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 3</td>
<td>1st A</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 4</td>
<td>1st A</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>School B</td>
<td>State school serving low-SES communities</td>
<td>Afrikaans</td>
<td>Grade 1</td>
<td>1st</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 2</td>
<td>1st A</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 3</td>
<td>1st A</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 4</td>
<td>1st A</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>School C</td>
<td>State school serving low-SES communities</td>
<td>Afrikaans</td>
<td>Grade 2</td>
<td>1st A</td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 3</td>
<td>1st A</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grade 4</td>
<td>1st A</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
3.4 PROJECT IMPLEMENTATION: PHASES AND SCHEDULES

The intervention began formally on 5 April 1999 and ended on 26 November 1999 (no training or fieldwork was done in schools during the June/July and September holidays). First, permission was obtained from the Western Cape Education Department (WCED), and school principles and staff agreed to implement the intervention and to conduct research (see Addendum A-ii). The key role players on the project were the researcher, her promoter, who headed the research team, Ms Jamison – the literacy consultant representing Shortland Publications in New Zealand, and three learning-support specialists and a learning-support supervisor delegated to the project by the WCED. The project was administered as follows:

The (WCED) LSEN advisors were responsible for assessing learners, providing teachers with support and for conducting formal observations during June and September in their respective schools. I did the pre- and post-testing in conjunction with the learning-support specialists. I also observed lessons, provided teachers with support, and met with the LSEN advisors to discuss training, observation and assessment results.

The research was conducted under the leadership of my promoter and was managed in four broad, overlapping phases: training, pre-testing, classroom support, and observation, post-testing and evaluation.

Phase 1: Training (April 1999)

Training in instructional approaches, materials and assessment (i.e. using Clay’s (1993) An Observation Survey of Early Literacy Achievement) took place during April, 1999. As someone who was thoroughly familiar with the materials and an experienced teacher trainer, Ms Jamison was eminently suitable to present a one-week intensive training course for teachers and the WCED learning-support specialists at the University of Stellenbosch. The course covered training in the main instructional approaches and the use of materials in each of the approaches, i.e. language experience, shared reading and writing, guided reading, word level work and management of literacy instruction in the classroom (see 2.13). After she had completed the training, she visited each of the project schools where she observed lessons, did demonstrations and provided the teachers with in-service support (see the photo gallery in Addendum G). As mentioned in 3.3.7, Ms Jamison also helped with the selection of materials for the project. She returned to South Africa in November 1999 with the management team of Shortland Publications to evaluate the project on behalf of the project sponsors.
During the rest of April, 1999, I trained the learning support specialists, who were experienced test administrators for the WCED, to administer the assessment tasks in *An Observation Survey of Learning Literacy Achievement*. As mentioned earlier, I also acted as a test administrator. Each learning support specialist was provided with *An Observation Survey of Early Literacy Achievement* (1993) guidebook, which clearly outlined all the assessment tasks, administration procedures and trainer responsibilities. The strict use of standard assessment tasks and standard administration procedures increased consistency across observers.

**Phase 2: Pre-testing of learners’ early literacy behaviours using Clay's (1993) An Observation Survey Of Early Literacy Achievement (April to mid-June, 1999)**

Eight learners from each class were pre-tested to obtain baseline data of each learner. The assessment data served the following three functions: The first was for comparative purposes, i.e. each learner's pre-intervention assessment data were compared with his/her post-assessment data at the end of the project to monitor progress. The second function was for grouping, i.e. initial baseline data were used to match learners to reading texts and to group learners on similar books for guided reading (Petersen, 1991:122-124; Hornsby, 2000:64-66). The third function was for instructional purposes, i.e. teachers had access to the data that they could use to inform their instruction (Clay, 1993a:16-19; Hornsby, 2000:64).

**Phase 3: Classroom support and observation (mid-June to September 1999)**

The third phase was the implementation and fieldwork phase. During this phase, the qualitative observational data were obtained. Throughout this phase, the teachers implemented the following approaches in their classrooms: the language experience approach; shared reading/writing; and guided reading (see 2.11-2.13). Each teacher received a grade appropriate teacher's manual with daily lesson plans that served as guidelines for his or her own lessons, and an organisation chart for managing the literacy programme (see Addendum A-iii for lesson examples from the teacher's guidebook). Fifty minutes per day was set aside for literacy. Twenty minutes per day were dedicated to shared reading and writing. During shared reading, each teacher worked with the whole class, using a 'big book' to engage learners in the reading task and to demonstrate reading/writing strategies and skills by explicitly demonstrating concepts about print (e.g. directionality and word boundaries); building a sense of story; demonstrating the processes of reading extended text (e.g. the ability to predict, question, clarify, infer); reading aloud with enthusiasm and enjoyment;
inviting the learners to participate and behave like readers; and building a body of known texts that children can use for independent reading and as resources for writing (Davidson, 1991a:24-26; DePree & Iversen, 1994:34-37; Fountas & Pinnell, 1996:22) (see 2.11.3-2.11.4).

In shared writing, the teachers 'shared the pen' with learners while composing texts or investigating word level work such as spelling patterns. During shared writing, teachers demonstrated how writing works, drew attention to 'hearing and recording' sounds in words, to words and to spelling patterns. Teachers also recorded children's ideas and thus created written language resources for classroom use. Once a week, the shared reading/writing timeslot was replaced with a language experience lesson in which learners participated in and wrote about a shared experience or event (e.g. making popcorn, visiting the apple factory on the farm school) (see photo gallery in Addendum G). The rest of the fifty minutes for literacy learning was used for guided reading and work at the learning stations. During guided reading, the teacher worked with one to two small groups of 6 to 8 learners per day. Each learner had an individual copy of the same text, which had been selected to match the reading level of the group. The teacher's task was to introduce the text to the group of learners and to support the learners in their efforts to read the whole text quietly and independently. While the teacher was busy with a guided reading group, the rest of the class worked either independently at their desks or at learning centres, which provided for a range of activities related to reading and writing.

All the project teachers were introduced to task management boards (TMBs). The task management board is a large chart containing name cards of groups of children and icons of a variety of tasks that are available at different learning stations. The group name cards are matched with icons. Learners read the TMB to see which task they have been assigned to (see Addendum A-iv). The group name cards can easily be rotated to a new set of activities each day. The TMB is an optional organisational tool. Three of the project teachers made use of them. The others said that they had a lot of new learning to do and they needed more time to build the TMB into their classroom routine and to familiarise themselves and the children with its use.

Phase 4: Post-testing (October to November, 1999)

This phase was dedicated to post-testing to monitor learner progress, data analysis and evaluation to assess the value of the research and the implications of this for future planning.
3.5  COLLECTION OF TEACHER AND LEARNER DATA

De Vos (2005d:334) contends that the purpose of the study will dictate the extent of data collection, analysis and reporting. The purpose of the study was to obtain both quantitative and qualitative data on the following:

- Two different types of learner progress (test scores and processing behaviours) on a number of literacy tests (quantitative and qualitative data);
- Changes in teachers' instructional approaches and teacher-learner interactions (qualitative data); and
- Changes in literacy processing behaviours of individual learners for instructional purposes and for comparison with similar studies elsewhere (qualitative data).

Consequently, the observation survey was the chief tool used in the study because it allowed me to collect both qualitative data (processing behaviours) and quantitative data (test scores) on learners' literacy performance.

3.5.1  Rationale for using An Observation Survey Of Early Literacy Achievement

Collecting data on progress in terms of scores (quantitative) and processing (qualitative) behaviours of individual learners on literacy tasks required suitable measurement instruments for evaluating each learner's responses to classroom reading and writing before and after the literacy intervention. Assessments that were suitable for the purposes of my research needed to be objective and to give educators accurate information on the needs of individual learners.

Standardised measurements satisfy the conditions for objectivity, but they are unsuitable for monitoring individual progress and for tracking early transitions in literacy behaviours that could direct the design of instructional programmes because they are based on norms or average scores and not on individual data (Ysseldyke & Algozzine, 1982:140; Clay, 1993a:4). Moreover, based on their extensive investigation into widely used measurement instruments, Ysseldyke and Algozzine (1982:140) have exposed the shortcomings of tests commonly used in education. Although their investigation was undertaken 17 years prior to this research study, it emphasises the inadvisability of basing instructional decisions on traditional forms of assessment.

According to Gnagey Short (1991:101-104) and Clay (1993:7), measurement instruments on which instructional decisions can be based should meet the following criteria:
• Use of standard tasks;
• Provide a standard way of administering and scoring the task;
• Offer a reliable means of making observations and comparisons; and
• Provide valid measures of authentic literacy activities (i.e. tasks that simulate real world tasks so that the observations relate to what the child is likely do in the real world for this establishes the validity of the observation).

Clay's *An Observation Survey Of Early Literacy Achievement* (1993) satisfies not only the above criteria, but also others, which were important to my specific research purposes.

First, Clay's observational and instructional methodology has an established research base and has been tested and evaluated in different countries over a period of 25 years (DeFord, 1991:9-39; Iversen & Tumner, 1993:112-126; Clay, 2002:59-65). Thus, the use of the observation survey contributed to the overall soundness of the study.

Second, the observation survey tasks were designed to provide educators with continuous feedback to guide their instructional decision-making and to enable them to record the progress of individual students in a systematic way. Moreover, the observation survey tasks were suitable for use by busy teachers in their day-to-day classroom activities.

Third, they fulfilled the criterion of the new South African assessment system in that they represented a shift away from traditional assessment testing (i.e. standardised, norm-referenced tests) to continuous, criterion-referenced assessments (WCED, 1997:13; Naicker, 1999:111).

Fourth, the observation survey contained a number of different tasks. Consequently, the use of several different literacy measures made the data more trustworthy and provided teachers with a greater measure of confidence that their instruction was supporting their learners' progress.

Fifth, the systematic nature of the tasks in the observation survey avoids the pitfalls of too much subjectivity on the one hand and too much objectivity on the other, such as the following:

• Observation concurrent to teaching;
• Casual or subjective observation;
• Judgemental conclusions based on remembered events from fleeting observations;
• Over-reliance on measurement theories based on ability scores and standardised tests; and

• Readiness testing (as opposed to the view that all children are ready to learn and just need opportunities to do so) (Clay, 1993a:16).

Sixth, Weaver (1994) and Hornsby (2000) distinguish between an additive model of reading progress and a transformational model. In an additive model, progress is reported as quantitative scores, whereas in a transformational model, progress is demonstrated in variables such as integrating different language cueing systems, mobilising several resources for problem-solving a task, and monitoring and self-correcting errors. The observation survey tasks test both additive and transformational variables. Observation survey tasks were used on the project in a pre-test, post-test design to obtain quantitative data in the form of test scores that record individual children's progress, e.g. the correct number of phonemes, letters and words obtained in each test, and qualitative data on transformational variables, i.e. changes in each learner's developing control over concepts.

3.5.2 Description of observation survey tasks

The five measures from the observation survey tasks are described in detail in the guidebook: An Observation Survey Of Early Literacy Achievement (Clay, 1993) (see Addendum A-v for an example). For this reason, only a brief description of each measure is provided here.

3.5.2.1 Running records

The measure for observing oral text reading on the project was the Running record. This measure assumes that there is a gradient of difficulty in the texts used for reading instruction and assessment. A reader's score and appropriate book level was determined by the highest level on the scale that he or she could attempt with 90% or more accuracy (i.e. no more than one error in every ten words). The running record also provides information of the reader's strategies and processing behaviours on running texts, i.e. repetitions, self-corrections and cue systems. The running records were recorded, analysed and scored according to the codes and conventions used for recording reading behaviours outlined by Clay (1993) in the observation survey on pages 27-30 (see Addendum A-vi).

The quantitative data in the running record measure enabled us to provide individual learners with appropriate texts at the correct instructional level and to assess each learner's reading progress on increasingly difficult texts. At the end of the project, each learner's progress in
book levels was established by comparing accuracy rates taken on two occasions three months apart, i.e. at pre- and post-testing.

3.5.2.2 Letter identification

The Letter identification task tests a learner's knowledge of all the lowercase and uppercase letters of the alphabet, including the typeset versions of $a$ and $g$. Each of these observation tasks was administered in a standard way, and was scored and recorded according to standard procedures outlined in *An Observation Survey Of Early Literacy Achievement* (Clay, 1993) (see Addendum A-vi). (These procedures are meticulously detailed in the observation survey guidebook and therefore do not need to be repeated here.) The pre-test, post-test design that was used provided two sets of measurements so that the progress of each individual learner could be compared on two of his/her own performances (Clay, 2001:12; Strydom, 2005:146). The Letter Identification task allows the evaluator to find out exactly how many letters a learner knows, which letters he knows and which letters he confuses (such as p and q). It also helps the evaluator understand what kinds of letter knowledge each learner is attending to, because the learner can respond by giving letter names, letter 'sounds', keywords or proper names. The record is scored by giving credit for each letter the learner identifies in any of the aforementioned ways.

3.5.2.3 Word tests

A list of 15 frequently occurring words derived from the classroom reading materials were used as test items. These sampled each learner's knowledge of the corpus of words he or she would encounter during reading. On retesting, an alternative list was used. The word test score sheets were interpreted by recording correct responses. The number of words the learner could read indicated the extent to which he had accumulated a reading vocabulary of the most frequently occurring words in the reading materials used on the project.

3.5.2.4 Writing vocabulary

To obtain scores for the Writing vocabulary task, children at emergent and early levels wrote personal lists of any words they knew from memory. This task enabled young learners, who had not yet acquired the knowledge of words common to older learners (which is how word knowledge is assessed in pre-constructed tests), to write words from their own personal knowledge. This task has a time limit of ten minutes. It is scored by assigning one point for each word that is correctly spelled. Older children who were too competent (i.e. they could write 50 words or more) were asked to write a story of several sentences or paragraphs,
which was analysed according to the qualitative data produced (see 4.6.4; 4.6.7). The categories for rating writing samples are provided in Addendum A-vii (Clay, 1993a:105).

3.5.2.5 **Hearing and recording sounds in words**

In this test, the evaluator asks the child to record a dictated sentence. The child is allowed to say each word slowly, listen to the sounds in the word and find letters to represent those sounds. Being able to hear sounds in words is an authentic task, not just one devised for the purpose of testing (Clay, 2002:111). The child's product is scored according to the detailed procedures outlined in pages 66-68 in *An Observation Survey of Early Literacy Achievement* (Clay, 1993a). Differences in scores at programme entry and exit were used as indicators of change over time of the child's ability to represent sounds in spoken words with their corresponding graphemes (written letters).

3.6 **THE MANAGEMENT OF THE QUALITATIVE DATA**

The next sections outline the treatment, presentation and analysis of the qualitative data obtained from the observation survey tasks and from the classroom-based field notes.

3.6.1 **Treatment of the qualitative data**

As mentioned in 3.5, the observation survey was designed to provide a profile of each child's current ways of responding to literacy tasks in classrooms. An observation summary was made from each learner's observation survey records, which provided a source of organised information that was used to prepare for discussions with teachers and project observers, and to provide feedback to improve instruction and determine progress (see Addendum A-viii).

For research purposes, the data provided evidence that enabled me to check my theoretical assumptions against observations of what individual children actually do in everyday classrooms (Clay, 1991a:2; Fountas & Pinnell, 1996:74). Through a constructive process of analysis and reflection on group and individual data, I attempted to build "a pattern of knowledge about the phenomenon being observed" (Fountas & Pinnell, 1996:73). My analysis of the qualitative data included descriptions of literacy processing behaviours, increases in 'items' of knowledge (sounds, letter, words) and changes in children's personal interests in and attitudes toward reading.

Qualitative data on teacher behaviours were obtained from site-based field notes (see Addendum F-i). Once away from the research site, I immersed myself in the data on an ongoing basis by transcribing my handwritten field notes onto a computer, which created
another "point of transition between data collection and data analysis" and generated further insights (De Vos, 2005c:336). In our monthly meetings, I tested my emerging understandings with those of the LSEN specialists and refined them. After printing out and reading these computerised transcripts several times, I began "transforming the data into findings" (De Vos, 2005c:333) (see Addendum F-ii) through a process of data reduction and analysis, during which I identified macro-categories (e.g. teacher professionalism, community of practitioners, teacher experience), key concepts (e.g. professional autonomy, theoretical body of knowledge, commitment to service, dependence of published programmes), themes (e.g. low expectations of learners, punitive classroom contexts) and recurring patterns of belief (e.g. skills-based definitions of reading, deficit views of learners, behaviouristic learning theories, learners should be ready for the teachers' programme versus adapting instruction to learner needs) (Huysamen, 1994:176; De Vos, 2005a:337). This process 'forced' an interaction with the data which enabled me to acquire a better understanding of teachers' needs.

The two following examples illustrate the above-mentioned process. Two of the categories I highlighted were 'teacher professionalism' and 'teacher experience'. Under the first category, I noted that the project teachers lacked a broad theoretical body of knowledge that would enhance their professional autonomy (see 3.3.1). I hypothesised that within the politicised South African educational context, teachers' acceptance of teacher-centred, authoritarian, functionalist paradigms and traditional approaches to reading instruction was partly a consequence of the historical emphasis on single-theory approaches, such as Fundamental Pedagogics (see 3.2.1) supported by item-based or critical variable theories (see 2.9.1-2.9.2). I concluded that there was a need to broaden teachers' knowledge base by introducing them to alternative theoretical approaches (see 2.7). I compared this with the McEneaney et al. (2006:125) finding that there is a need for more research that supports systems of professional development which give teachers access to a "community of practice", as opposed to fixed sets of instructional routines and facts. The second category, namely 'teacher experience', was closely related to the concept of 'professionalism' in that I questioned whether teacher development models based on 'teacher experience' would lead to the development of professional autonomy, especially when viewed in the light of South African's educational history. My observational data indicated that experience seems to have taught teachers that reading is a matter of recognising words automatically and pronouncing
them accurately, that writing is a matter of filling in worksheets and copying from the board, that learning is a matter of repetition and drill.

### 3.6.2 Presentation and analysis of the qualitative data

The final step after the data were analysed and categorised through the deconstruction process described above was to summarise and present the findings in text, tabular and figure forms. The following outcomes were derived from the qualitative data obtained during classroom observations:

- In-depth analysis of the kinds of literacy lessons that teachers gave before, during and after the intervention for comparison purposes to monitor change (see 4.5).
- In-depth analysis and discussion of pre- and post-test observation survey tasks to determine learner progress and patterns of development (see 4.6.).

### 3.7 MANAGEMENT OF THE QUANTITATIVE DATA

The quantitative data was collected by means of pre- and post-tests, using the following five observation survey tasks: running records; letter identification; word test; writing vocabulary; and hearing and recording sounds in words (see 3.5.2.1-3.5.2.5). The following sections outline the steps taken in treating, analysing and presenting the quantitative data obtained from the observation survey tasks.

#### 3.7.1 Treatment of the quantitative data

Each of these observation tasks was administered in a standard way, and was scored and recorded according to standard procedures outlined in *An Observation Survey Of Early Literacy Achievement* (Clay, 1993a) (see Addendum A-vi). (These procedures are meticulously detailed in the observation survey guidebook and are therefore not repeated here.) The pre-test, post-test design that was used provided two sets of measurements so that the progress of each individual learner could be compared on two of his or her own performances (Clay, 2001:12 Strydom, 2005:146).

#### 3.7.2 Presentation and analysis of the quantitative data

Single-system designs rely mainly on visual analysis of changes in a subject's behaviour, which are represented by means of simple graphics and not in the form of complex statistics (Strydom, 2005:146). In this study, graphs and tables were the principle means of presenting data obtained from the observation survey to graphically plot changes (improvement,
deterioration, no change) in the literacy behaviours of learners from baseline to project termination (see 4.7).

3.8 SOUNDNESS OF THE RESEARCH

According to the traditional positivist research paradigm, experimental research designs produce the most valid and reliable measurement results (De Vos, 2005c:389). However, non-traditional research paradigms in the field of early literacy tie into a complex theory of reading/writing that makes attempting to separate and isolate variables a pointless pursuit (see 3.2.2). The embedded nature of data derived from complex classroom interactions and environments renders constructs such as internal and external validity, reliability and objectivity inappropriate for naturalistic settings. Consequently, Lincoln and Guba (1985:290, in De Vos et al., 2005:346) suggest the following four alternative constructs that are more suitable for real life conditions that will be used as criteria for evaluating the soundness of this study: credibility, transferability, dependability and conformability.

3.8.1 Credibility (alternative to internal validity)

Clay (2001:205-208) states that it is questionable whether research that ignores real life variables can support change at grassroots level where teachers cannot control learners' prior experiences or other intervening variables (see 3.3.3). This research study aimed to capture learner responses to instruction and learner-teacher interactions in natural settings on authentic tasks. According to Clay (1993:7), it is not possible to get closer measures of real world literacy tasks than a record of child's performance in authentic classroom task. De Vos (2005d:346) agrees that descriptions of complex interactions and processes that are embedded in natural settings cannot help but have credibility. In this study, credibility was further strengthened by the use of Clay's observational methodology, which has been widely used and endorsed in the field of early literacy over a period of 25 years (see 3.5.1). However, researchers who follow statistical models of reading and who hold a different theoretical perspective to Clay (1993:2002) may be critical of running records of text reading because they do not conform to the rules of standardised tests and reading progress is not described in equal interval steps (Clay, 2001:45-46; Denton et al., 2006:31; McEneaney et al., 2006:119).

3.8.2 Transferability (external validity or generalisability)

Proponents of conventional research traditions regard qualitative studies as weak designs on the grounds that findings cannot be generalised to other populations or settings. In contrast,
this intervention was based on the construct of 'transferability', i.e. the theoretical concepts on which the study was grounded were spelled out, and my research paradigm and parameters were explained. Thus, other researchers conducting research within the same parameters can see how the research is consistent with a body of theory and can assess for themselves whether the cases described in this study can be generalised or not (Huysamen, 1994:2; De Vos, 2005d:346).

3.8.3 Dependability (reliability)

Standard tasks with standard administration procedures were used to obtain reliable observation survey data. Nevertheless, Clay (2001:271-273) and De Vos (2005d:346-347) question the extent to which the concept 'reliability' can be applied to naturalistic research. De Vos (2005d:346) asserts that reliability is a positivist notion that assumes an "unchanging universe where inquiry could, quite logically, be replicated". In contrast, the assumptions underlying a qualitative/interpretive study assume that social realities are continually constructed (De Vos, 2005d:347). As an alternative to reliability, I attempted to ensure dependability by providing descriptive accounts of phenomena that were theoretically and instructionally grounded.

3.8.4 Conformability (objectivity)

De Vos (2005d:347) recommends that evaluation for objectivity should be located in the data and not in some inherent characteristic of the researchers. In this view, objectivity would be attained if another study or researcher could confirm the findings. In this study, safeguards against subjectivity were built into the design through the use of multiple cases, more than one observer, more than one data gathering method and through comparison with similar research studies elsewhere.

3.9 CONCLUDING COMMENTS

In this chapter, I introduced the idea that there were causal links between the methodological paradigm wars in the domains of early literacy and that of research methodology and suggested that these conflicts are deeply rooted in conceptual differences and political agendas that make attempts at peace between major paradigmatic positions problematic (Weaver, 1994; Adams, 1990; De Vos, 2005a:358-359). My assumption is that one of the outcomes of the methodological conflict was that many teachers were narrowly trained. This could account for the predominantly phonics-orientated paradigm in many local classrooms.
The literacy intervention aimed to introduce teachers to alternative, cognitive-constructivist approaches that used observational methodology as its starting point.

My literature survey indicates that there is currently a greater need for research focused on social reforms that are theoretically accountable, have the potential for knowledge building and the professional development of teachers. De Vos *et al.*, (2005:13; 21) point out that, while teacher education curricula were changed to endorse social developmental concerns, these changes are not reflected in research traditions and research priorities, or in sources of funding for research projects. De Vos *et al.* (2005:9-15) and Strydom (2005:408) conclude that one of the reasons for the relative impasse in research traditions is the differences of opinion that exist about the nature of reality and knowledge, and the resultant guardianship of existing bodies of knowledge and authority, which are reflected in efforts to maintain the status quo. I argued that this highlights the need to move away from political and ideological polarisations, and I endorsed the view that methodological appropriateness and theoretical accountability are valid criteria for developing research designs. The next chapter discusses the research results and conclusions.
CHAPTER 4

RESEARCH RESULTS AND DISCUSSION

4.1 INTRODUCTION

The intervention used in this study is based on the view that each learner needs opportunities to read continuous texts in order to construct complex cognitive networks. A teacher's interactions with individual learners play an important role in this construction of cognitive processing systems. During training, the literacy consultant from New Zealand, Ms Jamison, demonstrated how teachers could use continuous text to teach children to read and showed them how to interact with individual children during shared and guided reading sessions.

I introduced Clay’s (1993) observational methodology as a means of obtaining both quantitative and qualitative data on each learner (see 3.3.3.1). With the help of learning support advisors from the WCED, I conducted observational field research to obtain data of specific teacher-learner interactions within group settings. The primary focus of the research, however, was on the progress of the individual learner and on specific cases of teacher-learner interactions within classroom settings (see 4.2).

This chapter, which describes the intervention process and presents the results, is organised as follows: The introductory section aims to underscore the focus of the research. It places a strong emphasis on individual cases since it is based on the view that social and contextual practices can influence literacy acquisition and behaviours. The chapter begins by exploring the particular social contexts of the learning. In other words, it presents baseline data of the pre-intervention literacy environments and reflects on the possible influences these environments had on learner attitudes and reading behaviours. Next, the baseline data are compared with data obtained from observations carried out after teachers had attended the initial training sessions conducted by Ms Jamison to assess whether the teachers' instructional practices conformed to the training and support that was provided (see 3.3.4). The rest of the chapter centres on the interpretation of the learners' literacy performances. As mentioned previously, the observation survey tasks were conducted on two learner cohorts, i.e. 64 EAL learners learning English in Afrikaans mainstream classes and eight EAL learners in a grade
1. English mainstream classroom, that is, 72 learners in total (see 3.3.9). The interpretation focuses first on the qualitative data of literacy processing behaviours obtained from the first EAL cohort on the observation survey tasks. The approach to interpreting the qualitative learner data was that language and literacy learning are both social and cognitive processes (Vygotsky, 1978). Therefore, issues of cognitive development can be explored through the learner's spoken and written language (i.e. qualitative data), since these are "the actualizations of the [learner's] meaning system" (Foley & Thompson, 2003:124). The pre- and post-qualitative data enabled me to assess progress in terms of change over time in literacy processing behaviours (see 3.3.4). An analysis of the learners' processing behaviours revealed some of the strategies the learners employed and the impact of books on the groups' writing behaviours (see 4.6). The interpretation of the qualitative data is followed by a discussion of the scores learners' obtained in the observation survey tasks to determine the quantifiable progress learners made (see 3.3.4). Next, the observation survey data obtained from the second cohort of EAL-learners are discussed. Finally, based on the principle of theoretically accountability, the discussion attempts to link these findings with the research and theoretical base in early literacy (see 3.1).

4.2 RESEARCH FOCUS

It is important to emphasise from the outset that, although group data are reported, the individual learner was the main focus of the research. Because of the study’s central focus was the individual, statistical analysis was not used to analyse learner data. The main thrust of the theoretical approach and the research methodology was directed at improving instruction in order to advance the literacy learning of individual learners. The research interpretations and recommendations were largely constructed from records of the personal resources individual children drew on in the literacy-learning task and from concrete examples of teacher-learner interactions during specific literacy events in classroom settings. The types of literacy events (e.g. language experience shared and guided reading and writing) were introduced to develop more effective teacher-learner interactions (see 2.11). Additionally, average scores for the entire cohort of learners as well as grade averages were reported to make it possible to

- Evaluate the literacy programme by comparing the entire EAL cohort's performance on book levels during initial assessment (see Figure 4.20 in 4.7.1) with their performance at exit (see Figure 4.21 in 4.7.1);
• Evaluate each grade level's performance on each test to determine which grade level made the most progress on which test(s); and
• Have different ways of measuring performance.

4.3 RATIONALE FOR INTERPRETATIVE STANCE

Few argue the need to improve literacy instruction at primary level (see 2.4). Many argue about how this should be done (see 2.5). The question of how literacy can be taught most effectively is particularly important for those children who know "little about stories and storytelling" (Clay, 2006:162). One of the arguments presented in Chapter 3 (3.3.3.1-3.3.3.3) was that good instruction starts where the learner is. However, in formal classroom procedures, the teacher has to compromise between individual and group instruction, which raises the problem of how best to support individual tuition within a mainstream classroom setting. In 2.11, I put forward the view that teachers' moment-by-moment interactions with individual children within group settings provide powerful learning opportunities. It follows that improving instruction depends, in large measure, on improving teachers' instructional interactions, as well as their understandings of 'on-the-spot' instructional decision-making. However, each interaction will be unique, which means that a recipe or prescriptive programme for guiding instruction is not appropriate. Nevertheless, since it was seen as the best option for accelerating progress (see 3.3.3.1), the intervention was based on the assumption that teachers build up an understanding from each interactive experience. This helps them develop the ability to make effective decisions.

Perhaps a puzzle provides a useful analogy of the stance adopted in the intervention. Just as each individual, uniquely shaped puzzle piece combines with other pieces to complete the whole puzzle, so teachers can gradually gain a coherent understanding of moment-by-moment decision-making. In addition to transcriptions of pivotal teacher responses during reading instruction, the research recorded 72 learners' attempts to engage in literacy processing 'on-the-run' as they read continuous English texts. Clay (2001:51) maintains that the utility of such moment-by-moment transcriptions is that they capture changes in processing systems, which occur rapidly over short time intervals. Thus, teachers can use such learner data to guide their daily instructional decision-making. As a result, how learners learn becomes the basis of a teacher's decision-making (Fountas & Pinnell, 1996; Clay, 2001; Lyons, 2003). Clay (2001:60) states that "traditional research analyses do not inform daily
instruction in this way", thereby underscoring the need for less conventional research designs in early literacy interventions (see 3.2.2).

4.4 LITERACY ENVIRONMENTS IN PROJECT CLASSROOMS BEFORE TRAINING

The research aimed to record changes that occurred in instructional practices as a result of the intervention (see 3.3.4). To address this question, data on teaching practices in participating schools were obtained from the learning support advisors' general experience in the field and from their transcripts of observed lessons taken before April 1999 in participating schools. These data were categorised according to themes, ideas and common patterns or belief systems that indicated a number of commonalities across sites (see 3.6.1). These are presented briefly here to give some indication of the kind of change required in the intervention and provide explanations for some of the learners' reading behaviours that were captured in the observation survey at baseline and to gain insight into the literacy learning environments prior to the intervention.

At baseline, the project teachers were guided by a behavioural theory of learning and a phonics approach to reading, i.e. they believed that repetition, drill and memorisation were the key to learning (see 2.6). The observers' transcripts of teacher lessons in the different schools indicate that teachers in all grades frequently used phrases such as "repeat after me", "say it altogether, three times" and "let's read/say/sing it again" in their lessons. None of the teachers was using shared or guided reading instruction. In grade 2, the teachers avoided reading and writing instruction because they believed additional language learners first had to learn the alphabet. In grades 3 and 4, round robin reading was the main instructional approach, i.e. teachers listened to learners read in turn and corrected their errors. The English medium grade 1 class in school B had an odd assortment of little books with no gradient of difficulty (see 3.3.7). However, when their initial performance was observed, none of the children was reading these little books because they were too busy learning letter sound correspondences and memorising sight words.

A third common theme that emerged from pre-intervention observational notes was that teachers were concerned that children might become confused if they had to learn two languages simultaneously. The observers reported that the project teachers strongly believed they first had to 'skill' the learners in Afrikaans. The grade 4 teacher in school B confessed, "I do not like to do English work" because "my learners still struggle with Afrikaans word
meanings and spellings". He said he did not want "to confuse" his learners. Another grade 4 teacher explained that the learners in her class "cannot even write Afrikaans or read it, so I only speak with them English, learn them new English words and sometimes they will write the specific words".

4.4.1 Teachers have low expectations of EAL and low-SES learners

The observational records indicated that the majority of learners in the project were either apathetic or negative towards reading (see Figure 4.1). Pre-intervention data from the different project schools where phonics was the predominant approach to reading reveal that some learners could read fluently, without comprehending (see 4.6.5). Bloch's (2000:25) and Gersten and Dimino's (2006:104) research confirms that this phenomenon is not restricted to the classrooms in this project. This suggests that phonics models of reading are inadequate or 'incomplete' accounts of reading (see 2.6.1). Project data indicated that learners who could read did not seem to enjoy reading, which seems to confirm Cambourne's (1988:27) contention that "textual alienation" is a function of how literacy has been taught, especially at primary school level (see 2.4). Fluent readers on the project were overly concerned with fast, fluent decoding at the expense of meaningful storylines and purposeful reading. This finding corresponds to Weaver's (1994:1-3) view that teachers' particular theoretical orientations tend to influence children's implicit definitions of reading. Collectively, their research appears to support the need for alternative approaches to literacy instruction that promote reading as a worthwhile and empowering activity. The following extracts taken from observational records illustrate these points:

(Grade 3 School B). Reading does not seem to be an enjoyable experience. The children in grade 3 all seem to be anxious readers – some rush through reading without pausing. They hardly even glance at the pictures to enjoy them.

Cheslin (Grade 4 School A) can read fluently but he treats reading as a chore. He leaves out sentences and reads the text below the picture before reading the text above the picture. He has established poor reading habits. I recommend that he return to books at easier level to help establish good reading behaviours. Select stories with humour and meaning. Help him focus on humour, meaning, and storyline.

Rachel (Grade 4 School B) reads without enthusiasm or phrasing for making sense – ignores writing on top of the page and leaves out sentences without noticing. At times she rereads/reruns to gain meaning, but does not do this consistently. Shows no interest in reading. Going through the motions – reads words but shows no love for reading.

These learners (Grade 3 School A) either agonise or speed their way through to the end of book.

Children (Grade 3 School C) don't take risks – they stick only to known sight words. Avoid making mistakes – rather guess anything to be fluent and please their teacher than try and work out difficult words.

Figure 4.1: Records indicate a lack of meaning and little interest in reading
The learners' 'textual alienation' and negative attitudes to literacy were probably reinforced by their teachers' low expectations of their abilities to learn. It seemed that the project teachers made strong assumptions of learner capabilities based on the latter's socio-economic and language status, as the following teacher comments from observational field notes in Figure 4.2 show (in this dissertation learner names have been changed to protect their identities):

Teachers made these comments during informal conversations with the observers at the pre-assessment phase of literacy intervention. Their words are in italics:

- **Our children are farm children. They cannot read or write as well as other children** (Grade 4 School A).
- **Writing is too difficult for [EAL learners] grade 2s. We just let them colour in or do handwriting patterns** (Grade 2 School B).
- **This year's children are a weak group. We first have to learn them their letter-sounds before they can read books** (Grade 2 School A).
- **I don't know why you want to assess Lulu [a grade 4 learner]. She doesn't know anything. You are wasting your time. Take Manual, he can read.** (This was said in the hearing of all the grade 4s, including Lulu and Manual.) (Grade 4 School C).
- **Estine is very weak. She doesn't have an IQ, you know, she was tested last week.** (Whispered to an observer in the learner's hearing) (Grade 4 School B).

**Figure 4.2: Teachers’ comments indicate low expectations**

### 4.4.2 Demotivating, authoritarian, punitive classroom climates

The literacy environments in the project classrooms may be described as dull, authoritarian and/or punitive. Children in these classrooms seemed easily distracted and displayed the following avoidance tactics: they dawdled into class late after breaks and they found ready excuses to leave their desks or classrooms, e.g. sharpening pencils, requesting to go to the bathroom, offering to run errands for their teachers. Teachers presented reading as a school subject and a chore that children had to be bribed into doing by offering them rewards for good behaviour and punishment for bad behaviour (see 2.7.3). In many instances, observers noted that reading lessons were characterised by punitive comments and/or a constant nagging, which interrupted storylines, disrupted rhythm, undermined 'educational time on task' and made the reading experience unpleasant to listen to as indicated in Figure 4.3.
Data gathered at baseline and early intervention indicated that reading lessons were frequently accompanied by admonitions or belittling remarks. The teachers' words are in italics.

- *Remember, if you don't sit still, you will not be allowed to go out for break* (Grade 2 School A).
- *Quiet! ... I can see there are not going to be any gold stars today* (Grade 2 School B).
- *Where are your ears! ... Those things you don't use!* (Grade 1 School B).

At times, teachers even interrupted themselves to scold the learners – as demonstrated by this excerpt in which the teacher's attention was distracted by a learner, called DuWayne, during her reading of *The Polliwog* (a poem about a frogling):

- *I am going to read for you ... DuWayne sit still! ... the poem called *DuWayne!* ... *The Polliwog*. Oh, the Polliwog is woggling/ In his pleasant ... Do you want to go and see Mr X [headmaster] or are you going to sit still?* (Grade 3 School C).

### Figure 4.3: Nagging, punitive classroom cultures

The classrooms were devoid of learner 'voices', such as messages written by the learners on display. Walls were either bare or filled with commercial charts. Patterns of classroom communication showed that the teacher provided most of the input and learners' contributions were limited to repeating or replying to close-ended questions (see 4.5). They had very little opportunity to ask questions or initiate discussions or clarify misunderstandings (see 4.5). Access to knowledge (and therefore to discursive power) came through the teacher (or via the textbook to the teacher) (Cazden, 1992c:215-221; Foley & Thompson, 2003:166). The disempowering consequences of 'lack of voice' and 'textual alienation' highlight the political nature of reading and its importance in democratic societies.

### 4.5 LITERACY ENVIRONMENTS AFTER TRAINING

After the in-service training session, the teachers took it upon themselves to improve their classroom environments (see photo gallery in Addendum G). To promote learner 'ownership' and 'voice', the commercial charts on the walls were replaced with teachers' and children's written work. At the end of the project, a grade 2 teacher commented that, whereas her children had never consulted any commercial or typed charts during independent work, they frequently consulted charts that were handwrittten by their peers or by her. She attributed the change to learner engagement with the personal quality of handwritten messages. Learners also took pleasure in 'reading round the room', i.e. using a pointer to read their messages on the walls during paired or individual reading time. They were also intrinsically motivated to engage in the novel big books and interesting stories and topics so that successful reading...
became its own reward (Lyons, 2003:27). The next sections describe how these changes came about.

4.5.1 Initial change was unpredictable and contrary to training

The first set of classroom observations took place in the early implementation phase shortly after Ms Jamison had provided training and on-site demonstrations, and the bulk of the learner assessments were completed (see 3.4). Field notes taken during these early observations revealed that, despite training, demonstration lessons and access to guidebooks, teachers had difficulty breaking with their familiar teaching patterns and relinquishing their control of the teaching process. Initially, entrenched forms of instruction (i.e. 'repeat after me') were transferred to the shared and guided reading situations, and teachers gained different-from-intended understandings from training, which transferred into practice in unpredictable ways (see Figure 4.4). The transcripts of lessons indicate that training and quality materials per se were not enough to change teachers' instruction. These illustrative examples taken from the observers' field notes during shared reading lessons underscore these points.

- Field notes (Grade 4 School B): Big Book: *The best book for Terry Lee*. The teacher reads an extract from the book to the class line-by-line and makes them repeat each line verbatim.

- Field notes (Grade 2 School A): Big Book: *Wake up Isabel*. The teacher taught her children to recite the first page of the book by heart without any regard for narrative structure and meaning. She completed the 'shared reading' session with a word identification activity. The learners never got beyond the first page of the book! They couldn't gain any 'sense' of the story.

- Field notes (Grade 3 School B): Big Book: *The apple tree*. The teacher actively prevented her learners from spontaneously joining in as co-readers during shared reading. She actually told them to stop interrupting her reading when they spontaneously joined in and insisted on them copying her lead: "I said, first I read, then you read." Many of the children could read independently, but they mimicked their teacher obediently (see lesson in Addendum C-i, example A1).

- Field notes (Grade 2 School C): Big Book: *Waves*. The teacher interpreted shared reading as storytelling, rather than a reading approach. She conducted her whole 'reading' lesson orally. She discussed each picture in the big book in minute detail without once referring to or reading the printed text. She completely missed the point of shared reading.

- Field notes (Grade 3 School A): Big Book: *Who's in the shed?* The teacher did the 'picture walk' by asking the learners to name the colour of the animals that appeared on each page and to imitate the sounds the animals make, instead of fostering comprehension strategies such as predicting upcoming events or guessing who's in the shed.

- Field notes (Grade 2 School B): Story cards: *The salad*. The lesson focused on memorising the sequence in which ingredients were put into a bowl, rather than on reading and/or interactive writing.

**Figure 4.4:** Field notes of the first shared reading lessons that were observed
Even though the approaches to literacy on the project required 'proleptic teaching' (i.e. in anticipation of competence), observations of guided reading revealed the same entrenched instructional habits in which teachers continued to rely on traditional instructional modes. This underscores the importance of follow-up support and feedback that target teachers' moment-by-moment teaching behaviours. Although the teacher who presented the next lesson (Figure 4.5) stated that she was conducting a guided reading lesson for two low progress readers in grade 2, her lesson was a typical 'round robin' reading lesson based on behaviourist learning theory (see 2.6.2). Moreover, the lack of instructional content in the lesson demonstrated an important point, namely that the often-used criterion for evaluating school effectiveness, i.e. 'time on task', is a necessary but insufficient condition for measuring the effectiveness of literacy instruction, because time on task does not indicate whether teachers are making efficient use of the learners' time (Depree & Irvensen, 1994:22).

The lesson was a typical 'round robin' reading lesson for two low progress readers in grade 2. Peter and Ian were grouped together in the 'weak' reading group. The lesson is printed below. Each learner had his own copy of the book they were reading from. In all of the figures in this chapter, the teacher's and the learners' non-verbal responses and actions are presented in square brackets. Dialogue is presented in italics.

[The teacher asks Peter to read his page]
Peter: *Mum come see us.*
Teacher: *It's can't.*
Peter: *Mum cannot see us.*
Teacher: *It's can't. Read that again. Mum can't see us.*
Peter: *Mum can't see us.*
Teacher: *Now let's read it again. All together.*
Peter and Ian: *Mum can't see us.*

[Teacher is satisfied with this response, the teacher hands out the next little book to be read. She points to the picture of a girl on the first page]
Teacher: *Her name is Helen. What's her name?*
Peter: *Helen.*
Teacher: *The other children's names are?*
Peter: *I don't really know these names very well.*
Teacher: *Felix and Adams. Say it three times.*
Teacher: *You read the next page, Ian.*
Ian: *Dad has a trumpet.*
Teacher: *Not has, had. Read it again please.*
[Pause]
Teacher: *Start again.*
Ian: *Why do I have to start again?*
Teacher: *Because you weren't reading smoothly. I want you to read smoothly.*
[Ian tries to initiate a conversation]
Teacher [impatiently]: *Read!*

Figure 4.5: Teacher dialogue during round robin reading
It is clear from this lesson that the teacher's view was that learning to read proficiently was a matter of repetition (the teacher uses the phrase *read/start that again* four times) and accuracy (i.e. "It's can't, not cannot"; "not has, had"). Her insistence on reading smoothly and correctly probably reinforced the learners' perceptions that reading was a matter of 'getting the words' right. It could be argued that the teacher was actually discouraging the learners from reading for meaning and consequently from developing effective reading strategies by teaching them to over-attend to individual words or letters (e.g. when Peter made a meaningful substitution, i.e. *cannot* for *can't*, the teacher insisted on making him correct the word). By only focusing the learners' attention on accurate word reading, the teacher reinforced the mistaken idea that the purpose of reading is 'getting words right' at the expense of gaining meaning from print.

In addition, her instructional style created dependence on an authority figure ("I want you to read smoothly") and demanded compliant behaviour ("Read!"/"I want you to …"), turning reading into a negative experience that learners wanted to avoid (see Ian's avoidance tactics). Throughout the lesson, she asked only two questions, both 'fill-in-the blank' types ("The other children's names are …?"); "Her name is Helen. What's her name?"). The rest of her lesson consisted of telling the learners how to respond accurately. Consequently, her instruction did not provide the kind of "expert scaffolding", which is sensitive to learners' needs and which is a distinctive feature of guided reading sessions for small groups (Weaver, 1994; Allington, 1998; Lyons, 2003). Moreover, her questioning techniques failed to model how to apply strategic cognitive processes that are critical for proficient reading, such as questioning the text, allocating time and effort to miscues, self-monitoring and self-correcting (Wray & Lewis, 1995:1-2; Palincsar & Brown, 1984:117).

The observations in Figures 4.4 and 4.5 confirmed other research findings that low-progress readers, including EAL learners, spend higher portions of the year than their high-progress peers practising letter and word level skills, to the detriment of meaningful reading (Lyons, 1991:210-211; Pinnell, Fried & Estice, 1991:31-35; Bloch, 2006:6-7). Through instruction that controls what they may attend to, many children in skills-based classrooms learn to habituate a narrow repertoire of reading behaviours. Unable to integrate the disconnected and independent skills they have been taught into a single, interactive process, they remain instruction dependent and do not develop self-management strategies (Clay, 2001). Such
lessons raise the possibility that children may gain implicit definitions of reading from instruction that could contribute to their reading disabilities (DeFord, Lyons & Pinnell, 1991:215; Weaver, 1994:1-5). Early observations on the project therefore confirmed that reform efforts to improve reading and writing should take teacher impact on literacy learning at classroom level into account (Bickley, 2004:26).

Notes that were taken of teacher-learner interactions during reading lessons were used as a springboard for informal conversations with each teacher individually after the lesson, as well as with groups of teachers after all the classroom observations in a particular school had taken place. For example, discussions centred on issues such as those highlighted in the lesson above, for example a teacher's exclusive focus on memorising and her overemphasis on isolated items of knowledge (i.e. 'getting the words right'). Parts of the lesson that demonstrated over-attendance to visual cues were contrasted with the types of questions that could be asked that would involve learners in active and independent problem-solving (Lyons, 1991:206). Finally, the suggested approach to teaching was linked to cognitive-constructivist theories underpinning teaching and learning on the basis that teachers' theoretical understandings would influence their teaching decisions (Caine & Caine, 1995:44; Lyons, 2003:5).

4.5.2 A high incidence of grammatical errors in the teachers' spoken English

Apart from misconceptions about reading approaches, the transcripts in field notes showed that there was a high incidence of grammatical errors in most of the teachers' spoken English. Ridge (1996:1) points out that teachers' limited English proficiency can lead to lack of confidence in using English. Thus, in addition to factors mentioned in 4.4, the Afrikaans-speaking teachers' level of proficiency in English might have been an inhibiting factor to providing English instruction. The excerpts of lessons in Figure 4.6 below illustrate the basic nature of the grammatical errors, which are printed in bold italics, made by three Afrikaans-speaking teachers during English literacy time (only the teachers' speech is printed):
Example 1: Teacher produced sentences. Language experience lesson (Grade 3 School A)

What would happen if someone bake a cake and mix together all the ingredients?

Yes, she follow the recipe.

Does everybody has a straw, a pin, and a piece of paper?

Read the instructions very cautiously.

Example 2. Teacher produced sentences. Introducing an observer. Language experience lesson (Grade 2 School C):

Say good morning for the teacher.

Where is the group leaders?

What do you think do you need to make these puppets?

What do you think is he doing with the stick?

Paste the barbecue stick on the backside of your puppet.

Example 3. Teacher produced sentence. Shared reading of Guinea pig grass (Grade 2 School B):

What do you think is he doing with the grass?

I want for you to listen.

What do you think do you call it when something sounds like that?

Gathering from the picture, who do you think is the lady?

Figure 4.6: A high incidence of grammar errors in the teachers' spoken English

Towell and Hawkins (1994:5), Lightbown and Spada (2006:45) and Tseng (2007:3-4) observe that second language learners typically stop short of mother-tongue proficiency in a number of areas of the L2 grammar. Their viewpoint, albeit controversial, that this might be related to the age at which grammatical parameters are set, offers a plausible explanation for the teachers' lack of 'target language' competence in English (see 2.7.4). Towell and Hawkins (1994:42) and Tseng (2007:6-7) argue that all L2 learners construct grammatical representations for the L2 on the basis of the input they receive (and probably under heavy influence from their L1). This would call for a comparison between the project learners' grammar and the classroom input available in the construction of that grammar which his beyond the scope of this study (see 5.4.2).

4.5.3 Gradual changes observed in reading practices

It is not possible to transform entrenched teaching beliefs, practices and language habits in a short space of time. However, it may be possible to provide an impetus for change by breaking some of the typical patterns of instruction discussed thus far. By introducing
teachers to approaches and reading materials that support cognitive processing paradigms and balanced literacy, such as shared and guided reading, and by supplementing training workshops with informal but guided 'in-the-classroom' support, teaching practices became more aligned with project goals (see 3.3.4). Needless to say, the role of quality reading materials such as big books and guided readers were critical in helping teachers change their instructional approaches (Davidson, 1991; Calkins, 2001). However, as mentioned earlier, teachers needed ongoing support in using the materials appropriately. In helping teachers make more economical use of teaching time, the observers concentrated on improving teachers' interactions with their learners through the use of prompts and teaching concepts about print (CAPS), i.e. print awareness and asking questions about the text.

A number of prompts were recommended to improve 'teacher dialogues'. How a teacher prompts depends upon what a child needs to integrate into his reading processing, i.e. the prompt should "send the child in search of a response within his network of responses" (Clay, 2005:39). For example, prompts could direct attention to hear sounds in words (e.g. What is the first letter in …?; Say the word slowly and write what you hear; Make another word that starts like that), to attend to meaning (e.g. You said …? Does that make sense?; What do you think [the story book character] is going to do now? Would you open the door …? What would you do if …?) and to check (e.g. Were you right? Does it look right/sound right? Check it.). The next three examples from the observers' field notes illustrate how teachers applied their newfound knowledge of prompts to different reading situations.

**Example 1:** Extract 1 contains a short segment of guided reading lesson. The lesson occurred before the teacher had been introduced to the idea of prompts. It shows the teacher pre-empting the reader's response to prevent error behaviour. In extract 2, the same teacher has learnt to prompt the reader to look for helpful cues:

**Extract 1:** Text: *Oooh, it's a crocodile rolling his eyes, Oooh, it's a dragon*
Teacher (reading): Oooh, it's a 
Learner (pre-empting): crocodile 
Learner: Rolling his eyes. Oooh, it's a 
Teacher (pre-empting): dragon.

**Extract 2:** Text: *The crocodile jumps in, the hippo jumps out*
Teacher: Can the picture help you?
Learner (looks and reads): The crocodile jumps in, the hippo jumps [pauses and cross-checks with illustration] out.

**Example 2:** Many of the emergent readers on the project read their basal readers word perfectly from memory, but were unable to point and read each word. To teach them to match one spoken word with one written word (i.e. one-to-one matching), teachers learnt to use the prompt. "Read that with your finger. Did it match?/Did you run out of words?"

**Example 3:** A learner wrote *slas* for *slice*. The teacher prompted the learner to correct the word through analogy with *rice*. Ms Jamison also taught teachers to use a system of crosses [x] and ticks [✓] to prompt learners to search for correct spellings, e.g. they placed ✓ above letters that were correct and x above incorrect letters. This turned out to be very successful,
because the learners loved taking on the role of 'word detectives' in attempting to find the right spelling of words.

Grade 2 teachers used Concepts About Print (CAP) procedures developed by Clay (1993:37-48) to help emergent readers become aware of how print works. This learning, which includes directional movement across print and attention to sequences of letters or words, happens mostly from the opportunities children have to read and write. Clay (2002:39) found that there are large individual differences in what children attend to in print. She argues that theorists have not given enough attention to children who find it particularly challenging to learn about essential features of a written code. Because the majority of grade 2 learners on the project had little prior print awareness (as indicated by the low entry scores on observation survey tasks in Table 4.1 in Addendum B-i), teaching early concepts about print was a priority.

Teachers' reliance on telling learners what to say was counteracted by introducing questioning techniques. During initial training, Ms Jamison modelled questioning techniques during shared and guided reading demonstrations. She also showed teachers how to use the lesson plans in the teachers' guidebooks. The guidebooks offered examples of many open-ended questions that could be asked on a variety of books.

Nevertheless, despite training and access to guidebooks, the teachers initially had great difficulty in asking comprehension-fostering questions. Although they switched from telling to asking, their early questions were monotonous and tended to focus on trivial details in the illustrations of the storybooks rather than on the text. Palincsar and Brown (1984:121) point out that effective readers are good at asking relevant questions (i.e. questioning the text). In contrast, low-progress learners tend to question texts about irrelevant details, which undermine comprehension. Perhaps the teachers' initial inability to model effective question asking contributed to the difficulties learners had in comprehending what they were reading, since 'questioning the text' is a powerful comprehension strategy (Palincsar & Brown, 1984:121). Examples A1 in Addendum C-i (teacher dialogue) and B1 in C-ii (teacher questions) are extracts from reading lessons given by project teachers in the early stages of the intervention. In sharp contrast to these early lessons, examples A2 in Addendum C-i (teacher dialogue) and B2 in Addendum C-ii (teacher questions) show that there was a change in the approach used in the lessons and the kinds of questions teachers' asked. These changes took place as a result of the informal in-class support that the observers provided. The observers also encouraged teachers to share ideas and to make use of ideas from the teachers' guidebooks.
One of the project aims was to move teachers away from a transmission paradigm and to change their phonics-based instructional practices to a more balanced, transactional approach (see 3.3.4). The observational data taken near the end of the project indicated that all of the teachers had taken the first step towards a transactional approach, as outlined in Weaver (1994:382-388) (see 2.8.3). That is, they had exchanged their basal readers for big books and graded readers. They were no longer pre-teaching phonics and sight words, but had taken on board interactive instructional approaches (see addenda C-i and C-ii). They made more use of questioning while teaching reading. The observers noted that lessons were far more interactive and that learners participated actively. On their own initiative, some of the teachers made the effort to make the language experience activities link up with the big books they were reading. For example, the teachers in School A organised a visit to an apple farm to coincide with their shared reading sessions (big book: *Round and round the apple tree*), two teachers in School B made popcorn in the classroom (story book: *Popcorn*) and the grade 2 teacher in School C took her learners on a teddy bear picnic (big book: *Teddy bear alphabet*) (see photo gallery in Addendum G).

The instructional approach that was most popular with all the teachers was shared reading, partly because the teachers could interact with the whole class at once, which reduced discipline problems. (Naicker (1999), who observed some of the lessons, makes the point that, in the South African context, shared reading is a valuable approach because it is suitable for teaching large classes.) In the shared reading approach, all the teachers moved beyond a mechanical level of performance to achieve satisfactory to high levels of competence (see lesson A2 in Addendum C-i). The observers in all three schools noted that, during shared reading, teachers introduced some of their own open-ended questions alongside those suggested in the teachers' guidebooks, indicating that they were consulting the guidebooks, but also finding their own 'voices' (see lesson B2 in Addendum C-ii).

Whereas teachers moved into shared reading easily, all the teachers found guided reading difficult. This is understandable given the substantial amount of change, expertise and organisation guided reading demands of teachers. In guided reading, seven teachers achieved mechanical levels of use, i.e. they had a basic idea of what was expected of them. They had organised sets of graded readers and they established some learning centres and several groups for reading (see photo gallery in Addendum G). However, they found it difficult to manage and work with a small group and to decide which strategies or text features to emphasise in guided reading. For instance, a common problem was that the teachers did not
vary questions to encourage a range of reading strategies (e.g. predicting, sampling, confirming, cross-checking, self-correcting). For example, during a guided reading lesson for grade 2s in School A, the teacher guided children through the book by asking them the same type of question on each page, e.g. \textit{Where does it say lion? Where does it say tiger? Where does it say giraffe?} etc.). In another lesson, observed in School B, the teacher was working with a group of grade 4 learners who were leaving inflectional endings off the words during reading. In revisiting the text, the teacher could have drawn the learners' attention to words in the text with inflectional endings; instead, she focused on sightwords.

Teachers also needed to understand the reciprocity of shared and guided reading more fully. For example, teachers tended to use shared reading procedures during guided reading by reading too much of the text and not relinquishing control of the reading process to the learners (see 2.8.3). Two teachers reached satisfactory levels of competence, i.e. they could run guided reading groups with few interruptions, but their lessons were slow-paced and they tended to be distracted by learners at the learning stations. Despite these understandable difficulties, the learners' enthusiastic responses to the different instructional approaches and materials indicated that worthwhile instructional changes had taken place (see 4.6.6).

In summary, observations that were made just after initial training revealed that access to excellent short training courses, guidebooks and high-quality materials per se did not change practice significantly. It is clear that the new approaches require substantial amounts of new learning on the part of the teachers. Thus, they all needed ongoing support and assistance with disentangling confusions, implementing new approaches, using different reading materials and consulting teacher guidebooks written in English. Observations also showed that teacher 'time on task' does not guarantee quality teacher-learner interactions. Teacher dialogues at baseline as well as in early lessons were characterised by a lack of instructional focus and an absence of prompts or questions. Furthermore, teachers' linguistic competence in English was a barrier to instruction. Learner data obtained from the observation survey pre-tests indicated that the majority of the children on the project could not read grade level texts (see Figure 4.20). Overall, the children's learning environments before the project was initiated were, to quote Cazden (1992c:214), "important sites of inequality" because these limiting environments did not enable learners to gain grade level competence in literacy that would support future school learning.
4.5.4 Literacy environments established during the intervention

On a positive note, the majority of teachers gradually became more enthusiastic about change and they put a great deal of effort into restructuring their learning environments (see Photo Gallery in Addendum G) and incorporating new teaching approaches in their classes. Whereas old practices predominated in the first few weeks after training, teachers gradually became more confident in using the 'new' approaches. As they gained confidence, they became less preoccupied with maintaining discipline and more skilled in using interesting instruction as a means of 'social control', especially in shared reading sessions. Additionally, as learners engaged with the interesting materials and responded to their questions, the teachers' interactions with their learners became more instructional and prompting and questioning increased. This change was made possible partly by the 'scaffolding' provided by the detailed teachers' guidebooks, the high-quality children's literature and on-going in-service support. The reading materials and guidebooks enhanced the teachers' content knowledge, raised the level of language use and improved the quality of the teacher-learner interactions.

To conclude, the project teachers exchanged the traditional phonics-first approach and implemented the instructional practices to which they had been introduced in the intervention with varying degrees of success (see 5.2.2). The constructive changes they made had a positive effect on learner progress and enjoyment of reading, which led to increased teacher motivation. The influence of the teachers' changed approaches to the literacy behaviours of their learners, as captured in the observation survey, is discussed next.

4.6 INTERPRETATION OF LEARNER PERFORMANCES: QUALITATIVE DATA FROM AN OBSERVATION SURVEY OF EARLY LITERACY ACHIEVEMENT

The following sections focus on the results of the first research sample for which complete data on five observation survey tasks were obtained in a pre-test, post-test design. The sample consisted of 64 EAL learners in grades 2 to 4, drawn from three schools (see Table 3.1). Use of the observation survey yielded information that addressed the question of learner progress from different perspectives (see 5.3). First, it provided quantifiable data (i.e. test scores) on the progress of each learner on the five tasks outlined in 3.5.2.1 to 3.5.2.5. Second, it provided qualitative data that provided evidence of changes in learners' literacy processing behaviours from baseline to project exit (see 3.3.4). Third, it provided insights into changes in
the learners' strategy use that accompanied changes in processing behaviours (see 5.2.1.3). The qualitative data provided other important diagnostic information, namely possible biases of the instructional programmes and the strengths and weakness of individual learners that will enable teachers to 'start where the learner is' and adjust instruction to meet each learner's changing needs (Clay, 1991a:242). An analysis of the observational data on each of the observation tasks is provided next.

4.6.1 Letter identification: Baseline and exit data: First learner cohort

The letter identification task assessed the learners' knowledge of 26 lower case and 26 upper case letters, as well as the typeset versions of \( a \) and \( g \) (see 3.7.2). The qualitative data obtained from the task provided teachers with an inventory of exactly what letters each child knew as well as other reference points to which they could anchor further learning, e.g. most learners single out one or two letters that they find 'easy to see' or 'easy to write' from their personal experiences (Clay, 2006:38). The letter identification task (see Addendum D-ii) confirmed that discoveries about letters "do not occur in alphabetical order" (Clay, 2006:38). At baseline, letter identification data also showed that some project learners could recite letters in alphabetical order, but they could not identify letters that were not in alphabetical order, e.g. they read \( a, b, c, d \ldots \) for \( a, f, k, p \ldots \).

The majority of project learners responded to the letter symbols by giving the letter sounds in preference to letter names or keywords. This differs from research conducted in New Zealand where the majority of learners preferred to use alphabet names (Clay, 2001:88). Differences between studies indicate that the letter identification task is sensitive to instructional procedures. In the project classrooms, teachers taught letter-sounds correspondences, rather than allowing learners to differentiate between letters in whatever manner they found feasible.

Considering that it is common practice in local schools to teach letter-sound knowledge as a precursor to reading, one could predict that, at baseline, the project learners would demonstrate a fairly strong knowledge of letter-sound correspondences, compared to other tasks in the observation survey. The results seemed to confirm this prediction (see Table 4.1 in Addendum B-i). However, the learners' baseline reading and writing abilities were very limited: a phonics-first emphasis did not seem to have enabled them to integrate this isolated knowledge source into a workable literacy processing system.
Since the letter identification task measures a finite set of learning, learners could be expected to master the identification of all the letters after approximately a year at school (Clay, 2002:89). However, at exit, many learners had stopped short of learning the full set of letter-sound pairs, irrespective of the grade they were in. It was interesting to note these learners found the same letter-sound sets difficult (see Figure 4.7). The finding appears to be consistent with a large-scale study conducted with Reading Recovery children in New Zealand. The study distinguished between a large, "easy-to-learn" letter-sound group and a smaller "hard-to-learn" group (Clay, 2002:89).

<table>
<thead>
<tr>
<th>Most difficult to learn letter-sound sets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consonants:</strong></td>
</tr>
<tr>
<td>Vv</td>
</tr>
<tr>
<td>Jj</td>
</tr>
<tr>
<td>Yy</td>
</tr>
<tr>
<td>Ww</td>
</tr>
<tr>
<td>Gg</td>
</tr>
<tr>
<td>Qq</td>
</tr>
<tr>
<td><strong>Vowels:</strong></td>
</tr>
<tr>
<td>Uu</td>
</tr>
</tbody>
</table>

Figure 4.7: Most difficult to learn letter-sounds sets

A reflection on why many learners have more trouble in learning some letter-sound correspondences than other letter-sound sets might lead to more efficient ways of teaching these letters. It suggests, for instance, that curricula "that begin with A and work through to Z as a teaching order are ignoring easier ways to sequence learning" (Clay, 2001:90). Knowing which letters many learners find difficult can also clear up misconceptions about letters commonly believed to be problematic, e.g. b/d confusions (Grové & Haupfleish, 1992:63; Clay, 2001:90). An analysis of the most difficult to learn letter-sound sets in Figure 4.7 revealed that the difficulty could be partly attributed to the fact that English and Afrikaans share some phonemes but represent them by different graphemes (e.g. v/f; w/v), or vice versa (u/u). In addition, the pronunciation of Gg in English (i.e. voiced velar non-nasal stop) differs from the pronunciation of Gg Afrikaans (i.e. voiceless velar fricative) as demonstrated by the following examples: go/gaan, great/groot). The letter [Qq] is not a letter that is used in many Afrikaans words. It might also be that, despite individual variability in learning, letter learning, like language learning, is not entirely random. There may be broad sequences of development that are universal to all learners, i.e. the letter-sound learning system may have its own set of innate organising principles (e.g. it may be that learners acquire similar visual or phonetic features in a 'natural order').

Another interesting observation was that the same learners on the project confused the alphabet with numerals. For example, they responded to the letters a, f, k with 1, 2, 3. A number of learners had particular difficulties with the following categories of letters: L I I i, which they confused with the numeral 1 (one). Some also confused Q and O and others
confused $p$ and $q$ (see Addendum D-iii). This evidence underscores the importance of establishing visual familiarity with letter identities (Adams, 1990:112; Clay, 2001:90). As mentioned earlier, these kinds of confusions do not show up in quantifiable scores, which emphasises the importance of qualitative data for guiding instruction and developing teachers' understandings. At first, teachers seemed inclined to attribute children's confusions to learner deficits, i.e. children with unusual patterns of responding were 'slow learners'. However, an analysis of the letter identification data of the whole group revealed that this confusion was fairly common. By the end of the project, the letter identification records showed that the letter-numeral confusions had cleared up, which seemed to indicate that the problem could be attributed to social factors or development or instruction, rather than to learner deficit.

The next section indicates that naming letters in isolation is not the difficult part of the literacy task. Accelerated letter learning is more likely to occur if teachers know which letters most learners can identify and then seek the fastest route to teaching the others. It is extracting information from embedded letters while reading for meaning that is challenging (Weaver, 1994: 134-135; Clay, 2002:269).

In summary, the letter identification task revealed the following:

- Letter learning is sensitive to instructional practices (e.g. all the project learners identified letters by sound and could recite the alphabet);
- For many learners, there seems to be a small 'hard-to-learn' group of letters;
- Isolated letter knowledge does not lead to an integrated literacy processing system;
- The letter learning process seemed to demonstrate a broad 'natural' developmental sequence as well as individual variability; and
- The letter learning process supports the 'natural variability of learners' rather than a 'learner deficit' model.

4.6.2 Word test: Baseline and exit data: First learner cohort

The word test indicated the extent to which the EAL learners were accumulating a sight word vocabulary. It also provided valuable insight into how they attempted to process words in isolation, i.e. without the contextual support of text. The data showed that at entry most learners used three main strategies for coping with unknown words. Some guessed unknown words, apparently substituting any word without regard for letter-phoneme matching, e.g. $with = him$; $shouted = home$; $help = beet$. Others guessed words from first letters, e.g. $chair$
= child; purple = people. Some attempted a letter-for-letter sounding out strategy: l-i-k-e = lick; Mr = m-r.

At baseline, the learners struggled to read words with more than one syllable. Adams (1990:112-115) argues convincingly that skilled reading is strongly associated with a reader's sensitivity to legal letter strings and to the overall frequency with which these letter strings appear in English. Low progress readers lack a sensitivity to smaller-than-word spelling patterns, i.e. they have not developed their orthographic knowledge sufficiently. The project learners' insufficient knowledge of likely letter strings in English created problems for them when they were faced with multi-syllabic words, because they could not chunk the word appropriately into smaller letter strings (Adams, 1990:125). Again, the project data argues against the practice of teaching stand-alone letter-sound correspondences.

At exit, most grade 3 and 4 learners were able to chunk two syllable words in the word lists appropriately, e.g. hun-gry; af-ter. An interesting finding was that, on average, the grade 3s and 4s miscued on words with the –ed past tense marker, e.g. they read shout for shouted; on words beginning with wh-, as the following attempts on the word where demonstrates: where = were, here, worried, there, will; on words with more than two syllables, i.e. they consistently simplified syllables: e-q-ment for equipment; on words with the vowel digraph ai, e.g. sad for said; and on abbreviations, e.g. Mr, Mrs. Thus, at exit, the results of word reading tests indicated that the grade 3s and 4s did not know how to use morphological markers (i.e. -ed; -ing; -ly) to aid their reading and they were unfamiliar with conventions for abbreviations (Mr).

An unexpected outcome of the study was that learners could read words that they could not write. For example, Aai/I, that is, learners read the word I in the sight word test, but spelt it Aai when they wrote words in the writing vocabulary tests that required them to write words from memory. Similarly, learners could read am, too, me from the sight word list, but not spell them: em/am; toe/too; muu/me. Thus, in writing they resorted to a phonemic strategy in spelling. Clay (2001:274) offers the explanation that errors are made more frequently in spelling than in readings, because there is no way to check for correct spelling in writing from memory, but syntactic and semantic sources of information in reading texts serve as built-in checks for word identities. Adams (1990:112) contends that relying too much on contextual clues enables readers to shortcut the visual processing involved in reading, which contributes minimally to the growth of their orthographic knowledge (see 4.6.4).
In sum, progressions on the word-reading task varied from baseline to exit as follows: At first, the learners' attempts showed no relationship between letter strings and phonemes. Next, they correctly matched initial phonemes and initial letters. As their knowledge increased, they began to read one-to-two syllable words. More advanced readers used their knowledge of syllabic cues in pronunciation to read multi-syllabic words, rather than knowledge of or visual familiarity with smaller-than-word spelling patterns. Finally, if the pre- and post-test letter identification and word test tasks are considered together, a number of conclusions can be drawn that could inform instruction, namely that knowledge of isolated letters is a necessary but insufficient skill for reading progress. To read words on sight, learners need to develop their orthographic knowledge. The importance of visual familiarity with letter patterns suggests that writing might be a useful means of helping young learners build familiarity with letter patterns. Schema theory suggests that identifying letters embedded in print or producing them in writing produces more significant learning gains than being able to name the symbols of the alphabet or give their sounds.

4.6.3 Hearing and recording sounds in words: Baseline and exit data: First learner cohort

The value of this task lies in the information it provides about children's phonological awareness and their ability to link phonemes with graphemes, i.e. it captures learners' control of sound-to-letter correspondences in that learners have to hear phonemes in words and then find a possible way of recording them. Hearing and recording sounds in words is very different to traditional phonics instruction, because the child learns to listen to sound sequences in his or her own speech, instead of trying to learn the 'sound' each letter makes. Sometimes learners can hear the sounds (phonemes) correctly, but they do not know how to record them (graphemes unknown). For example, one of the project learners asked an observer, "How do I make a /h/?" The question signalled that the learner had made the important link between her oral language and the alphabet. The ability to hear and record sounds in their own speech was a major breakthrough, especially for the grade 2 project learners. Once they grasped the idea that it was their own 'speech' they were writing down, they started using a phonemic strategy to write words they would never have attempted before (see 4.6.4).

The hearing and recording sounds in words task provides important indicators of change over time of an individual learner's ability to go from an analysis of phonemes in spoken words to producing written forms of these sounds, of different ways individual learners understand
sound-to-spelling sequences, and of common confusions with regard to English orthography that groups of learners share (DePree & Iversen, 1994:66-73; Dorn et al., 1998:89-90; Clay, 2002:111-119). As such, the task provided specific information for future research and instructional use.

The first noticeable finding was that there was very evident transfer of phonological properties of the L1 grammar into the L2 grammar. I am aware that researchers disagree on the role that transfer plays in second language acquisition (Ellis, 1985:286; Towell & Hawkins, 1994:7-11; Lightbown & Spada, 2006:23-25). On the one hand, I agree that the concept of 'transfer' should be reconceptualised in a more positive light, e.g. L2 learners use their L1 as a resource for learning (Ellis, 1985:286; Lightbown & Spada, 2006:53-58). Errors should be viewed partly as the external manifestation of a learner's developing interlanguage system (Ellis, 1985:73). On the other hand, I agree with Lightbown and Spada (2006:113) that when errors are caused by the "overextension of some partial similarity between the first and second languages, the errors may be specially hard to overcome – particularly if learners are frequently in contact with other learners who make the same errors" (see 2.7.4; 4.6.4).

In the phonological category, some of the project learners' errors could be attributed to phonological differences and some to phonological similarities between languages. Because English has speech sounds that do not exist in Afrikaans, these sounds may be distorted or replaced with other sounds (Owens, 1996:413). For example, project data indicated that Afrikaans learners had difficulty in hearing the phoneme /g/, hence they consistently represented that phoneme with /k/ or even /d/ (biek/big; dok/dog; douien/going). On the other hand, data indicated that Afrikaans-speaking learners had problems with English spelling because Afrikaans and English use an identical alphabet and the two languages share many identical phonemes e.g. go (English) and gou (Afrikaans). As a result of such surface phonemic similarities, the learners frequently replaced the letters i with ie (bieg/big; hiem/him) and o with ou (houn/home; kou/go) (see Table 4.2 in Addendum B-ii). Consequently, the learning task was problematic, because alphabet and pronunciation similarities in the two languages could not be applied to spelling patterns in English.

Overall, the observation survey data seemed to indicate that phonological properties accounted for the project learners' poor spelling. Even though it can be argued that transfer makes up a relatively small percentage of the kind of errors EAL learners make, the project data indicate that words containing the same transfer errors occurred frequently in the learners' written work. Hence, it is the frequency (as opposed to the quantity) with which the
small percentage of errors appeared in a given piece of written work that interfered with the quality of the writing (e.g. *Aai em kouien toe maai houm*).

Individual learners differed greatly in their ability to hear and record phonemes correctly, reinforcing the value of the observation survey in highlighting precisely the ways in which learners' understandings vary (Clay, 1993a; 2002). Example A in Addendum C-iii provides baseline data of five grade 3 project learners' attempts at hearing and recording sounds in words. Data in example B in Addendum C-iii can be compared with data in example A to show the progress made by each of the five learners from baseline to exit. (To avoid the practice effect, different test sentences were used at baseline and exit respectively. The sentences used at baseline were: *I have a big dog at home. Today I am going to take him to school* and at exit: *Mum has gone up to the shop. She will get milk and bread.*)

The qualitative data of the five grade 3 learners provide a sense of the range of abilities in a given grade. At entry, learner 1 seemed unable to record English phonemes. Learner 2 was able to hear and record some first and last letters of words, possibly because beginnings and ends of words are easier to 'see' than features embedded within words and partly because spaces help learners to locate and perceive the letters at the edges of the spaces (Clay, 2001:270). According to theories on development in children's invented spellings, learner 2 was at an early phonemic stage, which is recognised by the use of individual letters to represent each syllable (Weaver, 1994:114). This learner used a predominantly letter-sound strategy to record sounds and replaced the *v*-consonant with its Afrikaans equivalent *w* (as in *wat*). Learners 3, 4 and 5 had progressed further. Using a phonemic spelling strategy, they were able to hear and record internal vowel sounds, albeit that sound sequences were spelled incorrectly, probably due to interference from the L1. These learners seem to have borrowed heavily from Afrikaans to complete the task. The data highlighted the learners' individualistic understandings of certain aspects of English grammar, for example *I* and *going* were represented differently by each learner: *a ajs aa ai (I)* and *kouien, douieng, goeeng (going)* and learner 5 substituted *to* with *twee* (Afrikaans for *two*). This lends credence to Owens' (1996:448) argument that language learning and teaching are an individualising process and that each learner should be considered in terms of his or her own language competencies and needs. The differences in starting competencies between the five learners in Addendum C-iii seemed to support the contention that interventions should begin at each individual's lowest level of functioning and should continue within that level until the individual is ready to progress to succeeding levels (Owens, 1996; Clay, 2006). Again, this stresses the importance
of obtaining data from assessments such as those in the observation survey, which allow analysis of the processing behaviours of individuals.

In summary, the data obtained in the hearing and recording task indicate that, in acquiring literacy, the project learners were at a transitional phase of development toward the target language (Towell & Hawkins, 1994:10; Owens, 1996:422). They seemed to progress from an inability to record letter-sounds links accurately to an early phonemic strategy (using letters to match sounds in syllables), followed by a transitional form (phonemic spelling and a mix of L1 and L2). At this stage, there was a noticeable increase in the number of phonemes they were able to hear and record, and spelling was closer to the correct target form. (For example, see the second set of sentences in Example B in Addendum C-iii.) As in the letter identification task, the data seemed to point to common developmental sequences, because learner errors tended to be of a similar type on the same words, e.g. the internal vowel in *has* and *will* (*hus*; *hes*; *whul*; *wel*; *wl*), the consonant blend *sh* (*sop*; *se*; *sie*, *see*) and the *rime/silent-e* in *gone* (*gon*). Despite similarities in learning sequences, there were also individualistic differences in learners developing linguistic knowledge. Owens (1996:447) cautions that it would be a "gross misuse" of the developmental model to assume that children should all follow the "same lockstep sequence", and that developmental stages should therefore not be viewed as a fixed set of sequences from which a teacher may not deviate.

### 4.6.4 Writing vocabulary test: Baseline and exit data: First learner cohort

The writing vocabulary task is like a screen upon which the child can project what he or she knows (Clay, 2002:102). The task samples the learners' store of writing behaviours by capturing the words or short stories each learner can produce from memory. According to cognitive processing and schema theories, a word that a child can write represents a 'program of action' that can be performed again to become part of a network of information. Established networks form the basis for noticing more about the features of words (Fountas & Pinnell, 1996:77).

By ignoring spelling and reflecting on the range and categories of words in the data obtained from all the grades, one gains some idea of the word categories and semantic networks that make up the learners' additional language lexicons and how writing might be improved through research-based instruction. In contrast to behavioural theories of language use, the writing vocabulary task can be viewed in the light of socio-psycholinguistic theories that
emphasise the underlying mental processes, social 'embeddedness' and semantic functions that word categories represent (Owens, 1996:51; Foley & Thompson, 2003:32). In this view, language and literacy learning are regarded as both social and cognitive processes. Therefore, the writing vocabulary task enabled me to investigate and monitor progression in cognitive processing behaviours through an exploration of the learners' written language (see 4.1). It was also possible to investigate strategy use and evaluate the impact of books on the groups' writing behaviours.

A comparison of the kinds and amounts of writing learners did before and after the intervention underscores the view that the type of input a child receives will "influence what the child constructs" (Foley & Thompson, 2003:115). The task revealed some interesting patterns with regards to the personal lexicons, word categories, levels of specification (e.g. *Jaguar* is more specific than *car*; *Boxer* is more specific than *dog*), language and narrative structures the learners had opportunities to construct. It also indicated that EAL learners employed a range of strategies in the language learning process, some of which seem to parallel L1 oral language-learning strategies, e.g. venturing into new domains when confronted with new learning opportunities, refining distinctions within categories, repetition and chunking strategies, and the construction and reconstruction of linguistic and cognitive systems through exposure to new experiences (Owens, 1996:49-51; Foley & Thompson, 2003:120-121).

Differences in learner data from different grade levels (i.e. grades 2, 3 and 4) indicated that in each grade learners' proficiency in the writing vocabulary task differed considerably along a continuum of very weak to capable. Irrespective of the learner's age or grade level, some learners wrote nothing, others drew a picture and wrote their names. Some wrote their names and one or two words (see Addendum D-iv). Often these first words were borrowed from their first language e.g. *Quiniot (Quiton)*; *son (sun)*. At this level, records frequently contained single letters and non-word permissible as well as non-permissible letter strings, e.g. *r; s; ka; kra; tkloo*. The middle range of learners wrote lists of words, phrases or sentences, while the high progress group were able to write short stories. This information is important, because it enables teachers to understand learner performances in terms of broad developmental sequences rather than in terms of fixed ability and deficit models, and it gives them an idea of transitional phases and patterns of progress in writing development.

An analysis of data from all the grades indicated that the word lists were dominated by three large syntactic categories – nouns, verbs and adjectives – that were anchored in real world
experiences. With single exceptions, the words written by the grade twos at baseline were monosyllabic words with CVC (cat), VC (is) or CV (go) structures. Initial words written by grades 3 and 4 were often modified in production, for example, through consonant cluster reduction, i.e. tee = tree; sop = shop; wen = when, or through vowel-deletion, ie. brn = brown; mk = milk; wl = will. Writers that are more proficient tended to reduce the middle and final syllables in multi-syllabic words to produce two-syllable words: elfint/elephant; elieph/elephant; femly/family. Modified productions are typical of the early oral productions of first-language preschool learners (Owens, 1996:266-269).

Singular nouns formed the largest syntactic category in these learners' written word lists. This coincides with Owens' (1996:246) finding that nouns predominated in the first fifty words uttered by English-speaking preschoolers (i.e. 60-65% of the first fifty words were nouns). Interestingly, according to Owens, 'action words' accounted for less than 20% of first words. In this regard, data from EAL learners in the study seemed to correspond to research data of first language learners, namely that nouns form a nearly universal initial lexicon (Owens, 1996:248). The prominence of nouns in initial lexicons can probably be attributed to their conceptual prominence in the world of real objects and their semantic duality, i.e. one word can mean two or more things (Owens, 1996:248). Social interactions take place around objects. Therefore, nouns provide a simple but effective means of early communication at any age because they attach to objects that are perceptually visual, which makes reference unambiguous. Yet single nouns can be used to express a range of intended meanings, e.g. home could signal ownership, approval of living quarters or the desire to return home, depending on contextual interpretation (Adams, 1990:51; Owens, 1996:248-250). Linguists also point out that, in some languages, nouns have few morphological markers, which makes them easier to learn, than for example verbs, which are highly inflexed (Owens, 1996).

Owens (1996:246) found that the early noun category referred to objects familiar to children (e.g. no references to politics, unemployment or nuclear holocausts). Early nouns contained no abstractions (e.g. joy) or collections (e.g. forest). The noun category produced by the EAL learners was divided into three major subgroups:

(a) Proper nouns. Most learners' first written words were their own names. Often, word lists included the names of their peers. The name of a popular soft drink, Coca Cola, appeared in many records. It was spelt couk, kouk, koukekoula, perhaps indicating that environmental print does not necessarily help with spelling.
(b) Types of animals. The largest subcategory within the noun class was household animals. Ket (cat) was the most popular word, followed by dok (dog). The nouns were applicable to a midlevel of generality e.g. *dog* not *Boxer*; *cat* not *Siamese*.

(c) Basic kinship terms that referred to parents, e.g. ded (dad), father, mother.

At exit, the use of singular nouns had increased substantially and they still formed the largest syntactic category in the learners' written word lists. However, the dependence on proper nouns decreased. This was accompanied by an increase in the number of nouns that were storybook related, e.g. *the* Jigaree, gingerbread, treasure chest. These nouns were more specific, which showed that the learners were refining distinctions within word categories, e.g. gingerbread instead of bread, treasure chest instead of money box, pirate instead of man (Foley & Thompson, 2003:120). Whereas in the pre-test most learners selected to write monosyllabic words that reflected phonics-based instruction, in the post-test learners were more adventurous and used many multi-syllabic and descriptive words they had encountered in books, e.g. excmaaited, panau (piano), Jigaree. Since these new words were not previously in their 'known' vocabulary, it indicated that the learners were moving into new domains (Foley & Thompson, 2003:119). In doing so, they resorted to a 'hearing and recording sounds in words' strategy, to write novel words which led to invented spellings that could not be recorded in numerical performance scores (Clay, 1993a:65). By and large, the growth towards conventional spelling was offset by an increase in the number of invented spellings, suggesting that learners were strategically using the hearing and recording sound strategy to write unfamiliar words.

Nine verbs occurred frequently in the pre-test writing vocabulary word lists. These were mostly copula verbs (*ies/is; em/am*), finite verbs in the simple present tense (*sit, run, zump/jump, loek/look, help, gou/go*) and one modal verb (i.e. *cen/can*). The nature of the verbs gave the impression that they were most probably taught as carefully selected examples of the language system similar in type to structures found in basal reader programmes: *Look, Mo, the monkey can swing/jump/run or Look. Look. Kathy. I can run/ride/jump*. At post-test, the use of verbs increased from nine to thirty-three, revealing that the children were elaborating their cognitive networks by "refining distinctions that have already been made and developing increasingly delicate options", e.g. excited, gonna, slice (Foley & Thompson, 2003:120).
The third most popular syntactic category was adjectives. Interestingly, at pre-testing, this category was dominated by the names of colours, possibly as a result of instruction in colour-noun combinations. *Ret/red* was the most popular ‘colour name’. Using mainly a phonemic spelling strategy, different learners spelled the same colour name differently, again highlighting the individualistic nature of learning, e.g.:

<table>
<thead>
<tr>
<th>Colour</th>
<th>Spelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ret/red</td>
<td>grin/green</td>
</tr>
<tr>
<td>rut/red</td>
<td>krien/green</td>
</tr>
<tr>
<td>blek/black</td>
<td>pienk/pink</td>
</tr>
<tr>
<td>bloo/blue</td>
<td>peengk/pink</td>
</tr>
<tr>
<td>blow/blue</td>
<td>qiqil/purple</td>
</tr>
</tbody>
</table>

**Figure 4.8: Adjective category dominated by colours**

At post-testing, adjectives showed more variation and less reliance on colour (e.g. cold, wet, fat, little, small). Adjective ordering occurred in some records (e.g. one, cold, wet night (night)), but this probably reflected an early, imitative strategy rather than an analytical approach, because these kinds of phrases came verbatim from the storybooks that were used on the project (Owens, 1996:377). The other words that occurred fairly frequently in both pre- and post-test data were the following: three prepositions (*ap/up; ien, in/in; an/on*), three demonstratives (*a; the; zis/this*) as well as *not* and *no*. Baseline records also contained four pronouns (*aai/I; huu/he; me; my*). At exit, the use of pronouns increased to six with the addition of *she* and *they*.

At both baseline and exit, all learner records were characterised by a lack of morphological markers. The post-test records contained only isolated instances of two past tense markers (*cried* and *ran*) and the *-s* marker to spell plural nouns (balloons, waves, rhymes, books). The majority of learners had not yet learned to use word endings, such as *-s* (plural), *-ing* (present tense) or *-ed* (past tense), to support their writing. The failure to use morphological markers probably indicates an early stage in development (Ellis, 1985:55-58). However, lack of direct instruction that enables learners to understand the significance of grammatical markers could provide an alternative account for the relative lack of morphological markers in both the nouns and verbs in the word lists from the various grades. Overall, the data of all the EAL-project learners (i.e. grades 2-4) indicated that some aspects of English grammar remained troublesome for all the learners, even after three to four years in school (see addenda B iii). Similarly, other researchers have reported that, in general, additional language learners in
both traditional and immersion programmes fail to achieve high levels of grammatical knowledge about the target language, even after several years in these programmes (Lapkin et al., 1991; Lightbown & Spada, 2006:90).

At pre-intervention, the learners' written productions were characterised by a lack of individuality and learner 'voice' (see 4.4). The sentences learners wrote were contrived S-V-O type sentences. Therefore, the kind of writing they produced reflected a lack of authentic writing opportunities. This was confirmed by classroom observations of writing instruction, which required learners to copy contrived sentences from the board. These sentences were aimed at teaching concepts such as opposites, proper nouns or prepositions: The man is long. The girl is short. My name is Jadian. The cat is in the box. Teachers told observers that their learners could not write independently in English and that they needed exposure to correctly spelled sentences. Figure 4.9 shows that the early results of the writing vocabulary task mirrored adult-devised teaching strategies. In the figure below, the child’

\begin{quote}
\textit{The man is long. The girl is short. My name is Jadian. The cat is in the box. My name is Jadian. My Grandma name is an hanie. The dog sit on the gate. The cat sit in the box. My angel nam is Ian. The dog is big. My Mum's bring me an apple.}
\end{quote}

\textit{(Jadian, Grade 3 School A)}

\textbf{Figure 4.9: Contrived writing reflects contrived learning environment}

Baseline data produced no evidence of an awareness of narrative structure. All written attempts consisted of isolated words or a collection of sentences that were strung together without regard for story plot, cohesion or variety in syntax. Any sentence could be moved to any position in the story without affecting the structure or changing the overall meaning. As illustrated in Figure 4.9, the organisational pattern seemed to be based on grammatical similarity and association of ideas.

Perhaps the most encouraging finding in the writing vocabulary post-test was that contrast between the kinds of contrived 'classroom' writing children produced at baseline and the type of writing they produced at exit. The storybooks learners interacted with had a noticeable influence on their writing abilities. They drew on the vocabulary, language patterns, narrative structures and ideas found in storybooks in their own written work. First, the widespread influence of the storybooks on the learners' personal lexicons was noticeable. For example, words such as princess, skildiedle doo, co.whacky.do. jigaree, guinea pig began to appear frequently in learner records. This was clearly vocabulary that they had gained from the stories used on the project. Another important change was that many of the learners
progressed to spontaneously producing phrases and sentences. The majority of these progressions were marked by the use of sentences from the reading materials used on the project. This appeared to mirror aspects of the consolidation phase in writing described by Owens (1996:396) in which young English first-language speakers are able to write independently, using oral language structures. Similarly, the EAL learners in the literacy study borrowed structures memorised from the storybooks they had been reading to support their independent writing, as indicated in Figure 4.10.

<table>
<thead>
<tr>
<th>The jigaree</th>
<th>Before I go to skool I vas my vys (Grade 2, school B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I cen see The jigaree.</td>
<td>Wayse cam in breg me shlle (Grade 2, school C)</td>
</tr>
<tr>
<td>(Grade 2, School C)</td>
<td></td>
</tr>
<tr>
<td>The skaa is falling.</td>
<td>one cold wet nighat (Grade 2, school B)</td>
</tr>
<tr>
<td>Pass pasta please. (Grade 2, School A)</td>
<td></td>
</tr>
<tr>
<td>The books</td>
<td>The hos zamp in skidelidie doo</td>
</tr>
<tr>
<td>The tree Little duks</td>
<td></td>
</tr>
<tr>
<td>Jack in the Box</td>
<td>The dog zamp in the siiikildie doo (Grade 2, school A)</td>
</tr>
<tr>
<td>Little Red Hen (Grade 2, school C)</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.10: EAL learners borrowed storybook structures**

The EAL groups' writing displayed a greater variety and flexibility in sentence structure than was the case at baseline, where learners produced contrived sentences. It was clear that the learners were building a repertoire of story elements that they could use themselves, for example, some learners combined their knowledge of traditional story frames and conventions to produce their own narratives (see Addendum D-v).

The more proficient writers wrote short stories that revealed story grammar development. One striking aspect of these stories was that they were clearly influenced by the content and structures of the storybooks the learners had been exposed to in the literacy intervention. At the simplest level, these were one- or two-sentence stories, with an elementary but meaningful focus and an additive organisational structure (see Figure 4.11). Owens (1996) found that additive structures are typical of the oral narratives of preschool English first-language speakers (see Figure 4.11).
I saw a treasure chest in the chest I saw gold and a necklace and I saw a ship and I saw a Pieret on the ship. (Cheslin, Grade 3 School A)

**Figure 4.11: Additive structures in early narratives**

McCarrierg et al. (1996) and Clay (2001) emphasise the motivational value of self-composed messages. On the project, message quality improved as learners took ownership of the writing process and attempted to record their own ideas and, at times, poignant emotions, as is evident in Mmabatho's story about parental aspirations for a daughter (see Figure 4.12).

*Her mother told her one day that you are going to be a very happy women one day and not like me and your daddy my child. And I think that you are going to be lovely ... sayd her dad.*

(Mmabatho, Grade 3 School C)

**Figure 4.12: Authentic messages revealing learner's personal 'voice'**

Likewise, learners' written work began to show transitional forms as well as an appreciation of a 'sense of story' as they attempted to tell a story in their own language mixed with book language. Phelicia's story in Figure 4.13 is an example of the mix between Phelicia's own story telling and book narrative. Her 'bird-in-the-tree' story demonstrates a clear beginning, middle and end. It has beginning and end markers such as those found in narratives (one day … the end.). Its plot consists of an action sequence that shows some awareness of time and of cause and effect. At the end, the storywriter addresses a warning in the form of a moral to other children, indicating that the learner views herself as a writer for an audience of children.

One day a bird flew into a tree. Another bird came. I thought they were building a nest. I climbed the tree. I fell out of the tree … Be careful children you might fall

The end

(Phelicia, Grade 4 School A)

**Figure 4.13: The moral of the story is …**

Finally, an interesting finding was that some learners wrote verbatim extracts of the stories they were exposed to on the project. Such writing behaviours were difficult to explain in terms of story grammar development because they were copies of the original and they contained structures that seemed to be beyond the current language capabilities of the learners who produced them. Perhaps these forms were an early learning strategy, much like
learning nursery rhymes off by heart, which indicated a transition from oral to written story patterns. For example, a grade 2 learner wrote an extract from *The Gingerbread Man* from memory. As can be seen from the extract in Figure 4.14, he showed very little regard for spelling and punctuation, which is typical of early oral narrative attempts of L1 learners (Owens, 1996; Iversen, 1997).

<table>
<thead>
<tr>
<th>Verbatim text written from memory</th>
<th>Actual text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once upon time</td>
<td>Once upon a time,</td>
</tr>
<tr>
<td>There was a Little Old Man</td>
<td>there was a little old man and a little old woman.</td>
</tr>
<tr>
<td>And a Little Old Wamen</td>
<td>One day the little old woman said, &quot;I am going to bake some</td>
</tr>
<tr>
<td>One day the Little Old Wamen</td>
<td>gingerbread.&quot; So the little old woman got some flour, some sugar, some</td>
</tr>
<tr>
<td>Said, I am going to bake some</td>
<td>ginger, some butter and some milk.</td>
</tr>
<tr>
<td>Gingerbread so the little Old</td>
<td></td>
</tr>
<tr>
<td>Wamen</td>
<td></td>
</tr>
<tr>
<td>Had some flour, ginger, some</td>
<td></td>
</tr>
<tr>
<td>butter and some milk.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 4.14: Story texts written verbatim from memory

Likewise, the writing vocabulary extracts in Addendum D-vi were produced from memory. They consist almost solely of a collection of unanalysed portions of various big books that were used on the project to teach reading. These writing behaviours were different from conventional written productions because they were memorised copies of input from storybooks, rather than products of the learners' own linguistic systems. They appeared to belong to the category referred to in additional language research literature as "formulas" (Towell & Hawkins, 1994:183). Research literature is not clear about the significance of these formulas for language development. While some researchers argue that "unanalysed wholes" are unusable because they are inflexible structures that resist alteration, others argue that formulas are an essential starting point in language learning because they provide the material for children to decompose and analyse for application in novel situations (Towell & Hawkins, 1994:183).

Foley and Thompson (2003:120-126) provide a convincing explanation for "formulas", which they reconceptualise as "repetition and chunking strategies". They contend that the
learners' "repetition" of large uninterrupted "chunks" of language plays an important part in the learners' language development and in the learners' construal of abstract meanings, because familiarity with chunks of texts allows them to experience the pattern of cohesion that characterise "text grammar" and introduces them to language that conveys abstract concepts.

From the data, it seemed as if the learners were developing a memory for stories that they could draw on at a later stage for their own productions. For instance, one of the project's learners used verbatim phrases from the storybook *The Jigaree*, which he rearranged to create his own sentences. The original text had the following repetitive structure: *The Jigaree. He is jumping after me. He is climbing after me*, etc. Based on this pattern, the learner produced the following version printed in Figure 4.15 (the spelling errors have been corrected to emphasise how the learner was manipulating the original story or employing deconstruction and reconstruction strategies):

This example suggests that learners do 'unpack' and manipulate formulaic language for their own use and that learning can proceed from unanalysed wholes to parts.

A life story of the Jigaree.

The Jigaree. He was a Jigaree. Jigaree climb. Here climb the Jigaree climbing after me. Jigaree swimming. The swimming Jigaree swim after me.

The Jigaree was a bird but he can climb and can swim.

*(Jason, Grade 2)*

**Figure 4.15: Learning proceeds from analysed 'wholes'*

The exit data from the writing vocabulary task showed that learners were beginning to make an important shift from phonemic dependence in spelling to using alternative strategies and more advanced phonic knowledge. Spelling strategies still included hearing and recording sounds in words, but, in addition, the learners were beginning to use different strategies to write words, e.g. syllabification (*baloons, eliefant, bekpek (backpack), icpak (icepack)*), onset-rime analogy (*bed, hen, then*), alliteration (*ball, bed, body*) and spelling conventions, e.g. the modifying -e, double consonants, consonant clusters and digraphs (child, grass, ball, she, the) and medial vowels (horse, corn, house) (Moustafa, 1998:135; Dorn & Soffos, 2001a:62). Their overdependence on 'sounding out' each unknown word, letter for letter, disappeared.
Nevertheless, despite a shift towards conventional spellings of words, learners soon reached their spelling thresholds and made extensive use of inventive spellings. Inventive spellings appeared to be developmental in nature and therefore it could be expected that many spellings would improve over time with exposure to correct forms (Weaver, 1994; Owens, 1996). However, in addition to developmental aspects, persistent error types in the EAL learners' spellings appeared to be due to letter-sound patterns that were transferred to the additional language from their first language. Table 4.2 in Addendum B-ii provides a categorisation of the types of persistent spelling errors made by the learners in grades 2, 3 and 4.

In considering the types of errors outlined in Table 4.2, it is possible that the dominance of the L1 phonological/pronunciation system tends to override the learners' direct visual processing of the English orthography, which may prevent them from attending to and developing a thorough visual memory of the English orthography. Because they were using their knowledge of the phonology and spelling systems of their L1 as a resource for learning, they were not attending to English spelling patterns. The records of the EAL learners confirmed this because, although they read words in texts correctly, most probably by glossing over them and by using contextual clues, they nevertheless spelt them incorrectly, for example, *hos* (horse), *ket* (cat), *aai* (I), *em* (am). These invented spellings showed a strong reliance on their L1 phonological system. Since unfamiliar letter strings have a disruptive effect on the reading process, it was likely that at more advanced levels inattention to detail in words could slow down their reading and interfere with their comprehension (Adams, 1990; Clay, 2006).

The learners' stories at exit showed an improvement in the language level (as measured by the level of linguistic organisation used by the learner), authentic message quality and in development of story schemas. However, as in the case of their inventive spelling, the greater freedom to express their own ideas was accompanied by many types of grammar errors. These were: the omission of third-person singular endings on verbs (He walk), the lack of agreement between demonstratives and nouns (*this dogs …*), the failure to make the verb 'to be' agree with its subject (I is hungry), ungrammatical use of verb tense forms (Yesterday I go), pronoun errors and the use of words without their suffixes as well as the use of incorrect prepositions (see Towell & Hawkins, 1994). Some of their grammatical errors showed similar characteristics to their spelling errors (see Table 4.2 in Addendum B-ii). For example, both their spelling and EAL grammar were influenced by the grammatical properties of their first language. Furthermore, when writing words, they tended to omit or transpose letters; when
writing sentences, they tended to omit or transpose words. The sentences printed in Figure 4.16 illustrate the influence of the first language, omission and transposition of words:

<table>
<thead>
<tr>
<th>L1 Influence:</th>
<th>L2: I give for my grandpa present.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1:</td>
<td>Ek gee vir my oupa 'n present.</td>
</tr>
<tr>
<td>L2:</td>
<td>Where is the presents?</td>
</tr>
<tr>
<td>L1:</td>
<td>Waar is die presente?</td>
</tr>
</tbody>
</table>

Omission: I run away am not a wolf.
The was living in a big house.

Transposition: I love my white bread to buy.

Figure 4.16: Ungrammatical sentences

The stubborn nature of these errors in the written attempts of learners in different grade levels suggested that some of the errors would not improve without direct, corrective instruction (Lightbown & Spada, 2006:113). In the first instance, the learners were exposed to only a few hours per week of English. Secondly, their teachers were not English speaking and, although the presence of quality English materials went a long way to helping them overcome linguistic barriers, they were not entirely comfortable with teaching or communicating in English. Consequently, the learners heard many inaccurate linguistic structures from their teachers (see 4.5.2). They were also surrounded by other learners whose English was influenced by the same first language, thus their opportunities for recognising where English differed from their home language were restricted to reading storybooks. Moreover, they had limited contact with the English language outside the classroom. It was unrealistic to expect these additional language learners to learn to read and write English accurately. The only time the project learners heard certain linguistic features was during shared and guided reading sessions or when they listened to the story tapes that accompanied the big books. Providing them with excellent models of English through high-quality reading materials and tapes, and teaching them to read independently at the earliest age possible so that they can gain access to other good quality language sources, appeared to be an important step forward.

In summary, the analysis of the EAL cohorts writing samples showed the following trends: In each class, the learner profiles revealed a wide range of competencies in writing (e.g. some children could write nothing, some could write short stories). Progress in EAL writing appeared to be developmental in nature and seemed to parallel some of the oral acquisition processes characteristic of L1 learners. This was evident in a number of areas, namely the sequence of development from one-word to longer written productions; the learners' modified
grammar productions; the dominance of nouns (semantic category) in the learners' written productions; the gradual elaboration in lexical networks; more specific distinctions of word categories; use of formulas or interrupted chunks of language; and the development of story grammars.

At project exit, the learners had moved away from copying and from 'basalese' to employ the problem-solving and processing strategies that were described in this section. These can be summarised as follows (Clay, 1991a; Foley & Thompson, 2003:120-126): When confronted with more interesting and challenging reading and writing tasks, the learners moved into new semantic domains. The growth in their knowledge was evident in the increasingly refined options (i.e. moving from general to specific categories) in the semantic categories they selected to use. They were active agents in their own learning as witnessed by their repetition and chunking strategies, and the constructing and reconstructing processes of their cognitive and linguistic schemas. They also adopted a hearing and recording sounds in words strategy, employed more advanced spelling strategies and used storyframes as 'templates' for their own productions. Finally, they were actively engaged in writing that reflected storybook content and structures.

4.6.5 Running records: Baseline and exit data: First English Additional Language learner cohort

On the literacy project, running records were used to analyse learners' reading behaviours on continuous texts (see 3.7.1). As such, the running records yielded valuable qualitative data that provided valuable insights into both individual and group reading behaviours that were useful for helping teachers prompt and support individual learners' reading efforts. For example, data at the individual level revealed that different learners may achieve identical accuracy scores in reading, but they may process texts very differently, i.e. they obtained the same scores by individual routes, as indicated by the following cases. Two grade 4 learners, Phelecia and Davina, who were in the same class, both read the same book with 90% accuracy, but Phelecia's miscues reflected inattention to meaning and an absence of self-corrections, whereas Davina's miscues reflected use of meaning cues and the presence of self-corrections. The implications for instruction are that Phelecia's teacher has to help her to attend to meaning, while Davina has to learn to attend to letter-level details in words.

Group data, on the other hand, indicated that, at baseline, the majority of learners knew one or two main strategies for dealing with unknown words, namely 'sounding out' unknown
words, e.g. f-a-k-eh for face; l-i-t-t-l-eh for little, or guessing words from first letters (see section 4.6.5). Thus, the data revealed limitations in instructional programmes: The learners' approach to unknown words corresponded to their teachers' view that phonics was the key to good reading instruction. As mentioned before, project teachers had a standard response to learners who struggled to read, namely "Die kind ken nie sy klanke nie" (The child does not know his sounds).

A second reading habit that was due to poor teaching approaches became evident from the group data of oral reading, namely that the grade 2s had been taught to recite beginner books and rhymes from memory. Observers in all three schools recorded that some grade 2 learners 'read' familiar texts word perfectly until they were asked to point to the words they were reading. Then it became apparent that they were relying on memory because they were unable to match one spoken word with one printed word. When asked to read unseen texts, other learners resorted to 'reading-the-pictures'. Consequently, when one of the project observers asked a grade 2 girl to read a beginner reading book, she responded, "You tell me the pictures, then I'll read you the story". In itself, this could be regarded as a normal developmental stage in emergent reading. However, observational records indicated that there were learners in grade 4 who did not seem to pay any attention to print when asked to read. They seemed to equate reading with telling the story from the pictures and appeared to be unaware that reading made different demands from storytelling. For example, when asked to read the classroom text printed in Figure 4.17, an EAL learner in grade 4 responded by retelling the entire book based on its pictures. He did not apply one-to-one matching (i.e. one spoken word with one written word) and seemed unaware that he was supposed to attend to print (let alone detail in print) in text.

<table>
<thead>
<tr>
<th>Reader's version</th>
<th>Actual text</th>
</tr>
</thead>
<tbody>
<tr>
<td>They paint the plane.</td>
<td>Biff made an aeroplane</td>
</tr>
<tr>
<td>They shoot the plane.</td>
<td>Biff wanted to fly it</td>
</tr>
<tr>
<td>Then the plane goes into the room.</td>
<td>The aeroplane flew up</td>
</tr>
<tr>
<td>They look for the plane.</td>
<td>Biff looked for the aeroplane</td>
</tr>
<tr>
<td>They don't find the plane.</td>
<td>She couldn't find it.</td>
</tr>
<tr>
<td>Then she goes into the room.</td>
<td>She wanted to cry.</td>
</tr>
<tr>
<td>Then she finds the plane.</td>
<td>The aeroplane was on the bed.</td>
</tr>
</tbody>
</table>

**Figure 4.17: Picture reading**
Reciting books off by heart prevents the establishment of effective reading behaviours for at least two reasons. One, it is difficult to help learners observe detail in over-familiar material. Two, over-memorised books do not offer learners sufficient challenge to force them to interact with texts, problem-solve and learn new things (Clay, 1991a:208). Again, this highlights the need for many little books at the same gradient of difficulty so that learners can consolidate early reading behaviours on easy books without having to reread the same, over-familiar books (Gnagey Short, 1991:104; Hornsby, 2000:35-36).

Group data also showed that many fluent readers in grades 3 and 4 could read fluently, but did not comprehend what they were reading (see Addendum D-vi). This coincides with Gersten and Dimino's (2006:104-105) finding that some readers can "decode well, but cannot comprehend what they read". This suggests that the problem is prevalent and highlights the need for more research into "optimal" ways for developing semantic aspects and comprehension-fostering skills (Gersten & Dimino, 2006:105). Marilyn was a project learner whose reading profile fitted the 'fluent but meaningless reading' category. She was a grade 4 learner in school B. At baseline, Marilyn's teacher introduced her as the top reader in her class and sent her to be assessed on a library book she had selected for Marilyn to read. Marilyn read fluently, but her running records showed that she made no effort to construct meaning (see example in Addendum D-vi). She appeared anxious to please, but read too fast and skipped sentences without noticing the loss of meaning. She showed no concern for punctuation or phrasing and she did not self-correct any of the miscues she made, indicating that she was not monitoring and taking control of her reading. Discussions with the observers indicated that a common problem in the project schools was that fluent decoders were frequently placed on books that were too difficult for them. This seems to confirm the view that the project teachers equated fluent decoding with good reading. Marilyn's running records enabled the observer in school B to discuss Marilyn's reading behaviours with her teacher, who then selected easier materials for Marilyn to read. Once Marilyn was appropriately placed on books at the correct gradient of difficulty, she appeared to enjoy reading and began initiating searching and monitoring behaviours.

Some learners responded to requests to retell stories they had just read by inventing their own stories that were unrelated to what actually happened in the text. Alternatively, they reacted to comprehension-based questions by staring at the ceiling as if they were searching their memories to recall answers. They seemed unaware that they could consult or scan the book they were reading for relevant information. Clay (2006:170) attributes "wandering eyes" in
older children to an avoidance strategy. "Look away and the problem gets solved, because other people get tired of waiting" and supply the answer. She reports that eye-movement research found that high scores of eye-on-print behaviour were related to reading progress and high scores on 'eyes-wandering' were related to slow reading progress (Clay, 2002:278). At any rate, the project learners' behaviours seemed to reflect their teachers' reading approaches, namely reading is a matter of saying words fluently and accurately and comprehension is a matter of recalling memorised content.

Furthermore, the pre-test data in the running records of the grade 3 and 4 cohort revealed that a number of project learners had developed confusions about the directional constraints of written English. This highlighted the need for checking to see that texts help children with directional problems to acquire the correct directional rules of written English. Text positioning can easily create confusions that encourage undisciplined directional behaviours. For example, some little books contain two sentences of print per page that are separated by a picture. The first sentence is positioned above the picture at the top of the page and the second sentence below the picture at the bottom of the page. A running record of a grade 4 learner revealed that he read the second sentence at the bottom of the picture first before reading the first sentence above the picture, instead of the other way round. In another instance, an emergent reader in grade 3 was exposed to a double-page spread in an open book with speech bubbles on each page (see Addendum D-vii). The child read the right page before the left page, i.e. It's not. It's mine! That's my glue! instead of That's my glue! It's not. It's mine! On the same text, another grade 3 learner produced a correct oral reading, i.e. That's my glue! It's not. It's mine! However, when asked to point while reading the right hand page, her running record revealed this rendition:

| Text:          | It's not | It's mine! | -----
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner:</td>
<td>That's</td>
<td>my glue!</td>
<td></td>
</tr>
</tbody>
</table>

Apart from her over familiarity with the text and her inability to match one spoken word with its written equivalent, the latter learner had not established correct directional habits. A lack of monitoring and flexible page layouts in texts were impeding reading progress for these children. Research indicates that for readers who need to develop directional schemas, books with one-line captions, consistently positioned at the top left corner of a left page, would be appropriate for establishing the correct position and directional movement required in reading (Clay, 1993b). Project teachers were encouraged to develop 'word' schemas and one-to-one
matching by using books with big print and enlarged spacing between words, and by allowing learners to point to words while reading (Davidson, 1991a; Clay, 1993b).

Over-segmenting was a very common problem that showed up in the learners' running records. Learners tended to read multi-syllabic words as two separate words, indicating that they lacked one-to-one matching and they did not have sufficient visual memory for chunking permissible letter strings. Once again, this highlighted the importance of building orthographic knowledge that would help learners read syllables in words, by chunking familiar smaller-than-word units (Adams, 1990). Project teachers taught learners two strategies for dealing with multi-syllabic words, using masking cards to isolate smaller-than-word parts and pointing to syllables in words in order to monitor correct matching.

Finally, as in the other observation survey tasks, the baseline group data obtained from the running records revealed a wide range of competencies in each grade level (e.g. reading levels varied from zero to fluent reading). This meant that, in each class, teachers had to cope with readers at opposite ends of the reading spectrum. Additionally, reading materials in each classroom had to support a range of readers from the weakest to the most advanced. Clearly, one basal reader and a few odd books were inappropriate for the task (see 4.4). Thabo is a case in point. She was a grade 3 learner in school C. At pre-testing showed her reading level was zero, three levels below the average grade 3 learner (see Table 4.1 in Addendum B-i). At post-testing, she had progressed to beginner level books (i.e. level three) (see Addendum D-v-iii). However, her entry level was too low to enable her to catch up with her peers whose reading levels had doubled by the end of the project. Thus, although Thabo was beginning to develop effective early reading behaviours, her low starting point ensured that she remained out of depth in reading compared to her peers. Consequently, as a result of poor placement with regards to grade level, her academic career is in jeopardy. Thabo represents a prevailing problem in schools, namely that the range of competencies in any one classroom is too great for teachers, most of whom have large classes, to cope with, which suggests a need for research in this area.

At post-testing, the running records indicated that the majority of project learners were reading for meaning. They were using problem-solving strategies for solving difficulties in text and were beginning to integrate different cueing systems (e.g. semantics, syntax, graphophonic cues). The appearance of cross-checking and self-correcting behaviours in their records showed that they were monitoring their reading. Very importantly, they enjoyed reading and they liked English. This was evident from incidental comments they made about
reading and about English (e.g. *I like 'We Ski'; I like to read; I like English*). The observers at the different schools reported that the children were 'buying in' to reading: They responded enthusiastically to the different teaching approaches and materials; they were motivated to participate in shared reading; they asked their teachers and the observers for English books to read in their spare time; they lined up of their own accord outside the observers' offices to come and read to them; during breaks they spontaneously sang the songs they learnt at the listening stations; and some learners preferred to stay in class during break to read. The observers reported that improved instructional approaches and interesting materials had led to a sharp decline in discipline problems and 'off-task' behaviours (see 4.4.2). Moreover, the headteacher of school B told an observer that absenteeism had decreased as a result of the English reading programme. At school C, the grade 2 teacher said that the children rushed through their other work so that they could go and read the English books.

### 4.6.6 Learners view themselves as readers and writers of English

In the light of Freppon and McIntyre's research (1998), the learners' engagement in stories and enjoyment in reading was perhaps one of the projects' key successes, because learners are more likely to continue reading if they develop a love of reading in the early grades. The learners' engagement in and enthusiasm for reading were visibly evident (see photo gallery in Addendum G). It showed in the frequent references to the language, events and characters from storybooks that appeared spontaneously in their conversations, songs and written work. Their incidental comments during reading, such as those listed in Figure 4.18, indicated that they were discovering their favourite stories, predicting events, becoming personally involved with characters and engaging in meaningful reading:

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*I liked the best book from teddie lie*

*(Title: The Best Book of Teddy Lee)*

(Sigwese, Grade 3 School B)

*I think snake is gonna be alright.*

*(Title: Snake's Sore Head)*

(Samantha, Grade 4 School C)

*I think the gonna bird is gonna to do it tomorrow.*

*(Title: The Gonna Bird)* (Evert, Grade 4 School A)

---

**Figure 4.18: Learner engagement with and comprehension of stories**

Whereas at pre-intervention observational records showed that learners tended to avoid reading and writing tasks whenever possible, the literacy intervention reversed this 'aversion
to reading' trend (see 4.4.1-4.4.2). Field notes indicate that both proficient and less proficient
readers frequently engaged in voluntary, independent reading. Some learners chose to stay
inside and read during breaks. It was evident from their behaviours that the majority of
learners had taken ownership of the role of reader and the role of author. Figure 4.19 contains
spontaneous comments written by learners during independent writing time:

---

*I love to read.*
*I love to kick soccer*
(Loyiso. Grade 3 School A)

*I love to read in school but I don't like noise. I love to sing and I love big books, because is nice.*
(Nosizwe. Grade 3 School C)

*I like engels.*
*I like read.*
(Yunay. Grade 4 School B)

*A like my school. A hef my Inglish.*
(Lucinda. Grade 4 School C)

*I love to read mem (ma'am?) and my friends al so read.*
(Patricia. Grade 4. School B)

One of the grade 3 Xhosa-speaking learners spontaneously wrote the following thank
you letter to an observer:

*Im very happy thenks to you. I can't stop thenk you. Im injong (enjoying) the read. It is very nice. Thenk you very much. I don't know your name, but your name is lawlee (lovely). I thenk you one more time. Thenks.*

---

**Figure 4.19: EAL learners love to read English**

However, during informal talks with the observers, teachers started expressing their concern
that English was becoming too well liked to the detriment of Afrikaans and other school
subjects, such as maths. They said that their learners "rushed through" their other school
tasks, because all they wanted to do was read the English books. Thus, the children's obvious
enthusiasm for reading in English created a potential anti-English stance on the part of the
teachers who felt that the learners' home language would be jeopardised if English became
too popular.
4.6.7 Summary

Overall, pre-test data indicated that the majority of readers on the project were not developing effective reading processes or strategies. Both slow and fluent readers seemed over-committed to the idea that reading was about sounding out individual letters and pronouncing words. Although the difference between the two groups was marked, i.e. the first group exhibited fast, fluent reading; the second group exhibited slow, laborious reading. Both groups were 'stuck' on word-level reading, they did not attend to larger-than-word units or meaningful reading of stretches of text.

Thus, an early exposure to interactive instruction that placed priority on strategic competence seemed to be important to prevent the habituation of ineffective reading behaviours. Many of the reading problems of the older learners appeared to stem from an over-attendance to letter and word learning and a too rapid promotion to books beyond their comprehension level. Ineffective reading behaviours were ingrained by an instructional focus on accuracy and fluency at the expense of strategic reading and monitoring behaviours. It became more difficult and time-consuming to break ineffective reading habits once learners had progressed to higher grades.

To conclude, progress in the learners' processing behaviours was evident in the learners' active employment of strategies that facilitate the development of language growth in lexis.

4.7 OBSERVATION SURVEY: QUANTITATIVE DATA: FIRST LEARNER COHORT

This section focuses on the graphic presentation and discussion of the quantitative data obtained from five tasks in the observation survey. As mentioned earlier, the research sample for which complete data were obtained consisted of 64 EAL learners in grades 2 to 4, drawn from three schools (see Table 3.1). Three of the five assessment tasks were classified by ceiling affects, i.e. assessments that measured finite sets of learning. These were letter identification, the word test and hearing and recording sounds in words. Two tests, book level and the writing vocabulary tasks, were open-ended and did not have a ceiling effect (i.e. learners were not expected to master a finite set of information). Table 4.1 in Addendum B-i compares the mean scores of the research sample at (1) baseline and (2) exit for each task in the observation survey.

When a comparison was made between the exit and the entry scores in Table 4.2 in Addendum B-i progress in all tests was noted. The gains made by the grade 2s equalled or
exceeded the mean entry scores of the grade 3s on four of the five assessments, i.e. book level, word test, letter identification and hearing and recording sounds in words. The mean exit scores of the grade 3s were higher in every assessment than the mean entry scores of the grade 4s. This suggests that, in most cases, the learners on the programme were progressing at a faster rate than the learners who had been in similar grades the year before. The grade 2 cohort made the most progress in all the tests, with the exception of the writing vocabulary test. This seems to indicate that, in general, the literacy intervention was most beneficial in the early grades. However, the grade 4s made the most gains in the writing vocabulary component of the literacy programme. Before the intervention, there was a downward trend in the writing vocabulary scores from grade 3 to 4. Thus, the results, supported by theory, suggest that instruction that utilises the reciprocity of reading and writing has the most potential for improving the literacy levels of learners in grade 4. On tests with ceilings (i.e. letter identification, the word test and hearing and recording sounds in words), all the learner groups stopped short of total scores. The grade 3s and 4s obtained similar exit scores on these tests. Qualitative data from their records indicated common difficulties with certain letters, phonemes and words, which suggests that instruction should focus on those particular areas. The next section elaborates on each of the tests in Table 4.2.

4.7.1 Quantitative results and discussion: Book level (running records) for the first English Additional Language learner cohort

The first assessment task listed in Table 4.2 is the book level (running record) task that recorded the highest level of text a reader could read at or above 90% accuracy. To record a learner's reading progress over time, books were grouped according to a gradient of difficulty ranging from emergent (beginner) level to fluent levels. To accommodate the learners' prior knowledge of literacy, two levels (level 0 and levels 1-2) were added to the reading range. Thus, level 0 signified that the learners could not match a spoken word with its written equivalent. Learners at Level 1-2 were able to 'read' one or two of their own dictated sentences that the teacher wrote down for them. Reading these sentences relied strongly on memory skills, rather than on the actual ability to read.

Running records were used to record the reading progress of each learner on two separate occasions, approximately fifteen school-weeks apart. The learners' ability to move up through texts of increasing levels of difficulty was viewed as an indication of reading progress. For instance, Addendum D-ix (Baseline data) contains an example of Wayne's running record taken at the initial assessment on a beginner book level. From the many errors in the record, it
is evident that the text was too difficult for Wayne. The running record (Exit data) in Addendum D-ix show Wayne's progress in reading at final assessment. He could read the same level text with 100% accuracy and was therefore promoted to books that he could read at instructional level (i.e. with 90% accuracy).

The graphs in Figures 4.20 and 4.21 provide an overview of the progress made by the 64 EAL learners. Figure 4.20 summarises the complete set of data obtained from the running records of the full EAL sample at initial testing and Figure 4.21 summarises the set of data obtained from the running records of the same EAL sample at final testing.

The x-axis in Figure 4.20 provides the scores in book levels from level 0 (non reader) to level 17+ (fluent readers). The y-axis shows the number of children reading at a particular level at entry to the programme. From the graph, it is clear that a large proportion (i.e. 50%) of the 64 learners had entry scores of zero or 1-2 on reading tasks.

In Figure 4.21, the movement of the group from low-level scoring to higher levels shows that a large number of children made substantial progress in reading over the period of intervention. At the beginning of the programme, 63% of the learners were reading at emergent or zero levels and 38% were reading at levels 6–17. After the programme had run for fifteen school weeks, 27% of the learners were reading at emergent and zero levels and 73% had progressed to levels 6-17. A few of the children on the programme had not progressed beyond zero level (3 children) or emergent level (1 child), suggesting the need for individualised help.

Figure 4.20: EAL Group Book Level at Baseline Assessment 64 Learners in Grades 2, 3 & 4
4.7.2 Results: Discussion of Table 4.2. The average entry and exit scores on book level for each grade

Whereas the graphs in Figures 4.20 and 4.21 show the book levels of the entire EAL sample, the first section (Book Level) in Table 4.1 in Addendum B-i shows the average entry and exit scores on book level for each of the grades separately, i.e. grades 2, 3 and 4. All grades made meaningful gains on book level. The grade 2s from schools A, B and C, who was all in their first year of learning English as an additional language, progressed through six levels of graded readers in three months. Their scores equalled the initial test scores of the grade 3s, who had started learning English the year before. This suggests that the grade 2 learners were progressing at a faster rate than usual and that acceleration is possible. The grade 3s had progressed through five levels and had exceeded the entry scores achieved by the grade 4s. At final testing, the entry scores of the grade 4s increased three book levels. The grade 2s made the most gains, while the grade 4s made the least. In part, the smaller gains made by the grade 4s could be attributed to the more challenging content of the books at higher levels. However, the declining rate of progress with each increasing grade may confirm the importance of stimulating children's interest in reading at a younger age while they are still in the early grades (Clay, 1993a; Pressley, 1998).

The second set of the assessments in Table 4.1 in Addendum B-i shows the scores for the Writing Vocabulary task. Although the results demonstrated that the number of words
written correctly by learners had more than doubled or trebled at post-testing, the scores were still low. On average, none of the grades wrote more than 13 to 20 English words correctly. Since no points were allocated for words that were spelt incorrectly, the scores on this task were strongly influenced by the learners' lack of knowledge of spelling patterns in English. However, if correct spelling were not taken into account, learner performance on this task would show a marked improvement in the number and the type of words written at post-testing compared to those written at pre-testing. There was also a marked difference in the strategies they used for writing words (see 4.6.4). The types of spelling errors made by English additional language speakers were analysed in Table 4.2 in Addendum B-ii. The data in Table 4.1 can be used to provide teachers with information about the sources of knowledge and spelling strategies that many EAL-speakers in South African classrooms may be using.

Section four in Table 4.2 shows the results for the **Letter Identification** task. As can be expected, at initial testing the grade 2s achieved lower scores (24/54) than the grade 3s and 4s who both scored 36/54. At final testing, all the grades achieved the same scores, i.e. 42/54. This indicated that the grade 2s had caught up with the grade 3s and 4s in the letter identification task. A number of observations were made about the type of letter knowledge the EAL learners possessed and its usefulness to reading. First, most of the learners could recite letter names in sequence (that is: a, b, c …) from memory. But, when confronted with letters that were treated in random order, they all responded by giving the sound correspondences for letters, rather than their letter names. Their inability to use letter-sound knowledge when reading or writing is probably the result of instructional practice that emphasised letter-sound correspondence and rote memorisation of the alphabet. Letter sounds and speech sounds appeared to be two separate sets of knowledge, because the learners did not seem to make useful connections between the letter sounds and the sound sequences in their own speech. Second, even though all the grades scored approximately 80% at final testing for identifying letters, their writing vocabulary results (discussed above) were in line with research indicating that knowledge of letters in isolation was not sufficient to help children spell words in English. Adams (1990:114) makes the point that the identity of a word is determined by the order of the letters in the word (e.g. tip/pit; pot/top; spit/tips). Thus, letter-sound correspondences are usable when they are linked to larger spelling patterns in syllabic units. The difference in learner scores in the writing vocabulary task and the letter identification task seemed to support the research indicating that learners need to develop a thorough visual familiarity with letters that occur together frequently to form consistent
spelling patterns (Adams, 1990; Clay, 1993b; Moustafa, 1998). In their writing tasks, the EAL learners produced spellings that were very different from the actual spelling of English words. It is possible that the learners' weak knowledge of spelling patterns in English was a factor that could potentially influence reading negatively (see 4.6.2).

Each **Word Test** (section three in Table 4.2) contained fifteen frequently recurring words that had been selected from the reading series used on the project. Since each test scored words that were read in isolation, it did not assess gains made in terms of strategic reading behaviour, which is needed for problem-solving continuous texts. In this test, the grade 2s made the most gains, probably because they started from the lowest word knowledge base and therefore they had more learning to do than the learners in the higher grades. At final testing, the grade 3s and 4s were unable to read multi-syllabic words. Identifying long words depends on the learners' ability to break the words into syllabic units. Thus, the results of the word test also suggested that the learners' progress might have been impeded by their lack of familiarity with English spelling patterns, since their inability to parse long words into recognisable syllables was likely to have a negative effect on word reading (Adams, 1990:128).

The **Hearing and Recording Sounds in Words** task (the last assessment in Table 4.2) assessed phonemic awareness, that is, a learner's ability to hear and record sounds in words. It required the learners to analyse a new word into its sequence of sounds, to match each sound to its corresponding grapheme(s) and to write each sound down in left-to-right order as they occurred in words. The task was scored by counting the learner's ability to control each letter-to-sound link. Phonemic awareness is an important skill that has received much attention in reading research. Clay (1993) found that low-progress readers had considerable difficulty in analysing words into their sound sequences. A number of other researchers have stressed that phonemic awareness demonstrates a strong relationship with progress in reading (e.g. Ayres, 1998:209, 1973; Iversen; 1997). Our findings confirmed that the learners with low scores on the hearing and recording task also had low scores on the reading assessment (running records) and vice versa. The learners' reading and hearing and recording sounds in words scores seemed to improve simultaneously. Example A in Addendum D-x provides an example of this. It shows the initial attempt of a Xhosa-speaking learner, Lulu, on the dictation task. She was able to record only one individual letter for each word she heard and the majority of the letters she recorded did not represent an acceptable sound-letter analysis that would be useful to her when reading. Similarly, on the initial reading assessment, Lulu
scored zero. Example B in Addendum D-x shows Lulu's attempts in the dictation task at final testing. At this stage, she was able to hear most of the initial and final sounds as well as some of the internal vowel sounds in words. The running record printed in Addendum D-xi shows that she was reading beginner level books with 96% accuracy at final testing.

The final test results in Table 4.2 show that the majority of learners made gains in the hearing and recording sounds in words tasks at final testing. As could be expected, most gains were made by the grade 2s, who had the lowest initial scores, i.e. 14 out of a possible 37. Observation data also showed that the EAL learners transferred the phonological properties from their mother tongue into the L2, which corrupted the spelling patterns found in English.

4.8 QUANTITATIVE RESULTS AND DISCUSSION: SECOND LEARNER COHORT: LEARNERS WHO WERE NOT ENGLISH FIRST-LANGUAGE SPEAKERS, BUT WHO RECEIVED INSTRUCTION THROUGH THE MEDIUM OF ENGLISH

Baseline and exit data were also obtained from the second sample of learners (see 4.1). They were from an Afrikaans-medium school that had started an English medium grade 1 class for the first time in 1999. Eight learners who were members of the newly formed grade 1 class were assessed in April/May and again in November. The group's teacher had received training in the approach to literacy adopted in this research study, but she left the school in June and was replaced by a temporary teacher who had not received training. Thus, the approach was not implemented in grade 1 and the group took more of a 'control group' role. Observational data, recorded in September 1999, indicated that the replacement teacher used a strong behaviouristic approach to literacy instruction. Phonics drill and memorisation were her main instructionalistic strategies.

Discussions with the classroom teacher confirmed that she placed the emphasis on phonics and oral language skills as precursors to reading and writing. For example, she explained that she had not "paid much attention to reading", but that she had been "working on the children's sounds". She was very concerned about "getting them to speak English" before they started to read and write, because English was not their mother tongue. She also commented that she was disillusioned with outcomes-based education. In the "old system", children learned to read because they "knew their sounds".

The progress made by this group of learners was below expectation and contrasted poorly with the progress made by the first-time EAL learners in grade 2 on the project. Even if one
took into account that the learners were not English-speaking, their performance after a year at school was disappointing. From the results in Table 4.3 in Addendum B-iii, it was evident that, after one year in school, none of the learners could read beginner levels books at the required 90% accuracy rates. One learner’s scores, however, were higher than those of her fellow learners on all the assessments. Although she scored below the 90% accuracy rate for text reading, she was the only learner in her group that could read emergent level books with 87% accuracy if assistance was provided. Her reading records indicated that her reading progress and comprehension were severely hampered by the sounding out strategy she used when trying to read unknown words. This strategy made her hesitate and lose concentration on words such as *face, headache, sore, air*.

If the scores of the highest scoring learner in the class are removed from Table 4.3, the results will show that the learners in this group made virtually no progress in any of the assessments. The poor results were in stark contrast to results achieved by the EAL research sample. The following comments made by a project observer may shed light on some of the reasons for the poor results of the grade 1 sample. It is interesting that the descriptions below match the descriptions of the early literacy behaviours that the EAL sample exhibited at baseline. Thus, it appeared that the grade 1 learners had not progressed beyond the first developmental stage in literacy learning. Since most of the EAL learners started at the same level as the grade 1 learners, the results highlight the likelihood that poor instruction was the cause of reading problems:

- The children 'read' from memory and from the pictures, but when asked to "point to the words" as they read, they are unable to match one spoken word with one written word.
- The only strategy these learners seem to know for solving unfamiliar words is a sounding out strategy.
- Two learners in this group confused numerals with letters and another learner read the page numbers instead of the words on the page.
- These learners can recognise some of the letters in the letter identification task, but they don't apply this knowledge to reading words.
- The learner does not know what the term *word* means. When I asked him to write words he wrote: 2 X 2. He can write his name and a few letters. When asked to write *cat*, he wrote: *cte*. 
• The learners make wild guesses at identifying words (e.g. he = and; to = Tom; will = is; in = find).

• The children in this group are unwilling to try the activities.

In brief, the literacy behaviours of the children in this classroom embodied the distinction between literacy skills and literate behaviours outlined by Dahl and Freppon (1998:272): they had not become personally engaged in reading and writing, nor had they progressed beyond their role as answer makers. According to Dahl and Freppon, the prognosis for children who have disengaged from literacy instruction at the first-grade level is not promising, as they may already have begun the pattern of turning away from school.

4.9 SUMMARY AND CONCLUSION

Many researchers have emphasised that teachers hold traditional attitudes that seem resistant to change and that the decisions they make in classroom domains can seriously undermine reform goals (Ysseldyke & Algozzine, 1982:27-36; Slee, 1991:43-46; Weaver, 1998e:11-15; Allington, 1998:498-511; Clay, 2001:24-25). As a prerequisite for a theoretically based intervention aimed at improving literacy instruction (and by implication for democratising education), project observers conducted an analysis of existing approaches to and practices in literacy learning in EAL classrooms. Several central themes emerged from the analysis. These were:

• Literacy curricula and teaching approaches may be disabling factors in the education of learners, or, in the words of Skrtic (1991:21), many learners are "handicapped by the experience of schooling".

• Teacher attitudes, instructional approaches and resources tend to perpetuate conventional attitudes that undermine innovation.

• The quality of classroom learning was jeopardised by poor decision-making related to instructional aspects such as task appropriateness, time-on-task and teacher-learner interactions.

• Inadequate observation and diagnosis was at the root of poor instructional decision-making and placement of children on texts.

• Teacher-dialogue played a critical role in limiting learning opportunities.
Teachers at different grade levels were faced with large classes and learners at different stages of development in literacy learning.

The same range of developmental levels was apparent in every classroom irrespective of the range of learner ages.

Commitment to a prescribed curriculum did not empower teachers to respond effectively to a diversity of learner needs.

Based on these observations, the literacy research project attempted to change approaches to literacy instruction through the following:

- The introduction of alternative approaches in literacy instruction;
- The introduction of diagnostic assessment in the form the observation survey to enable interactive teaching and correct matching of children to books;
- Quality materials to replace basal readers;
- In-service training and support; and
- Correct matching of children and books.

The overall results support a balanced, transactional perspective that views reading as situated within the variable social, instructional and cognitive contexts where reading occurs. The fundamental approach it recommends is contingent teaching that respects the natural variability in learners and responds to individual needs (Clay, 2001:12-13; McEneaney et al., 2006:117).

The next chapter summarises the main outcomes of the research in the light of the research questions (see 5.2) and makes recommendations for future research.
CHAPTER 5

REFLECTIVE OVERVIEW AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of the study was to implement and investigate the effects of an intervention based on a particular theoretical perspective on literacy acquisition in three primary schools in the Western Cape. This approach to reading was very different from traditional, phonics-based instruction (see 2.2). In contrast to research methods based on statistical models of reading, which tend to "exclude the most immediate conditions that support learners" (McEneaney et al., 2006:121) (i.e. the teacher-learner interactions within specific classroom, school and cultural settings), the research was grounded in natural forms of inquiry in particular classroom settings (see 3.3.5). I had a personal interest in this study. I wished to explore effective practice in the light of my theoretical understanding of literacy acquisition for additional language learners in local contexts. My longer-term vision was to expand the early literacy intervention to other schools and to continue research directed by the professional research values outlined in 3.1.

5.2 REFLECTIONS ON THE RESEARCH QUESTIONS

In the following sections, I will reflect on the main outcomes of the central research questions before considering possible future (see 4.3.4) research.

In keeping with the evolving nature of whole language theory, the intervention was based on the view that responsive instruction is a complex process that needs to be constantly developed and refined in the context of working with specific learners. As such, the research did not intend to extract a set of standard instructional procedures that could be generalised to other settings as a universal solution to teaching problems. Rather, it aimed at reconceptualising the foundation-phase teacher education knowledge base in terms of 'contingent teaching', i.e. instruction that responds to the natural variability of readers (see Haley, 2004:1; McEneaney et al., 2006:125). As Haley (2004) and McEneaney et al. (2006) show, studies that contribute to the development of a body of knowledge (as opposed to the development of a standard instructional model) can promote teacher development, in that
they stimulate reflective practice, which leads to greater professional self-definition. Through developing knowledge, teachers gain access to the larger community of professional research and practice (Slavin, 1994:vii-xvii; Klinger & Edwards, 2006:113).

5.2.1 First research question: What progress did learners make in literacy learning from pre-testing to post-testing?

The discussion first centres on the progress made by the learners (see 1.6 and 3.3.4) before offering suggestions for further research. Progress is interpreted in three different ways: performance scores (quantitative results), maintaining positive engagement, and change in literacy processing behaviours (qualitative results).

5.2.1.1 Performance scores

Two of the measures used on the project were the pre-test/post-test scores on five observation survey tasks (see 3.7). As indicated in 4.7, the quantitative data indicated that performance scores of the EAL cohort increased on all measures between entry and exit to the project (see Table 4.1 in Addendum B-i). These positive results indicated that the majority of learners participating in the project made good reading progress. The sharp increase in reading levels is congruent with reported results of balanced literacy interventions internationally (see Addendum E), thus suggesting that the approach adopted in the intervention has theoretical accountability and therefore wider application (Elley, 1999:5-6; Bickley, 2004:4-5; McEneaney et al., 2006:121).

5.2.1.2 Maintaining positive engagement

If test scores are not the primary focus of attention, an alternative facet of progress emerges from the qualitative classroom and observation survey data, namely that learner engagement with literacy can be viewed as a significant variable in establishing continued progress in school (Witte, 1991:166; Dahl & Freppon, 1998:273). As it turned out, there was an immediate and positive response on the part of the project learners to the new materials and teaching approaches. The observational data across schools showed unusually high levels of learner engagement with reading and writing in English. It should be borne in mind that, according to transferability and interdependence theory (see 2.7.4), learner engagement in reading in English could lead to reading proficiency in the learner's first language and vice versa. Engagement in reading is an important factor in predicting continued schooling and future academic progress. Dahl and Freppon (1998:272), for example, found that the prognosis for school completion was poor for learners who had disengaged from literacy in
the early grades (see 2.7.3). In a similar vein, Joyce, Murphy, Showers and Murphy (1991:191) stress that high levels of engagement with literacy are essential to ensure that many learners are not, to all intents and purposes, "wiped out of the economic marketplace" in their first years in school. As mentioned in 1.3, this makes the early primary years the critical years for establishing the literacy base on which children's continued progress in school depends. Witte (1996:167) found that schools that focus less competitively on academic achievement and more on affective factors have a substantial advantage in terms of the number of low-progress students who complete high school and enrol in college. In this regard, the literacy intervention showed strong potential for helping teachers establish high-interest, non-competitive environments and for keeping learners encouraged and motivated to read, write and continue learning (see 4.3 and 4.6.12).

In the South African context, increased learner engagement in reading appears to be critically important, especially if considered in the light of the current investigation by the Ministerial Committee on Learner Retention into ways of reducing learner drop out and improving the retention of children in grades 1 to 12 in South African schools (Department of Education, 2007:1). The balanced literacy approach has strong potential for providing learners with an early start that "moves them into literacy fairly easily", thus preventing some children, who might otherwise disengage from literacy in the early grades, from becoming progressively demotivated by the "weight of failure" and eventually dropping out of school (Fountas & Pinnell, 1996:193).

5.2.1.3 Literacy processing

Apart from obtaining performance scores and gathering evidence of continuing engagement with literacy, the study adopted a third view of progress, namely a literacy processing view, i.e. progress is defined as 'changes in cognitive processing behaviours' in reading and writing (see 5.3.1-5.3.2). In contrast to the traditional information-processing model of learning and the 'additive' model of literacy acquisition, the literacy processing view reflects a transformational model of progress in which primitive decision-making is fine-tuned and expanded into more efficient decision-making (see 2.11). The qualitative data of each individual's processing behaviours that were captured on the five tasks in the observation survey at pre-testing and post-testing indicated that, in most cases, each learner's separate ways of operating in early learning were becoming integrated and co-ordinated into a smoothly functioning literacy system (Clay, 2001:296).
Since the results of each test were discussed in some detail in Chapter 3, only a brief review of the EAL-cohort's key reading and writing behaviours is provided here.

a) Progress as patterns of change in reading behaviours

In general, at pre-testing one or more of the following patterns, which correspond to some of the early patterns listed by Clay (2001:84-85), typified the majority of EAL learners' behaviours during 'reading' (see 4.6 for a full explanations of children reading behaviours):

- No response to print;
- 'Eyes-off-print' and avoidance behaviours;
- 'Reading' from memory and/or pictures;
- Inability to match one spoken word with one printed word;
- Decoding emphasis: sounding out unknown words and guessing from first letters;
- Stumbling over most words in print; and
- Inability to read emergent texts.

Exit data indicated that the majority of learners had established adequately functioning systems for continued literacy learning, as indicated by recordable shifts in learners' processing behaviours (see 4.6). Again, some of the shifts corresponded with those listed by Clay (2001:84-85) and can be summarised as follows:

- Engagement in reading 'work', i.e. using several new strategies to solve difficulties;
- Visual attention to print and illustrations;
- Searching and cross-checking, e.g. matching text with illustrations or semantic and grapho-phonic cues;
- Integration of different knowledge sources (semantic, grapho-phonic, syntactic), while maintaining a 'message-getting' emphasis;
- Substitutions that were close to text words on syntactic, semantic and grapho-phonic information; and
- Self-corrections and re-readings that signalled executive control over reading.

In line with "a theory of generic learning", the shifts in processing behaviours seem to support the hypothesis that by engaging in reading work on continuous texts learners construct generic competencies that generate further independent learning (Clay, 1991a:1).
The view of learners constructing a network of competencies for independent text reading seems to support the notions of interdependence and transferability mentioned earlier, i.e. the idea that second-language reading acquisition has much to contribute to first-language acquisition and vice versa (Clay, 1991a:2; Lenters, 2005:330).

b) Processes underlying patterns of progress in reading and patterns of progress in language learning

Interestingly, the data seems to indicate that similar processes appear to be operating in learning to read and learning to speak. This finding appears to be consistent with Clay's (2001:49) stance that successful readers build effective processing systems "somewhat analogous to the way every child builds a grammar for speaking" and to Moustafa's (1998:142) view that the cognitive processes that underlie the acquisition of spoken language also underlie learning to pronounce unfamiliar print words. The parallels between language and reading acquisition seem to confirm the whole language stance that instruction that provides comprehensible input that is embedded in a literature-rich context will help all learners, not just second-language learners, to develop high levels of content knowledge and language proficiency (see 2.7.5).

The findings also seem to underscore the view that, in general, a balanced literacy approach in the classroom that exposes learners to a rich variety of learning experiences and materials, and that fosters interaction is more conducive to literacy and language acquisition than traditional classroom environments are. This seems to be compatible with constructivist learning theories, e.g. that children acquire words as unanalysed speech 'wholes' in natural contexts through interaction with people who are more experienced with the spoken or written code (Cambourne, 1988:45; Moustafa, 1998:142). Additionally, in learning to speak, motivation and reinforcement are subtly grounded in caring environments, in needs fulfilment, in the act of communicating itself and in sheer enjoyment (Owens, 1996:62; Lyons, 2003:77-80). The same is true for learning to read and write (see 5.2.1). If, as these researchers suggest, processes underlying learning to read unfamiliar print are similar to the processes underlying language learning, then literacy acquisition can be accelerated if it is embedded in literature-rich, non-competitive, nurturing learning environments that keep learners engaged in reading (see 2.13). In the project classrooms, the interactive teaching approaches combined with interesting materials led to high levels of motivation (see 4.5), which seems to have contributed to the sharp increase in the reading levels of the majority of project learners, indicating that print-rich classrooms with a "constrained academic structure"
and a caring ethos "do better in improving achievement for those learners who begin at the lower end of the distribution" (Witte, 1996:173).

Data confirming the benefit of non-competitive, meaningful learning environments challenge the limitations of the behaviourist learning theories supporting traditional phonics approaches (see 2.6.3). Furthermore, the latter approach does not account for the observation that some learners can decode well and can present themselves as fluent readers, but they cannot comprehend what they read (Fuchs & Fuchs, 2006:104). The profile of Marilyn, one of the fourth-grade project learners, provides evidence of this and underscores the point that non-phonological, semantic factors are critically important in learning to read, emphasising again the importance of contextually embedded learning, i.e. utterances (spoken or written) are socially motivated acts that gain meaning within particular social and cultural contexts (see 2.7.3-2.7.6).

c) Acquisition through access to modified input

While natural environments are important for learning, Lightbown and Spada's (2006:114) review of language acquisition reveals that the concept of "total immersion in natural environments without modified input" is a fallacy (see 2.7.5). Their research shows that, although children are immersed in the language spoken in their environments, parents or fluent language users intuitively adapt their speech when speaking to young children. Their modified speech tends to leave out complex forms (Lightbown & Spada, 2006:114). Acquisition through "immersion with access to modified input" reflects in the gradual increase in complexity in the data obtained from learners. Although the learners were actively engaged in literature-rich environments, they had access to modified linguistic input in the form of books and instruction (see 3.3.7). For example, in shared reading, their interactions with teachers led to modified input in the form of negotiated meanings. In guided reading instruction, 'non-readers' were taught to read texts they dictated themselves (i.e. 'modified' language patterns that mirrored the learners' own language competence) and early readers were placed on graded readers that avoided overly complex language patterns (see 3.3.7). Observation survey data indicated that placing learners on texts of increasing complexity gradually improved their proficiency, much in the same way that fluent speakers intuitively increase the complexity of their language to accommodate the growing proficiency of young language learners (Lightbown & Spada, 2006:114).
d) Progress as patterns of change in writing

As mentioned in 4.6.4 and 4.6.11, the qualitative data on children's patterns of progress in reading and writing revealed a number of issues that have implications for research. First, there were vast differences in competency levels between individuals in each grade (i.e. grades 1-4). For example, competencies ranged from those who had no concept of a word to those who wrote their names and random letter strings to others who could already read little books and write paragraph-length stories. Second, as with learning to speak, results indicated that the learners' writing followed a broad sequence of development that, in some ways, was similar to oral language development (see 4.6.4). Apart from the general progress along a continuum from writing nothing, to writing words, to writing short stories, similar patterns characterised each child's developing knowledge of English orthography. By degrees, children's written work contained the following:

- Characteristics of their first language, which learners seemed to use as a resource for learning;
- Characteristics of the additional language, i.e. English;
- Features of 'book language' from the storybooks on the project;
- Developmental features that were common to all the learners;
- Features that were unique to individual learners; and
- Persistent errors, possibly due to transfer from their L1 as well as the input provided by their teacher (see 4.5.2).

Finally, the learners' written work across three grades indicated that they continued to make persistent spelling and grammar errors (see 4.6.4). Many of these errors could be classified as possible transfer patterns from their first language (see Table 4.3 in Addendum B-iii). As indicated in 2.7.5, the research of Towell and Hawkins (1994:5) and Lightbown and Spada (2006:45-46) indicates that, after a certain age, linguistic errors made by ESL learners tend to be especially hard to overcome, particularly if learners are frequently in contact with other speakers who make the same errors. This highlights the important instructive role quality materials can play in shaping learners' language proficiency.
5.2.2 Second research question: What changes took place in instructional practices from baseline assessment to exit?

As discussed in 4.5.1, with the support provided by the project observers, the project teachers exchanged the traditional phonics-first approach and implemented the instructional practices to which they had been introduced in the intervention with varying degrees of success. While the constructive changes they made had a positive effect on learner progress and motivation in only a short space of time, it can be assumed that if teachers had been more familiar with the new approaches and skilled in implementation, children could have progressed even more.

To ensure long-term results, researchers recommend a time span of approximately five years to bed down an innovative project in a new school setting (Clay, 2001; Ladd, 1996). Clearly, the intervention was too short to allow teachers to attain advanced levels of practical competence in all aspects of literacy intervention. Since changing old understandings and entrenched ways of thinking is complex and time-consuming, it can be assumed that the amount of learning in the literacy intervention was too great to enable project teachers to internalise a new theoretical knowledge base and achieve independence in teaching by operating from a "theory of reasoned action", i.e. one which associates the voluntary behaviour of teachers with their belief systems (Ainscow, 1991:1-10; Thousand & Villa, 1991:173-175).

5.3 RECOMMENDATIONS FOR RESEARCH

Huysamen (1994:16) emphasises that the expansion of knowledge is a never-ending process and that research is a cyclical process that continually generates new questions for investigation. In reflecting on the research process and questions, a number of possible areas for further research can be suggested.

5.3.1 Research flowing from the first question

A number of recommendations for future research flow from the findings related to the first question. In the first instance, alternative, longer-term explanations of progress (e.g. engagement in reading and changes in cognitive processing behaviours) should be considered as alternative measures of progress, because the way student progress is measured has an impact on teacher attitudes, instruction and classroom climate. Fostering a learning environment (versus a testing environment) that focuses on higher-level goals and
developmental principles (such as developing independent readers and learners) could go a long way to ensuring the kinds of progress that keep as many children as possible in school.

5.3.1.1 Research into school effectiveness

The importance of keeping children in schools calls for research into school-effective issues, e.g. studies ascertaining how best learner retention in schools can be supported so that learners can graduate from high school and/or attend college/find work. South African research along the lines of Dahl and Freppon's study could investigate the impact of early literacy environments on the probability of learners engaging in literacy and remaining in school (see 5.2). Such studies could make a valuable contribution to the future progress and well-being of students, especially those students who are disadvantaged by traditional, competitive and individualistic school environments. Investigating the role of classroom climates and educators' understandings of motivational and other emotive factors in literacy learning, as suggested by Lyons (2003:1), could be another valuable area of study.

5.3.1.2 Research designs that provide descriptors of change that could lead to theory construction

The cognitive processing view of progress suggests that research utilising non-traditional research designs, which incorporate non-competitive, diagnostic assessment systems, can provide educators with useful descriptions of change in terms of "acts of processing" in literacy learning (Calkins, 2001:144-155; Clay, 2001:43-48). In this regard, Fountas and Pinnell (1996:73) and McEneaney et al. (2006:122-125) argue that the value of diagnostic assessment for constructing theory to improve instruction should not be undervalued, because the use of diagnostic assessment enables educators to refine and revise theories about learning in their everyday work with children. From their perspective, theory construction through assessment is never complete: it is a process of continuous growth because each child's unique data add to and enriches the theory (Fountas & Pinnell, 1996:73-74; McEneaney et al. 2006:123). For this reason, diagnostic assessment fits well with whole language philosophy (see 2.7). Alternative, non-competitive assessment systems are a general feature of field-based research designs in New Zealand primary education, but could be used more widely in the South African context to obtain data that could improve instruction and ensure alternative forms of learner progress (Fountas & Pinnell, 1996; Calkins, 2001; Lyons, 2003; Clay, 2006).
5.3.1.3  Research focusing on 'contingent teaching'

The literacy intervention also confirmed the need for further research focusing on contingent teaching in which teachers provide instruction based on careful observation of the needs of individual children. This need became evident because early observations showed that teachers often wasted precious teaching time drilling trivialities and content that learners already knew, instead of engaging in genuine conversational interactions. Numerous researchers have pointed out that "classroom talk" constitutes a critical, albeit neglected part of the enacted curriculum (Bennet, 1991; Wang, 1991; Cazden, 1992c: 214; Cohen, 1996:100). Lightbown and Spada (2006:85) underscore the need for more research that focuses directly on the number and types of interactions learners in EAL classrooms are exposed to. Likewise, Clay (2005:15) emphasises the importance of research that produces evidence of the specific things effective classroom teachers say and do to prompt "changes in processing behaviours" in children who would otherwise miss the "focal point" of lessons. Cazden (1992c:214) points out that teacher-learner interactions form the "most proximal context for learning", which means that ineffective classrooms can be regarded as important "sites of inequalities". This makes "classroom talk" an important variable for research into current reform initiatives in South Africa. Finally, research on diagnostic assessment that can lead to improvements in "teacher talk" by helping them analyse and articulate their own teaching decisions based on careful observation of what learners can or cannot do should not be underestimated (Clay, 2001; McCarrier et al., 1996; McEneaney et al., 2006).

5.3.1.4  Research into organisational structures

The analysis of reading and writing data produced by the project learners highlights another area of potential research, namely research into flexible organisational structures in schools that can embody the ideal of equal education for all learners. For example, finding alternatives to the grade level grouping of learners seems to be of paramount importance. The data reveal that in each class there were children who were moving at different rates and that literacy levels in each grade ranged from zero to competent (see 4.6-4.7). To address this issue, a research project could be set up in South Africa to investigate non-graded progression and multi-age classrooms (Cazden, 1992e:251; Fountas & Pinnell, 1996:189). Another innovation suggested by Fountas and Pinnell (1996:189) is for a competent first-grade teacher "to move with her students to second grade, then move back to first and take another group through two years of literacy education". This organisational adaptation could work equally well with preschool and first grade or second and third grades, because it ensures consistency.
in approach across grades and provides learners with a solid foundation in literacy under the
guidance of an expert teacher (Fountas & Pinnell, 1996:189). The effects of reducing class
size and matching teacher expertise to classes could be an area of study (Ladd, 1996; Bickley,
2004:14). Other restructuring options of the organisation of school and classroom
'workplaces' for researchers to consider is organisational and time adjustments for doing
diagnostic assessment, and institutional structures that facilitate adaptations in
communication and behavioural patterns (Skrtic, 1991:20). Research conducted by Lesley
University into teacher 'buy in' (see 5.3.2.1) indicates that teacher support would be
significantly enhanced if school improvement models could help ensure more time was made
available for training and planning lessons (Caswell, 2007b:2). Needless to say, these
research recommendations go hand in hand with research projects supporting professional
development and long-term change (see 5.6).

5.3.1.5 Research focusing on learner diversity and variability

Learner diversity in classrooms in South Africa makes it vital that learners have access to
appropriate reading materials and other resources, such as story tapes, magnetic letters,
alphabet charts, paper and writing material. The pre-interventional project data show there
was a great need for books and other literacy material to meet the diverse and changing needs
of young readers. This suggests the need for more research into the design of a
developmentally appropriate set of levelled readers for South African learners, both in the
main languages of instruction and in additional languages. Bilingualism may not be promoted
if teachers believe that learning an additional language will threaten the learners' home
language. A case in point that illustrates this is the project teachers' increasing concern that
children were more interested in reading English than Afrikaans (see 4.6.6). This suggests a
need for more pilot programmes in South Africa of the kind undertaken by READ (1998)
who developed and trialled both Afrikaans and English reading materials in collaboration
with Wendy Pye Ltd (1998), or of the kind undertaken by Bloch (2006), who designs
multilingual materials to support early literacy in multilingual settings. Additionally, the
learners' low entry scores on the observation survey indicated a lack of prior experiences with
print and the English language. This implies a need for more research projects that foster
dual-language proficiency through home-to-school literacy links such as those conducted by
Ohio State University in America, Unisa in South Africa and Deakin University in Australia
(2004).
Case studies investigating learner variability in literacy learning is another area that can identify research problems. For example, Marilyn's case (outlined in Chapter 4, section 4.6.5) of the learner who reads fluently without comprehension lends credence to Fuch and Fuch's (2006:104) prediction that research into comprehension instruction and the semantic aspects of language acquisition will be at the front of the next wave of research.

5.3.1.6 Research into spelling and transfer errors

Finally, Goswami (1999:360-361) believes that working out exactly how phonological conventions affect graphemic representations in different languages promises to be an exciting area of future research. Her perspective is supported by the overall results of the analysis of project learners' written samples through grades 2 to 4. These do not lend support to the point of view that all grammar and spelling errors are developmental in nature and will disappear by themselves through immersion in literature-rich environments. Thus, research examining how spelling patterns are acquired and research studying the relationship between spelling and reading could shed light on these issues. It might also be of interest to set up projects that renew interest in the role of L1 transfer in the continuous written productions of EAL based on a reappraisal of the concept of "transfer errors" in terms of "acquisition strategies" (Ellis, 1985:287; Towell & Hawkins, 1994:28).

5.3.2 Reflections and recommendations for research related to the second research question

A number of studies show that variation in student outcomes is mainly due to variation between classrooms, rather than between-school difference. This emphasises the important contributions individual teachers can make to improve the nature and quality of instruction (Reynolds, 1991:94-95; Bickley, 2004:4; Gerston & Dimino, 2006:99). Improving instruction, however, is much more complex than simply learning how to use different approaches or methods of teaching, partly because teachers' conceptualisation of language, learning and teaching is situated within their wider belief systems about the nature of human existence and partly because teaching and learning are such complex processes (Richards & Rodgers, 2001:252; McEneaney et al., 2006:117). Moreover, it is likely that, after years of classroom practice and experience, teachers have formed powerful core beliefs about teaching and learning that are very resistant to change (Clark & Peterson, 1986:255). Slee (1991:45) argues that, in many cases, teachers have simply "donned the discourse" of change
without making the corresponding paradigmatic shift that leads to long-term transformation of practice.

5.3.2.1 Research into teacher 'buy-in'

Due to the complexity of changing instructional practices, numerous researchers have highlighted the need for research that gives more consideration to the paradigmatic shifts required to improve teaching as well as research that investigates how teachers acquire and sustain knowledge (Richards & Rodgers, 2001:252; Reddy, 2001:200). Gersten and Dimino (2006:103) hypothesise that most classroom teachers will only change if they see long-term benefits to themselves as professionals, such as improving their skills as teachers. For this reason, they recommend qualitative research that "explores how interventions are framed, communicated and implemented in ways that mesh with the lives of teachers in classrooms and the realities of the core reading programmes they are using".

Lesley University (1999-2002) conducted large-scale surveys to investigate what predicts successful teacher support or 'buy in' for literacy reform models. Their research indicated that "the largest and most statistically significant predictor of teacher buy-in" is the degree to which teachers think the intervention has a positive impact on student learning (Caswell, 2007c:2). The data also indicated that teachers would 'buy-in' if they were empowered to share in decision-making processes, were provided with higher levels of support and were less overworked (more time and materials). Similar surveys could be conducted in local schools to determine what patterns for predicting teacher buy-in apply in the South African context. Joyce et al. (1991:193), however, argue that teacher 'buy-in' is only one factor in successful reforms and that teachers will "surely return to their previous states fairly rapidly unless they are well-supported".

Despite the widespread consensus that change initiatives aimed at improving literacy levels in schools need to be supported through ongoing professional development, there is no simple and straightforward approach to changing schools (Ainscow, 1991:6-15; Reynolds, 1991:92-103; Gersen & Dimino, 2006:102). The long history of failed efforts at school reforms in various countries attests to the fact that school cultures are complex and resistant to change (Cuban, 1988:76; Ysseldyke & Algozzine, 1982:203; Cohen, 1996).

5.3.2.2 Reviews of historical data and traditional research methodologies

Critics observe that the persistent reappearance of copycat reforms in education is evidence of a pervasive amnesia about former school reforms (Cuban, 1988:76; Ysseldyke &
Algozzine, 1982:203; Clay, 2001:43). They point out that the data to answer many of the crucial questions currently being asked by both researchers and educators can be found in libraries or data banks. Since one is unlikely to get different outcomes by repeating the same reform activities, it appears that comparative research reviews of historical data on school reforms in different countries could be useful for learning from history and avoiding some of the pitfalls that beset current efforts at raising literacy levels.

In a similar vein, McEneaney et al., (2006:123) contend that past practice, which has entrenched traditional experimental and quasi-experimental research methodologies, at the expense of alternative research methods, may have contributed to the persistence of ineffective practices in education. Thus, studies that are less preoccupied with traditional research designs could pave the way for innovative alternatives.

5.3.2.3 Research into school culture variables

After examining an extensive body of research findings on improvements in teaching and learning, Ainscow (1991:6) emphasises that schools are first and foremost relationships and interactions between people, and that bringing about change in classrooms involves a range of complex and unpredictable interacting factors. Reynolds (1991:99) points out that innovation is often threatening to established ways of thinking and behaving in schools. The arrival of new knowledge in a school may also be personally threatening to individuals and may "create a disturbance, both individually and collectively amongst the whole staff group" (Reynolds, 1991:100). Moreover, staff cultures and belief systems in schools sometimes exhibit non-rational qualities, which resist "rational/empirical" models of change from penetrating the deeper school cultures (Reynolds, 1991:101). For these reasons, Reynolds (1991:102) suggests that there is a great need to develop alternative to traditional research designs that are capable of producing detailed data of "unexplored characteristics" that may "only be in existence in the ineffective schools" and that may restrict their ability to act on innovative reforms aimed at improving instruction. Reynolds' view ties in with Gersten and Dimino's (2006:103) recommendation for more research that explores how interventions are framed, communicated and implemented to ensure a fit with the realities of teachers' lives and classroom practices.

It could be argued that schools differ from one another in the same way that individuals differ; therefore each school is more likely to adopt (or adapt) innovations that fit its specific needs and culture. For this reason, numerous researchers have questioned the wisdom of
state-wide reform initiatives on that grounds that the success of any programme to transform instruction is to a large degree dependent on the mesh between values inherent in the reform and those of the organisation targeted by the reforms. Hence, they conclude that efforts to impose what are perceived as alien values are very likely to be resisted (Ysseldyke & Algozzine, 1982:175; Robbins, 1986:462). An example from the project data that illustrates cultural resistance to reforms was that the learners' enthusiasm for English was regarded as a threat to home-language instruction by some of the project teachers (see 4.6.6). Outcomes-based education (to which whole language has been linked) in South African society is another case in point. Given a diversity of cultural beliefs, it is unlikely that progressive ideologies inherent in outcomes-based education will be compatible with all school cultures. As a result, any instructional programme linked to outcomes-based instruction may be viewed with suspicion in traditional or authoritarian cultures. Similarly, in classrooms with a long history of basic-skills learning, new demands for literacy instruction may conflict with more familiar ways of doing and any short-term gains made by alternative approaches may lose ground in the long-term as teachers drift back into old habits. Viewed from an historical perspective, current realities point to the likelihood that vast discrepancies between reform ideologies and school-based practices will persist. It therefore seems inevitable that schools will continue to implement their age-old strategy of finding their own trade-off between the advantages and disadvantages of reforms imposed upon them. The fact that cultures differ foregrounds the notion that schools and individual teachers have to take 'ownership' of new approaches.

Since school cultures are likely to resist one-size-fits-all reforms, it appears that seeking wide-scale adoption of standardised programmes may not be an appropriate goal. In the light of the complexity of schooling, Slee (1991:43) underscores the need for a more systematic and considered approach to changes that can target both the culture and processes of schools. At any rate, the history of school reforms suggests a cautious approach to interventions, and underscores a need for investigating what approaches work in specific classrooms in specific schools or specific clusters of schools (i.e. which teachers/kind of schools successfully adopt what types of programmes), particularly those in high-poverty areas that are most in need of change. This could lead to the design of more effective interventions that supplement the existing characteristics of individual schools as an alternative to the long-standing practice of implementing full-blown schemes without knowing how individual schools and teachers will react to them (Wang, 1991:151; Ladd, 1996:18).
One possibility suggested by these arguments is to situate research within whole-school literacy pedagogy (Stoll, 1991; Fountas & Pinnell, 1996; Bickley, 2004;). Bickley (2004:2) and Stoll (1991:71-78) describe some of the essential features of a whole-school literacy approach. These include the following: Teachers in effective schools hold high expectations of their learners, i.e. they believe all children can learn and they communicate these high expectations for children's achievements. Children benefit academically when instruction is closely linked with assessment and learner progress. Effective schools invest in long-term teacher development that is characterised by teacher collegiality, collaborative problem-solving and high levels of support. Heads in effective schools provide purposeful leadership and are actively involved in the academic curriculum of their schools. They encourage an informal 'open-door' policy regarding parental involvement and help in the classrooms and on visits.

Additionally, to promote 'ownership', school-wide literacy reforms should be integrally connected with the reading materials teachers use in their classrooms. Such an approach would fit the teacher's role more appropriately and it meshes well with a whole language philosophy (see 2.7).

### 5.4 LIMITATIONS OF THE STUDY

Against the backdrop of the long history of failed efforts to reform instruction, it would be unrealistic to think that a short-term literacy intervention, even with sound theoretical underpinnings, would have permanent impact upon school cultures or teacher paradigms. Furthermore, because it was innovative, site-specific, limited in scope and responsive to individual learners, it was likely to lack long-term, system-wide support, partly because 'top-down' reforms are of necessity configured for homogeneity (Skrtic, 1991:21; Robbins, 1986:462). Due to its research focus and limited scope, findings cannot be generalised to other settings. When combined with the collective wisdom of similar studies conducted elsewhere, it is possible to speculate that results have broader application (Fountas & Pinnell, 1996:xi-xvii; Duncan, 1999:2-7; Clay, 2001:4-6). Ultimately, in considering the wider applicability of the study, it is the reader, not the researcher, who will decide whether and to what extent research findings apply to his or her content (Guba & Lincoln, 1985:288; Babbie & Mouton, 2001:277). I believe that the study provides enough detail for the reader to do this.
Additionally, researchers committed to traditional experimental and quasi-experimental designs and statistical models of reading ability would most likely object to the study's non-conventional research methodology, its commitment to a natural-variability model of reading, and its insistence on cross-classroom complexities (see 3.3.5).

The study was time-consuming, resource-hungry (human and material resources) and required whole school planning strategies. Enough time had to be set aside for each learner on the project to be assessed and for uninterrupted ESL literacy instruction. In addition, every learner's observation survey records had to be analysed and discussed with teachers so that a feedback loop could be established between teaching and learning. Classrooms had to be restructured to accommodate learning stations, which challenged the teachers' classroom management skills (see 4.5.3).

Furthermore, teachers may perceive efforts to open up school cultures to outside influences (teachers from other school as well as 'a community of practice') and to alternative knowledge bases as 'top-down' (see 5.3.2.3). Thus, "major blocks exist" on the extent to which permanent change to existing practices can be achieved (Reynolds, 1991:102). This suggests that additional research and "techniques derived from psychological … and social work programmes" may be necessary to ensure 'buy-in' and deal with the problems generated by a new knowledge base (Reynolds, 1991:103).

Finally, all the sponsored material and audio-tapes used in the project were produced in New Zealand. This must be seen as a limitation. Recently, a South African publisher, Via Afrika bought the rights to the Wild Cats series and has embarked on a programme to add a substantial amount of South African material.

5.5 VALUE OF THE RESEARCH

In many instances, some of the study's weaknesses were also its strengths. First of all, depending on one's conceptualisation of reading, one of the study's core strengths was its ties with best practice in Reading Recovery and its use of the observation survey as a key data collection method. As mentioned above, researchers will differ on this point. The stance taken in this study concurs with the view taken by McEneaney et al., (2006:121). They have no quarrel with the potential utility of experimental or quasi-experimental work to inform practice, but believe that, "there is an enormous and, in our view unwarranted, leap from this proposition to the thesis that responsive instructional practice can be patterned after an experimentally validated standard protocol".
Furthermore, they conclude that an undue commitment to the "scientific study" of reading over the previous 30 years has not contributed significantly to the goal of eliminating or ameliorating reading difficulties, and they believe that scientists "should be prepared to ask why" (McEneaney et al., 2006:121). They furthermore emphasise that research that emphasises natural variability and contingent teaching reflects the complex circumstances in classrooms more accurately and have more direct potential for helping teachers to become successful reading practitioners than do research endeavours that are directed at developing diagnostic categories and standard instructional protocols that are inflexibly applied.

The intervention under discussion was theoretically and instructionally grounded in a well-developed research base, which enhanced the "ecological validity of the diagnostic process" and grounded it more firmly in subsequent instruction (McEneaney et al., 2006:117). In addition, the cognitive-constructivist approach adopted in the intervention emphasised the developmental and constructive nature of literacy acquisition and highlighted the need for a preventative thrust to instruction (see 2.9). In keeping with the 'contingent teaching' perspective, which respects "the individual character of responsive teaching" (McEneaney et al., 2006:121), the observation survey was used as a diagnostic tool for guiding instructional practices based on an analysis of authentic learner data. Bennet (1991:129) states that lack of diagnosis causes teachers to limit assessment to the product of learners' work, rather than ascertaining the processes or strategies deployed by learners in arriving at the finished product, thereby limiting their efficacy to change and improve literacy outcomes. Given sufficient time, the process of analysing and articulating teaching decisions based on the diagnostic assessments has the potential to enable teachers to change and refine their theoretical paradigms of how children learn to read. It also has the potential to keep children in school through relevant, strategy-based instruction.

High dropout and failure rates in South African schools highlight the need for setting up research projects that support the training and development of literacy teachers. The increase in reading levels, motivation and engagement in all the grades and schools over a short time span suggests that the different teaching methods and materials used in the literacy intervention were beneficial to the majority of learners. In this regard, the intervention has an important role to play in informing the development of both teaching and research capacity.
5.6 ETHICAL ASPECTS

I could only obtain short-term sponsorship for the literacy project. This meant that I could not promise follow-up monitoring and support unless further funding was obtained. Consequently, there was a strong possibility that teachers would drift back to their former patterns of teaching if all support was suddenly withdrawn. In the case of this project, there was some form of continued support. The WCED Learning Support Specialists had received training on the literacy project and could therefore continue to provide teachers with support (see 3.4). In addition, as a result of the project, each classroom in each school had a large supply of high interest reading and writing materials that children would enjoy for a number of years. Although the teachers and the learners had benefited significantly, the high levels achieved during the project have not been maintained. This highlights the need for long-term and sustained development and support, rather than 'maintenance'. In the literacy projects I have engaged in since (see 5.7), I have underlined the need to take a longer view.

5.7 CONCLUDING REFLECTIONS

In 3.3.5, I argued that the study met a number of criteria of intervention research. One of these criteria was to obtain funding to expand the intervention. In this regard, the expertise and professional autonomy gained in the intervention gave me confidence to pursue a longer-term vision, which led to a sponsored, collaborative research project with Literacy Collaborative and Reading Recovery educators at Georgia State University. The project is based on a school-wide approach which utilises best instructional and assessment practices from Reading Recovery and Literacy Collaborative for improving the reading and writing achievement of street and at-risk learners. As such, the project meets current research requirements for integrating teaching practice, research and community development. The contribution the literacy intervention made to bringing about this synergy is, in my estimation, one of its most important achievements.

Finally, the study dealt with highly relevant, namely areas of research within the South African and international educational contexts, the teaching of literacy to English Additional Language learners and the lack of functional literacy of many school leavers (International Association for the Evaluation of Educational Achievement, 2008). As such, the knowledge gained through the intervention can make a valuable longer-term contribution to areas of educational need in a socially responsible manner.
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PIPER, T. 1993. *And then there were two: Children and second language learning*. Ontario: Pippen.


ADDENDUM A

CORRESPONDENCE, INSTRUCTIONAL AND ASSESSMENT PROCEDURES
Addendum A-i
Letter from Professor Marie Clay

Facsimile

To: Rene Nathanson
Of: UNIVERSITY OF STELLENBOSCH
ENGLISH DIDACTICS
Facsimile: 0027-21-8423922
Pages: 1, including this cover sheet.
Date: December 19, 1998

Dear Renee,

RH: TRAINER VISIT FOR INTRODUCTION OF:
THE OBSERVATION SURVEY OF EARLY LITERACY ACHIEVEMENT

Thank you for your fax which arrived before my departure from the United Kingdom. I am now at home in Auckland and my fax number is 649-529-9226.

I have consulted with my Trainer Colleagues at the National Reading Recovery Centre in Auckland and have obtained agreement to recommend that you proceed with the plan outlined in your fax, and that you should communicate with

Sue Duncan, Reading Recovery Trainer
18 Chesham Avenue
Taupo, NEW ZEALAND

E-mail duncana@XTRA.co.nz

in January and arrange with her about the Observation Survey workshops. She is familiar with Cape Town and South Africa because her brother worked there for many years and some nieces and nephews were educated there. She has also taught with the Reading Recovery team in Atlanta, Georgia for several years. At this time she is completing her Ph. D. at the University of Auckland. It would help her if you sent her a copy of your last fax to me - it

From the desk of...

Marie M. Clay
Professor Emerita
University of Auckland
Flat 9/551 Harrow Road
Auckland 1010, NEW ZEALAND
(649) 524-7047
Facsimile: (649) 529-9236
Addendum A-i
Letter from Professor Marie Clay

laid out the planning very clearly. You must discuss this with her, and they will be related to the hours of involvement you plan for her.

While I am very interested in any developments which you are planning, I am sure that Stage 1 can be left in Sue Duncan’s hands. I like your responses to questions 1-3. I do not think that you have allowed enough training time in that, after an introduction to the assessment tasks, which are somewhat unusual in type and scoring, the "learners" need to go away to practice on real children and return to discuss how to score and interpret what they have found. It is the return again, and perhaps at least twice, which needs your attention.

For this exercise you will need to persuade Heinemann to break open their packages (or order separate copies) for the books needed for your workshop will be The Observation Survey, Sand and Stones. That’s all.

I think you should work on finding out what kinds of information your teachers could get from the Observation Survey and increase the use of that in the education system. After the end of the first or second year you might then consider sending someone to be trained as a Reading Recovery trainer and your alternatives are Auckland College of Education, New Zealand; Texas Woman’s University, Denton, Texas, or Ohio State University, Columbus, Ohio.

Sincerely

Marie M. Clay

Professor Emeritus, University of Auckland
Addendum A-ii
Letter from the WCED

Dear Ms R. Nathanson
University of Stellenbosch
Stellenbosch

RE: READING RECOVERY PROGRAMME FOR LEARNING SUPPORT SPECIALISTS

Please be informed that the Western Cape Education Department (WCED) support strongly the involvement of the learning support specialists in the Reading Recovery Pilot project.

Mr Naicker will act as representative of the WCED and will be involved in the monitoring and evaluation of the project.

We wish you all the best in your endeavours.

Sincerely

PP. HEAD EDUCATION
Addendum A iii
Lesson samples from teachers' guide book

The Salad

The Salad Features
- The names of some common vegetables
- The names of some common actions that are used in the home when cooking or preparing food
- Procedural text and pictures (following instructions)
- Vivid colours that can be identified, such as green, red, orange
- High-frequency words: we, the

First Session (whole class or group)
- Discuss the instant picture of the father and child. You could ask, Where do you think they have been? What do they have in the bag? What could they make with these vegetables?
- Name the vegetables on the cover card and write these names on the chalkboard or on chart paper, for example, lettuce, carrots, tomatoes, peppers, onion, and radishes. Be aware that children may not be familiar with these vegetables or know their names. Ask the children to point to the vegetables. Talk about the colour of the vegetables, for example, green lettuce, orange carrots, red tomatoes, etc. Write these colours next to the vegetables' names on the chalkboard or chart paper. If possible, use coloured chalk to match each colour name. Read the list together.
- Point to the title and read it together. Discuss how we make a salad. List the children's ideas on the chalkboard or chart paper.
- Display the cards individually. Name the vegetable in each picture. Talk about what is happening in the picture. Read the caption together. As you read, point to each word and indicate where we begin to read and the direction in which we read. Note how the picture of the salad in the bowl has something else added each time. You could recap each card by saying, Look at the picture of the salad bowl. What do we have in the salad bowl now? By the third card, we have lettuce, tomatoes, and carrots. Discuss the vegetable in the little boxes at the bottom of each card and note how these are being filled progressively.
- After discussing and reading the cards together, hand the cards out to individual children. You could ask, Who has the cover card? The child who has the cover card comes out and holds up the card. Then ask, Who has the “We wash the lettuce” card? The child with the card comes out and holds up this card. Proceed in this way until all the cards are in order. Then read The Salad together.

Related Titles
Procedural texts: The Bird Feeder, Our Chore Chart, A Puppet Play
Colour names texts: Buttons, Balloons!, Chalk Talk, What Is It?, A Picture
Vegetable names and colours text: What Is It?

Future Sessions
Sequencing (group)
- Display The Salad cards in order using the side without text. Ask the children to tell what is happening on each card. Write the caption with the children, modelling where we start the direction in which we go the space between the words the uppercase W that starts the sentence the full stop at the end
- Pronounce each word clearly as you write, and talk about the starting sound in each. For example, say we, then say the sound for w and write the letter. After writing each caption, read them with the children.
- In a future session with the cards, involve the children in helping you as you model. Ask a child to come and write the starting word We or the letter that lettuce begins with.
- Give the cards to pairs of children and have them write the instructions. They can refer to the other side of the card for help or to check what they have written.

Follow-Up Activities
- If possible, make a salad with the children. Bring some vegetables to school. Before providing food for the children to taste, always check that the child has no allergies by sending a note home. Wash the vegetables well and ensure the children wash their hands before touching or eating the vegetables.
- Discuss the vegetables, naming them and their colour. Talk about the importance of washing vegetables before putting them into a salad and care in handling appliances such as knives and graters.

Ongoing Observations
Note the vocabulary the children have established in regard to making a salad, as this background information that they may bring to the text will assist them in interpreting the instructions shown in the pictures and in reading the text.
Addendum A-iv
Task Management Board
# Letter Identification Score Sheet

**Addendum A-v**

**Letter identification score sheet**

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</tbody>
</table>

**Confusions:**

**Letters Unknown:**

**Comment:**

**Recording:**

- **A**: Alphabet response: tick (check)
- **S**: Letter sound response: tick (check)
- **Word**: Record the word the child gives
- **IR**: Incorrect response: Record what the child says

**Date:**

**Test Score:**

**Stanine Group:**

**Name:**

**Age:**

**Recorder:**

**Date of Birth:**

**Total Score**
Addendum A-vi

Running record score sheet

SOME CONVENTIONS USED FOR RECORDING

1 Mark every word read correctly with a tick (or check). A record of the first five pages of the
'Ready to Read' (1963) book Early in the Morning
that was 100 percent correct would look like this.
(The lines indicate page breaks.)

Bill is asleep.          ✓  ✓  ✓
‘Wake up, Bill,’        ✓  ✓  ✓
said Peter.             ✓  ✓  ✓
Sally is asleep.        ✓  ✓  ✓
‘Wake up, Sally,’       ✓  ✓  ✓
said Mother.            ✓  ✓  ✓
Father is shaving.      ✓  ✓  ✓

2 Record a wrong response with the text under it.

Child:  home
Text:   house          [One error]

3 If a child tries several times to read a word, record all his trials.

Child:  here           h- home
Text:   house           [One error]

Child:  h- home
Text:   home            [No error]

4 If a child succeeds in correcting a previous error this is recorded as 'self-correction' (written SC).
Note that example 3 did not result in a self-correction.

Child:  where           when SC
Text:   were             [No error]

5 If no response is given to a word it is recorded with a dash. Insertion of a word is recorded over a dash.

No response Insertion
Child:  -               Child:  here
Text:   house Text: -   [In each case]

6 If the child baulks, unable to proceed because he is
aware he has made an error and cannot correct it,

Taking running records of reading texts 27
or because he cannot attempt the next word, he is
told the word (written T).

Child:  home
Text:   house T          [One error]

7 An appeal for help (A) from the child is turned
back to the child for further effort before using 1 as
in 6 above. Say 'You try it'.

Child:  -               A  here
Text:   house -          T  [One error]

8 Sometimes the child gets into a state of confusion
and it is necessary to extricate him. The most
detached method of doing this is to say 'Try that
again', marking TTA on the record. This would not
involve any teaching, but the teacher may indicate
where the child should begin again.

It is a good idea to put square brackets around
the first set of muddled behaviour, enter the TTA,
remember to count that as one error only (see page
29), and then begin a fresh record of the problem
text. An example of this recording would be:

✓  look  said ✓  ✓
Susan went with the headmaster
Timothy to TTA

✓  said  R  SC ✓  ✓  ✓
went

[One error]

9 Repetition (R) is not counted as error behaviour.
Sometimes it is used to confirm a previous attempt.
Often it results in self-correction. It is useful to
record it as it often indicates how much sorting out
the child is doing. "R", standing for repetition, is
used to indicate repetition of a word, with R1 or R2,
indicating the number of repetitions. If the child
goes back over a group of words, or returns to the
beginning of the line or sentence in his repetition,
the point to which he returns is shown by an arrow.

Child:  Here is the home  R  SC  [No error]
Addendum A-vii
Categories for rating writing samples

WRITING

Examine examples of the child’s writing behaviour. Does he have good letter formations? How many letter forms does he use? Does he have a small stock of words which he can construct from memory with the letters correctly sequenced? What are they?

By observing children as they write we can learn a great deal about what they understand about print, and messages in print, and what features of print they are attending to. Writing behaviour is a good indicator of a child’s knowledge of letters and of the left-to-right sequencing behaviour required to read English. In writing words letter by letter the child must recall not only the configuration but also the details of letter formation and letter order. A child’s written text are a good source of information about his visual discrimination of print for as the child learns to write words, the hand and the eye support and supplement each other to organise the learner’s first attempts to discover how to distinguish different letters one from another (a large set of visual discrimination learning).

Writing samples

Rating techniques can be used on children’s early attempts to write stories. For example, to rate writing in the first year of school take three samples of the child’s stories on consecutive days or for three successive weeks and rate them as follows for language level, message quality and directional features. (One sample is not sufficiently reliable for this evaluation technique.)

Language level

Record the number of the highest level of linguistic organisation used by the child.

1 Alphabetical (letters only).
2 Word (any recognisable word).
3 Word group (any two-word phrase).
4 Sentence (any simple sentence).
5 Punctuated story (of two or more sentences).
6 Paragraphed story (two themes).

Message quality

Record the number for the best description of the child’s sample:

1 He has a concept of signs (uses letters, invents letters, uses punctuation).
2 He has a concept that a message is conveyed.
3 A message is copied.

4 Repetitive use of sentence patterns such as ‘Here is a...’
5 Attempts to record own ideas.
6 Successful composition.

Directional principles

Record the number of the highest rating for which there is no error in the sample of the child’s writing.

1 No evidence of directional knowledge.
2 Part of the directional pattern is known: start top left, or move left to right, or return down left.
3 Reversal of the directional pattern (right to left and return down right).
4 Correct directional pattern.
5 Correct directional pattern and spaces between words.
6 Extensive text without any difficulties of arrangement and spacing of text.

RATING WRITING SAMPLES

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<th>A LANGUAGE LEVEL</th>
<th>B MESSAGE QUALITY</th>
<th>C DIRECTIONAL PRINCIPLES</th>
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<td>1 – 4</td>
<td>1 – 4</td>
<td>1 – 4</td>
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<td>5 – 6</td>
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Sometimes what children learn falls outside the limits of the analysis categories that teachers use. Michael was five and in his first year of school, but at home he had access to his father’s computer. Unaided he ‘pecked out’ this story on the keyboard, by passing the need to form letters.

Mr. snow by michael.

wun cod and snowee morning a boy came out to pla and he made a snow man and when it was nite time fare thee mis come too visit adelaide.

The story contains local knowledge (of Adelaide, Australia) with story knowledge about ‘snowee’ mornings and snowmen which do not occur in Adelaide, and with fantasy knowledge about ‘fare thee mis’. It is part of the fun of making careful observations of children who are writing that we can reflect on how they draw from diverse sources of knowledge as they construct their stories.
ADDENDUM B

ASSESSMENT RESULTS
Addendum B-i
Baseline and exit scores:
First English Additional Language learner cohort

Table 4.1 Initial and Final assessment scores of First EAL-cohort (adapted from Clay, 1993)

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<td>9.38</td>
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<tr>
<td>Writing</td>
<td>Grade 2's</td>
<td>1</td>
<td>22</td>
<td>3.64</td>
<td></td>
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</tr>
<tr>
<td>Vocabulary</td>
<td>Grade 3's</td>
<td>2</td>
<td>22</td>
<td>13.82</td>
<td>10.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 4's</td>
<td>2</td>
<td>15</td>
<td>18.27</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Grade 4's</td>
<td>2</td>
<td>15</td>
<td>30.80</td>
<td>12.53</td>
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<td></td>
</tr>
<tr>
<td>Word</td>
<td>Grade 2's</td>
<td>1</td>
<td>24</td>
<td>2.45</td>
<td>16%</td>
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<td></td>
</tr>
<tr>
<td>Test</td>
<td>Grade 3's</td>
<td>1</td>
<td>17</td>
<td>10.28</td>
<td>67%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 3's</td>
<td>2</td>
<td>17</td>
<td>13.00</td>
<td>2.82</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 4's</td>
<td>2</td>
<td>19</td>
<td>11.47</td>
<td>1.64</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 4's</td>
<td>2</td>
<td>19</td>
<td>13.11</td>
<td>1.64</td>
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</tr>
<tr>
<td>Letter</td>
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<td>21</td>
<td>24.67</td>
<td>46%</td>
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<td></td>
</tr>
<tr>
<td>Identification</td>
<td>Grade 3's</td>
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<td>21</td>
<td>36.24</td>
<td>36%</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Grade 4's</td>
<td>1</td>
<td>17</td>
<td>36.86</td>
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<td></td>
<td>Grade 4's</td>
<td>1</td>
<td>17</td>
<td>42.06</td>
<td>5.82</td>
<td>78%</td>
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</tr>
<tr>
<td>Hearing and Recording</td>
<td>Grade 4's</td>
<td>1</td>
<td>17</td>
<td>28.17</td>
<td>14.13</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>Sounds in</td>
<td>Grade 3's</td>
<td>2</td>
<td>24</td>
<td>28.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Words</td>
<td>Grade 4's</td>
<td>1</td>
<td>19</td>
<td>33.50</td>
<td>4.82</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>(Dictation)</td>
<td>Grade 4's</td>
<td>2</td>
<td>24</td>
<td>33.16</td>
<td>4.58</td>
<td>89%</td>
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</tr>
</tbody>
</table>
Addendum B-ii
Baseline and exit scores: Second English medium cohort

Table 4.2. Initial and Final assessment scores of Second cohort: Learners who were not English first language speakers, but who received instruction through the medium of English.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Tasks</th>
<th>Grades</th>
<th>1. Initial</th>
<th>2. Final</th>
<th>N</th>
<th>Mean</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book</td>
<td>Grade 1’s</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td></td>
<td>2</td>
<td>8</td>
<td></td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Writing</td>
<td>Grade 1’s</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Vocabulary</td>
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<td>2</td>
<td>8</td>
<td></td>
<td></td>
<td>8.00</td>
<td>7.00</td>
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<td>Word Test</td>
<td>Grade 1’s</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>00:0</td>
<td></td>
</tr>
<tr>
<td>Letter Identification</td>
<td>Grade 1’s</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>8:00</td>
<td></td>
</tr>
<tr>
<td>Hearing and Recording</td>
<td>Grade 1’s</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td>2:00</td>
<td></td>
</tr>
<tr>
<td>Sounds in Words (Dictation)</td>
<td></td>
<td>2</td>
<td>8</td>
<td></td>
<td></td>
<td>16:75</td>
<td>14:75</td>
</tr>
</tbody>
</table>
## Table 4.3. Categorisation of spelling errors

*Analyses of students’ spelling errors (adapted from Furniss, 1993)*

<table>
<thead>
<tr>
<th>Uses phonetics/phonology of the L1 system</th>
<th>Letter order in syllables and words</th>
<th>Confusions with grammar: syntax, tense, pronouns, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitutions:</td>
<td>Transpositions</td>
<td>Words in sentences are often left out:</td>
</tr>
<tr>
<td>v/f (vies/fish; vat/fat)</td>
<td>Black (black)</td>
<td>I run away _am not a wolf.</td>
</tr>
<tr>
<td>k/g (dok/dog)</td>
<td>Muhc (much)</td>
<td>The _ was live in a big house.</td>
</tr>
<tr>
<td>e/a (et/at; thenks/ thanks)</td>
<td>Heav (have)</td>
<td>I love big books because _ is nice.</td>
</tr>
<tr>
<td>ie/i (gieniepieg/guinea pig)</td>
<td>Bleu (blue)</td>
<td>Syntax reflects L1:</td>
</tr>
<tr>
<td>ie/ee (gien/green)</td>
<td>Syas (says)</td>
<td>I love big books because is nice.</td>
</tr>
<tr>
<td>ie/y (bodie/body)</td>
<td>Onec (once)</td>
<td>I love my white bread to buy.</td>
</tr>
<tr>
<td>ou/o (gou/go)</td>
<td></td>
<td>I like to give for my grandpa a pressend.</td>
</tr>
<tr>
<td>ou/o-e (cok/coke)</td>
<td>Insertions</td>
<td>Punctuation is omitted.</td>
</tr>
<tr>
<td>oe/oo (loek/look)</td>
<td>Night (night)</td>
<td>Problems with:</td>
</tr>
<tr>
<td>oe/o (toeday/today)</td>
<td>Plidey (play)</td>
<td>Subject – verb agreement:</td>
</tr>
<tr>
<td>oe/ou (woed/would)</td>
<td>Whant (want)</td>
<td>I loves my friends.</td>
</tr>
<tr>
<td>Aai/I or Y (aai/I; maaI/my)</td>
<td>Omissions</td>
<td>Big Books is nice.</td>
</tr>
<tr>
<td>t/d (ret/red)</td>
<td>Befo (before)</td>
<td>Verb tenses:</td>
</tr>
<tr>
<td>ien/ing (goien/going)</td>
<td>Hos (horse)</td>
<td>I climbed the tree and I fall out of the tree.</td>
</tr>
<tr>
<td>Combination of one or more of the above:</td>
<td></td>
<td>Uses of –ing forms:</td>
</tr>
<tr>
<td>vrok(frog); woelv (wolf)</td>
<td></td>
<td>I like read. (reading)</td>
</tr>
<tr>
<td>exesaaitet (excited)</td>
<td></td>
<td>I think the snake is gone be orite.</td>
</tr>
<tr>
<td>Problems with affixes:word beginnings and endings</td>
<td>Double/single letter confusions</td>
<td>Confusions with alternative spelling patterns and rimes</td>
</tr>
<tr>
<td>Climd (climded)</td>
<td>Bol (ball)</td>
<td>Eet (eat)</td>
</tr>
<tr>
<td>Wolkt (walked)</td>
<td>Tel (tell)</td>
<td>Sum (some)</td>
</tr>
<tr>
<td>Orite (alright)</td>
<td>Vol (full)</td>
<td>Lik (like)</td>
</tr>
<tr>
<td>Cearvol (careful)</td>
<td>Baloons (balloons)</td>
<td>Tak/tyk (take)</td>
</tr>
<tr>
<td>Kouien (going)</td>
<td>Womman (woman)</td>
<td>Cok (coke)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gief (give)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Smol (small)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pickenpy (Pick &amp; Pay)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>oup (up)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hear (hair)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bote (boat)</td>
</tr>
</tbody>
</table>
ADDENDUM C

COMPARISON OF BASELINE AND EXIT DATA
Addendum C-i

Comparison of two lessons:
Teacher's dialogue during shared reading

Comparison of a teacher's dialogue: first (A1) and second (A2) shared reading lessons

Example A1. Teacher dialogue during shared reading

First Shared Reading lesson: nature of teacher dialogue: focuses on discipline not instructional content.

[Procedure: During this reading lesson the teacher introduced the book called *The Apple Tree* by showing the learners the cover. It contained a picture of a big apple tree with children dancing around it. In the following extract only the teacher’s dialogue is printed to emphasise the nature of the dialogue. The teacher displays the cover and says:]

- Look at the cover. What do you see?
- Rozanne don’t shout out.
- Nicola, I’ll ask you when your hand is up.
- Now, I’m going to read to you… *Round and round the apple tree…*
- I said I’m reading first…. Franklin sit still. Martinus be quiet!
- Now first I read, then you read…..
- Who knows where you can hear a rhyming word?
- Franklin, if you want to say something, put up your hand. Who can show me…Not you Ahisha, because you can already read. Nicola, show me where it says basket.
- Good. Now we are going to listen to a tape. Now you sing when I say, not when I don’t say…Rozanne and Franklin!!

Example A2. Teacher dialogue during Shared Reading

Second Shared Reading lesson: nature of teacher dialogue: more playful, focuses on instructional content and fosters comprehension strategies. During this reading lesson the teacher introduced the book called *Crocodile Tea* in which the main character is a crocodile who invites a variety of other animals to tea with the intention of eating them. The crocodile’s tea table contains a number of items that his guests like to eat e.g. straw for the zebra and bananas for the baboon. In the following extract only the teacher’s dialogue is printed to emphasise the nature of the teacher’s dialogue. The teacher first displays the cover and then does a “picture walk” through the book to orientate the learners minds to the storyline and concepts they will meet in the book.

Before Reading: Picture Walk

- Look on the cover. Who can show me where’s the title? (attending to print)
- Now, who knows what it says? [waits for a response then rephrases question] Who can read it?
- Good, Ahisha, *Crocodile Tea*. How do you know this word says tea? (providing evidence)
- OK, because it starts with a t. Anything else? (extending responses)
- Good. There’s a teapot on the table.
- Now look at all the food on the table. Who knows what this is? And this?
- Who knows what a crocodile eats? (prior knowledge)
- Now, look, here comes a zebra. What’s he wearing round his neck? (noticing clues)
- OK, in English we call it a scarf, OK
- Now, the crocodile is holding out the straw to the zebra. What do you think he is saying?
- Hmmm. Can you show me where it says: *Come to tea*? (matching speech to print)
- What do you think crocodile is thinking? (inference)
- Zebra steak! Ha-ha-ha! Good, I think you are right, Jason. Let’s turn the page so we can see what happens.
- What’s happened to the zebra? Isn’t this the zebra’s scarf? Who do you think is going to be next?……Now, lets read the story together.

During Reading

Having directed the learners’ minds to the story idea and vocabulary they will meet in the text, she co-reads the text with the learners without interruptions.

After Reading

Focuses the learners’ attention on rhyming words in the text e.g. door/four; hive/five. Sticks/six.
Addendum C-ii

Comparison of two lessons:
Teacher's questions during shared reading

Comparison of a teacher’s questions during shared reading: first (B1) and second (B2) lessons

Example B1. Teacher-generated questions during shared reading

First Shared Reading lesson: unvaried, closed-ended questions that direct attention at sight words and irrelevant detail

[Procedure: On each page the teacher points to a farm animal peering through a hole in the shed and asks:]

*What do you see on this page?* [Learners: A sheep! The teacher pastes a flashcard with ‘sheep’ written on it on the board]

*And what do you see here?* [Learners: A cow! The teacher pastes ‘cow’ on the board]

*And now?* [Learners: A horse! The teacher pastes ‘horse’ on the board]

*And here?* [Learners: A pig! The teacher pastes ‘pig’ on the board]

*What does a pig say?* [Learners: Oink! Oink! The teacher pastes ‘oink oink’ on the board]

Example B2. Teacher-generated questions during Shared Reading

Second Shared Reading lesson: varied, open-ended questions directing attention at main events, storyline, humour, author/illustrator craft, role play.

**Before reading:**

*What happens to people if they don’t listen to a king’s commands?* (introduction to story idea/utilizing prior knowledge of royal command)

What do you think will happen to the cook if he doesn’t cook a dinner that pleases the king? (prediction/knowledge of monarchy)

**During reading**

*What kind of dinner do you think a king would like to eat?* (inference/prior knowledge)

*What do you think the cook is going to make?* (inference based on textual clues)

Do you think he is going to lose his head? (prediction: textual clues/prior knowledge of whimsical nature of royalty)

**After reading**

*Why did you laugh because the royal family liked the pizza?* (detecting anomalies/incongruities)

*What other things made the story humorous?* (analysis of illustrations, characterisation, voice, author craft, anomalies)

**Response activities**

Role play – investigating the effects of different voices for different characters (see photo gallery)
Comparison of five learners’ control of sound-to-letter links at baseline (example A) and exit (example B).

**Example A. Five learners’ control of sound-to-letter links at baseline.**

<table>
<thead>
<tr>
<th>Learner 1. (Raw score: 0) The observer wrote the following on her record:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner is not able to write letters, sounds or words.</td>
</tr>
<tr>
<td>Learner 2 wrote mostly single letters for each word (Score: 10):</td>
</tr>
<tr>
<td>a w e p e o m t a e m o t t e m t s k l</td>
</tr>
<tr>
<td>Learner 3 borrowed heavily from Afrikaans (Score: 18)</td>
</tr>
<tr>
<td>a j s h e v i b i e k d o k e d h o u m. t o e d a y a j s e m i k o u i e n t o e t y k h i e m t o e s k o e l.</td>
</tr>
<tr>
<td>Learner 4 borrowed heavily from Afrikaans (Score: 19)</td>
</tr>
<tr>
<td>a a h e w b i e k d e k h o u m t o e d y a a e m d o u i e n g t w e e t y k h i e m t w e e s k o e l.</td>
</tr>
<tr>
<td>Learner 5 borrowed from Afrikaans: (Score 27)</td>
</tr>
<tr>
<td>a i h a v a h i c d a z a t h o m e t o e d a i a i a m g o e e n g t o e t a k h e e m t e e s c o o l.</td>
</tr>
</tbody>
</table>

**Example B. Five learners’ control of sound-to-letter links at exit.**

<table>
<thead>
<tr>
<th>Learner 1. (Score: 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M a m ——— h o o p t o t h t s o p s e w l r e t m k e d b r e t</td>
</tr>
<tr>
<td>Learner 2 (Score: 33)</td>
</tr>
<tr>
<td>M u m a z g o n a u p t w o t h e s o p s i e w e l g e t m i l k a n d b r e d</td>
</tr>
<tr>
<td>Learner 3 (Score: 33)</td>
</tr>
<tr>
<td>M u m h u s g o n e a p t o t h e s h o p s h e w h u l g e t m e l k a n d b r e d.</td>
</tr>
<tr>
<td>Learner 4: (Score 33)</td>
</tr>
<tr>
<td>M a m h e z g o n u p t o o t h e s h o p. S h e h i l g e t m i l k a n d b r e d.</td>
</tr>
<tr>
<td>Learner 5: (Score 33)</td>
</tr>
<tr>
<td>M a h a z g o n u p t o t h e s h o p s e e w i l l g e t M i l k a n d b r e a t.</td>
</tr>
</tbody>
</table>
ADDENDUM D

RESULTS: LEARNER RECORDS
Addendum D-i
Letter knowledge does not happen in alphabetic order

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age: 21</th>
<th>Recorder: M. Basson</th>
<th>Date of Birth: 9/4/62</th>
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</thead>
<tbody>
<tr>
<td>Date:</td>
<td>15-04-99</td>
<td>TEST SCORE: 31</td>
<td>STANINE GROUP: 2</td>
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</tbody>
</table>

**LETTER IDENTIFICATION SCORE SHEET**

<table>
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<tr>
<th>A</th>
<th>S</th>
<th>Word</th>
<th>LR.</th>
<th>A</th>
<th>B</th>
<th>Word</th>
<th>LR.</th>
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</thead>
<tbody>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>J</td>
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<td>B</td>
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<td>H</td>
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<td>C</td>
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<td>O</td>
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<td>W</td>
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<tr>
<td>M</td>
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<td>D</td>
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<td>S</td>
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</tr>
</tbody>
</table>

**Confusions:**
- g -> qf
- o -> qf
- qf -> g

**Letters Unknown:**
- A
- Q
- Q

**Vowels Unknown:**
- o
- q
- q

**Comment:**
Similar letters confused by qf

**Recording:**
- Alphabet response: tick (check)
- Letter sound response: tick (check)
- Word: Record the word the child gives
- Incorrect response: Record what the child says

**TOTAL SCORE:** 7.1

**TOTALS:** 1 13 1
## LETTER IDENTIFICATION SCORE SHEET

**Date:** 15/04/99

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age: 7-9</th>
<th>Recorder: M. Basso</th>
<th>Date of Birth: 92-01-08</th>
</tr>
</thead>
</table>

### Test Score:

**Score:** 7/54

### Stanine Group:

**Group:** 1

### Confusions:
- p/d
- q/1/d
- v/f
- m/n

### Letters Unknown:

### Comment:

### Recording:

- **Alphabet response:**
  - A
  - B
  - C
  - D
  - E
  - F
  - G
  - H
  - I
  - J
  - K
  - L
  - M
  - N
  - O
  - P
  - Q
  - R
  - S
  - T
  - U
  - V
  - W
  - X
  - Y
  - Z

- **Letter sound response:**
  - tick (check)  
  - tick (check)

- **Word:**
  - Record the word the child gives

- **Incorrect response:**
  - Record what the child says

### Totals:

<table>
<thead>
<tr>
<th>I</th>
<th>S</th>
<th>T</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

### Total Score:

**Score:** 7
Addendum D-iii
Picture + name + letter strings

**Writing Vocabulary Observation Sheet**

Name: [Name]
Age: 8

Recorder: M. Basar
Date of Birth: 9/12/31

Date: 15-05-99

Test Score: 2
Stanine Group: 1

Words:
- sand
- is
- 
- saw
- bad
- dad
- ba

[Hand-drawn diagram of the word "bad"]
Once upon a time there was a little girl. Her name is Tracy and she was lost in the forest and did not know what to do. She was crying and crying because she was lost from her mom and dad and he fond them and she was happy.
I love to read.
I love to read in bed one night. Then Teddy and I turn out the light and as we drum the night away an story Book friends come out to play.
One day they was three little pigs.
My friends is Nosie and Veronica.
Friends old mother Hebbet.
Huff puff bo's could not blue.
The house of brick.
Good boy Teacher, love.
Addendum D-vi
Marilyn's reading without comprehending

Daddy is sitting in the car.
They of the four children
are sitting at the back
of the car. They will all
soon go off to sea for a
sentence left out.
Baby David is not there now.

[X] Sentence left out.
Does not seem to notice
continues unperturbed.
Learner first read page 5 on then page 4
### Addendum D-viii

**Thabo's running record**

<table>
<thead>
<tr>
<th>Page</th>
<th>Before I go to school.</th>
<th>E</th>
<th>SC</th>
<th>Information used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before - Fore</td>
<td>E</td>
<td>SC</td>
<td>E MSV</td>
</tr>
<tr>
<td></td>
<td>before</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>v v v v v</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td># v v v v</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>be/k</td>
<td>v v v v v</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>v v v v v</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>v v v v v</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>v v v v</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>back back</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Analysis of Errors and Self-corrections (see Observation Survey pages 30–32)
Addendum D-ix
Wayne's running record: baseline and exit data

<table>
<thead>
<tr>
<th>Exit</th>
<th>Before I go to school</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Monkey Tracks</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
<td>v</td>
</tr>
</tbody>
</table>

Analysis of Errors and Self-corrections from Observation 1 (5 Year Pkg)
**A. BASELINE DATA**

HEARING AND RECORDING SOUNDS IN WORDS (DICTATION TASK)  
OBSERVATION SHEET  

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age: 8:1</th>
<th>Recorder: M. B.</th>
<th>Date of Birth: 91-5-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST SCORE:</td>
<td>10.23</td>
<td>STANINE GROUP: 3</td>
<td></td>
</tr>
</tbody>
</table>

(Fold heading under before child uses sheet)

owe p-e o m  
taem ott tem  
task.

**B. EXIT DATA**

HEARING AND RECORDING SOUNDS IN WORDS (DICTATION TASK)  
OBSERVATION SHEET  

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age: 6:</th>
<th>Recorder: A.</th>
<th>Date of Birth: 91-05-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEST SCORE:</td>
<td>33.00</td>
<td>STANINE GROUP: 6</td>
<td></td>
</tr>
</tbody>
</table>

(Fold-heading under before child uses sheet)

mum haz gon cup two  
the sop Sie  
get mill and Sie bred  
well.
# Addendum D-xi

## Lulu's running record

**RUNNING RECORD SHEET**

**Name:** Leletiwe Mkhontwa  
**School:** St John's, Grade 2  
**Date:** 26-6-99  
**Age:** 7 yrs 11 mins  
**Text Titles**  
1. Easy
2. Instructional
3. Hard: *Me, the Monkey*

<table>
<thead>
<tr>
<th>Text Titles</th>
<th>Running words</th>
<th>Error</th>
<th>Error rate</th>
<th>Accuracy</th>
<th>Self-correction rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard: <em>Me, the Monkey</em></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Directional movement:** Does not match spoken words correctly to written words.

**Analysis of Errors and Self-corrections**  
*Information used or neglected (Meaning (M) Structure or Syntax (S) Visual (V))*

- Easy
- Instructional
- Hard: Pays no attention to print. Reads purely from memory.

**Cross-checking on information** (Note that this behaviour changes over time)  
Does not even look at the pictures.

**Page 2**

- Me the monkey (Class reader)

<table>
<thead>
<tr>
<th>Page</th>
<th>Information used</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>E SC</td>
</tr>
<tr>
<td>4</td>
<td>E SC MSV</td>
</tr>
</tbody>
</table>

- Does not show any interest in the picture.
ADDENDUM E

INDEPENDENT REVIEW OF READING RECOVERY: 2006-2007
Addendum E
Independent review of Reading Recovery

Reading Recovery in Ohio
2006-2007 Executive Summary

Introduction
Reading Recovery® is a professional development project with a two-tier level of curriculum faculty in
universities train and provide professional development to teacher leaders who work at the site level and
provide professional development to Reading Recovery teachers. This professional development project for teachers was
initiated at the United States by faculty at The Ohio State University in 1984, but it was first implemented in New Zealand as a result
of research conducted at the University of Auckland by Dr. Marie Clay. Since its first implementation in the United States, Reading
Recovery has served nearly two million children and in the last eight years alone, about 20,000 teachers have been trained.

Reading Recovery
Children in first grade who are having the greatest difficulty learning to read and write are taught by a Reading Recovery teacher who designs individual literacy lessons that are responsive to each child's strengths and needs. The goal is to accelerate each student's progress to average levels of reading and writing within 20 weeks. Researchers attribute this faster-than-usual progress to the one-to-one nature of the instruction, the teacher's professional development and the instructional components of the Reading Recovery lesson.

Notable Successes: Report of the What Works Clearinghouse
Reading Recovery received the highest marks from the What Works Clearinghouse, a division of the U.S. Department of Education's Institute of Education Sciences. Of the 153 beginning reading programs reviewed, only Reading Recovery was found to have positive effects across all four literacy domains and only Reading Recovery received the highest possible rating for general reading achievement.

The What Works Clearinghouse (WWC) released a 3-year independent review of the experimental research on Reading Recovery in March 2007. This authoritative, independent assessment clearly establishes that Reading Recovery is an effective intervention based on scientific evidence. The WWC found that Reading Recovery has positive effects—the WWC's highest rating—on students' basic literacy skills and general reading achievement. They found potentially positive effects, their next highest level of evidence, on fluency and comprehension outcomes. For details and select 'Beginning Reading', then 'Reading Recovery'.

Reading Recovery in Ohio, 2006-2007
In 2006-2007, 4,377 students were taught by 397 Reading Recovery teachers. These teachers also taught 24,023 students in the second half of the day when they were not teaching Reading Recovery. Reading Recovery teachers received professional development from 21 literacy coaches who themselves received professional development from faculty at The Ohio State University.

Well over half the students taught (59%) were boys; 53% receiving free or reduced price lunches; 77% were White; 15% Black; 3% Hispanic and 3% multiple or other races; 12% had some disability and 5% spoke a language other than English at home. Reading Recovery was in a wide variety of schools, with 18% urban, 45% suburban or large town and 38% small town or rural; 41% the schools had Title I and another 33% had school-wide Title I; 47% of the school had less than 5% non-White students, 34% had between 5-20% non-White students, 12% of schools had between 20-50% non-White students and 7% had more than 50% non-White students.

Results
4,166 students were enrolled in Reading Recovery lessons in Ohio last year. A full intervention lasts a maximum of 20 weeks (fewer weeks if students reach average levels of reading and writing sooner). Not all students who were enrolled completed a full intervention.

- 735 were enrolled in lessons at year-end without enough time in the school year to complete the intervention. Interventions began throughout the year so instructional slots become available. Those starting in spring are sometimes not completed due to insufficient time.
- 187 moved during the school year while they were enrolled in Reading Recovery.
- 85 students were removed from the intervention by someone other than the Reading Recovery teacher. (For example, they were placed back in kindergartens at the beginning of the year or withdrawn from Reading Recovery by parents who declined the additional teaching for their children.)

Of the 3,159 remaining students who received a complete intervention 20 weeks or less, 2,206 (70%) reached average levels of reading and writing:
- 953 (30%) made progress but not sufficient to reach average levels. They were recommended for consideration of a more intensive intervention.

Figure 1  Outcomes for Children with a Full Series of Lessons

- Reached Average Levels: 70%
- Made Progress But Did Not Reach Average Levels: 30%
ADDENDUM F

SAMPLES OF FIELD NOTES
Addendum F-i
Extract of field notes and categories

Extract 1.
- Need for books/materials
- Limits growth
- Power-teacher imbalance

Extract 2.
- Authority/control
- Phonetic/whole language debate
- In line with theory/ideological positions
- Curricular implications
- Transmission/transactional

Extract 3.
- Enthusiasm/motivation
- Teacher buy-in
- Progress
- Phonograms
Addendum F-ii
Transcription of field notes into categories on the computer

Ideological position

View of knowledge

A
- conservative
- external source
- objective, scientific
- universal rules for knowledge
- authoritarian

B
- progressive
- internal source
- subjective, interpretative
- socially constructed reality
- liberal

Organisational structure

- mechanistic (bureaucratic)
  - obedience/respect for authority
  - power-control
  - preserve social/political order

- organic (adhocratic)
  - mutual understanding and respect
  - power sharing
  - radical change to social/political forms

Curriculum

- accepting academic authority
  - transmission model of learning
  - memorising facts and skills
  - dependence

- intellectual independence
  - transactional model of learning
  - problem solving and critical thinking
  - autonomy

Literacy curriculum

- content knowledge
  - step-by-step acquisition
  - subject division
  - basic skills
  - phonics

- cognitive processes
  - holistic acquisition
  - integrated curriculum
  - mental strategies
  - whole language

Assessment

- formal tests & examinations
- decontextualised
- product & grade orientated
- norm-referenced
- summative

- variety of test on a continuous basis
- contextualised
- process and learner development
- criterion referenced
- formative

Ideological Positions and their influence on curricula
Teacher training, development & observation

Training Sessions at Stellenbosch University

Ms Jamison demonstrating and observing lessons in the project classrooms

WCED observers observing lessons in the project schools
Creating print rich classrooms
Language Experience Approach, Role Play, Arts & Culture

Outing to an Apple Farm.

Writing Based on the Experience

Role Play based on a Shared Book Experience

Art inspired by *The Best Book of Terry Lee*
Reading Activities

Guided Reading

Shared Reading

Independent Reading
Task Management Boards and Learning Stations

Task Management Board

Listening Station

Writing Station

Word Station

Teacher’s Workstation: Interactive Writing

Library Station

Alphabet Station