

# **Adapting Instruction to Meet the Individual Needs of Foundation Phase Readers and Writers**

by  
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## **DECLARATION**

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## **ABSTRACT**

Current intervention programmes implemented in most Western Cape schools reflect the use of isolated item-based literacy teaching methods. However, the low literacy levels in the Western Cape primary grades do not indicate successful literacy learning. Therefore, this study seeks to implement alternative approaches to fostering literacy comprehension, such as socio-cognitive processing and constructivist approaches, which are more in line with current research than the traditional items based models of literacy instruction.

The alternative, research-based methods were explored through the implementation of an individualized contingent literacy intervention with emergent literacy learners. The intervention took shape as a comparison between low progress learners, who participated in the literacy intervention lessons, and average progress learners, who did not participate in the literacy intervention lessons. The aim was to accelerate the low progress learners' literacy learning so that they could reach the average-band performance of their classmates after 12 weeks in the intervention. Data were gathered by means of observations of learners and a Grade one teacher, an interview with the teacher and assessment results obtained in a pre-mid-post-test design. In order to triangulate the results of the intervention, both qualitative data and quantitative data were obtained and discussed. Based on qualitative data, the intervention lessons proved to be successful, because observations indicated positive change in the low progress learners' reading and writing behaviours. Given the small sample size, the overall trend in the quantitative data supported the value of the intervention and indicated a need for extending the research beyond a pilot study. Further research using larger sample sizes is thus recommended. More research is also needed to obtain data on research-based interventions that are flexible enough to meet the diverse needs of learners from different cultural backgrounds.

## OPSOMMING

Die meerderheid Wes-Kaapse skole maak gebruik van intervensie programme wat geskoei is op die geïsoleerde item-geletterdheidsmetodes. Die lae geletterdheidsvlakke in die Wes-Kaapse laerskool grade reflekteer egter nie positief op die metode wat tans gebruik word nie. Daarom word hierdie studie onderneem met die oog op alternatiewe benaderings om geletterdheid te bevorder en sodoende verbeterde leesbegrip tot gevolg sal hê. Die benaderings ter sprake is sosio-kognitiewe prosessering en konstruktivistiese benaderings, wat beide meer in gehoor is met huidige navorsing.

Deur alternatiewe navorsingsgebaseerde metodes, is 'n individuele geletterdheid-intervensie program ontwikkel vir ontluikende geletterdheidsleerders. Die intervensie is geïmplementeer en gemeet deur middel van 'n vergelyking tussen stadig vorderende leerders en gemiddeld vorderende leerders, waarvan laasgenoemde nie in die intervensie lesse deelgeneem het nie. Sodoende kan die impak onafhanklik vergelyk word. Die doel was om die stadig vorderende leerders se geletterdheidsvlak te versnel ten einde dieselfde geletterdheidsvlak van hul gemiddeld vorderende klasmaats binne 12 weke te behaal. Data is ingesamel deur middel van observasies van die leerders en 'n Graad 1 juffrou, 'n onderhoud met die juffrou en toetsresultate verkry in 'n voor-middel-na-toets ontwerp. Om die resultate van die intervensie interpreteerbaar te vergelyk, is beide kwalitatiewe en kwantitatiewe data ingesamel en bespreek. Uit die kwalitatiewe data blyk dit dat die intervensie lesse suksesvol was aangesien die observasies dui op 'n positiewe lees en skryf gedragsverandering in die stadig vorderende leerders. Met die klein steekproef van leerders betrokke, was die algemene tendens van die kwantitatiewe data dat die intervensie wel waardevol was, maar dat verdere studies met groter steekproef groepe noodsaaklik is. Verdere navorsing t.o.v. die insameling van data vir navorsingsgebaseerde intervensies is nodig. Hierdie data insameling en evaluasie tegnieke moet die diverse behoeftes van leerders, afkomstig van 'n verskeidenheid agtergronde, in ag neem en akkomodeer om resultate vergelykbaar te maak.

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# **CHAPTER 1: PROBLEM STATEMENT, RATIONALE FOR AND OBJECTIVES OF THIS INVESTIGATION**

## **1.1 INTRODUCTION**

This chapter contextualises this study, which concentrates on the literacy needs of Grade one learners and their first encounter with formal reading and writing. The South African approach is considered in terms of research done in alternative approaches to introducing and teaching literacy in the classroom. Although the literature reviewed in chapter two and the principles on which the research is based is applicable to the classroom situation, the main focus of the study is on a one-on-one literacy intervention designed to accommodate the individuality of learners who were falling behind in literacy.

First in this chapter, I consider the importance of knowledge embedded in literacy and the need for an early start to literacy. Then I discuss the theoretical perspective that underlies my study and contrast this with the approach followed in many South African classrooms. My justification for the study, the research design and the outline of the remainder of the chapters follow.

## **1.2 KNOWLEDGE EMBEDDED IN LITERACY**

In a world of ever-progressing information and technology, literacy plays a vital part in the process of learning how to learn (Boekhorst & Britz, 2004). The ability to read unlocks the world of knowledge to people of all ages and cultures, whether it means reading a label or reading a book on electronics (Hornsby, 2000:2). Reading is essential for current day-to-day living. The earlier the knowledge of literacy is developed, the earlier the world of information can be unlocked. Literacy refers to both reading and writing with comprehension.

Early exposure to literacy helps learners through their school careers because literacy is the bedrock on which other subject knowledge is built. Thus, appropriate guidance into literacy and the start of reading and writing at an early age are important to ensure learners' positive attitude towards these major skills.

Seeing that literacy and the crucial first stages of entering the literate world in Grade one are so important, learners should be able to experience success in their reading and writing attempts. However, results of studies concerning literacy levels conducted in the Western Cape, South Africa, do not reflect early literacy success (Grant, 2009). Only half of the

learners in the study were able to pass literacy tests in 2008. In addition, a pass in literacy still does not ensure comprehension and fluency of reading and writing. The results indicate that some of the learners were able to move from Grade one to Grade 3 without having reached the minimum required grade-level for reading and writing, as set by the Assessment Standards of the National Curriculum. These research results are reflected in the PIRLS Technical Report of 2006 (INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT, 2008) that indicated a lack of literacy functionality in many school leavers. Also, 70% to 80% of South African primary schoolchildren are not able to read fluently in their school's instructional language (Fleisch, 2008). Early recognition of these learners could have reduced a big percentage of learners below literacy grade level.

### **1.3 PROBLEM STATEMENT**

In light of the preceding segment, the main problem appears to be low literacy levels in the primary grades and the necessity to prevent struggling learners from continuing through grades without the assistance or opportunity to improve their levels of reading and writing.

First, as a tutor and facilitator in 2009 I observed that some schools did not provide learners with what is known as "learning support" during their first year at school. Any problems encountered by the learner were dealt with in the classroom context and not in extra individual time outside of the classroom. Thus the elements in classrooms should be considered as factors influencing low literacy scores, such as large classes. This opens the case for assisting the lowest performers in order to remove the burden from the teacher to attend to these learners. An alternative approach to literacy and smaller groups, or even individual assistance, could be the answer to improvement of the literacy levels. Justice (2006) emphasises the need for an early multi-level intervention programme to prevent reading difficulties rather than identifying learners after attaining the literacy problem, after instruction.

Second, Clay (2002:5) explains that assessment of learners at the end of an instruction sequence results in a systematic testing of outcomes, rather than the systematic observation of a learner's learning. This means that individual learner's progress needs are not met and indicates a need to identify and help individual learners through supportive, successful measuring instruments. Therefore an applicable measuring instrument is necessary for early identification of, and intervention for, learners with literacy needs. It was this need for alternative measurement that Clay's (2002) *An Observation Survey of Early Literacy Achievement (OS)* met in my study.



Third, my tertiary Education course recommended teaching phonics, words, sentences and comprehension skills, each in their own time, and as rather loose items. This is problematic, because a theory of “reading continuous texts cannot arise from a theory of word reading because it involves the integration of many behaviours not studied in a theory of reading words” (Clay, 1993:7). In the approach of separating reading and writing, reading takes place in “ability” groups, but writing is presented as a class activity on one “level”. Whole classroom writing is a problem-area, because “successful readers and writers show us how they use what they know in reading to help their writing and vice versa, and therefore both must be part of an early literacy intervention program for second-chance learners” (DeFord, Lyons & Pinnell, 1991:56). A new approach which accommodates a more balanced programme should be considered. Such a programme would require a research-base of experts who have proved their approach with practical findings about literacy.

A three-tier approach is thus needed for prevention rather than the cure of low achieving learners, namely: (1) a measuring instrument to identify learners in need of a prevention programme, (2) an alternative approach to teaching literacy in interventions, and (3) an alternative approach to teaching literacy in classrooms. My focus is on (1) and (2) in order to make recommendations for (3).

#### **1.4 THEORETICAL PERSPECTIVE UNDERLYING THE RESEARCH**

My initial experiences of reading and writing in foundation-phase classrooms led me to understand that reading started at phonics level, progressed to word level, then sentence level and ultimately reading. However, an alternative approach to presenting literacy to young learners was introduced to me in 2009 at the second tertiary institution at which I enrolled. This approach supported learning from whole texts, and shifted the focus from a reliance on phonics to the process of reading. The latter approach led me to this research, in order to investigate its degree of success.

My theoretical perspective of the research approach was grounded in the work of a core group of theorists in Early Childhood Literacy (ECL), such as Clay (2002), Fountas and Pinnell, (2007), Scharer (2008), Weaver (1994) and Flanagan (1995) who describe early literacy behaviours, with the focus on processing of information in print, to assist learners who make slow progress with print. The success of Clay’s research over several years testifies to her being the pioneer in the field of early literacy. Clay developed alternative forms of assessment which focus on literacy processing strategies, such as the An Observation Survey of Early Literacy Achievement (OS) (Clay, 2002). For these reasons I also use Clay as key theorist in my study.

Their work is multifaceted, informed by years of study and research and implemented into what is known as the socio-cognitive processing approach to reading and writing (Pinnell & Fountas, 2006:365, 366). Their methods reflect what Weaver (1994) describes as the “Transactional model of education” and what Flanagan (1995) sees as the “Psycholinguistic view”. Translating these researchers’ methods and theories into literacy in the South African context meant considering a more holistic approach to teaching early literacy (Flanagan, 1995:12). The role of the teacher and how she can implement such a literacy approach into her classroom and in individual situations, is central to the success of such an approach. This highlights the necessity of teacher training and development (Pinnell & Fountas, 2006:368).

Under the influence of the above-mentioned researchers, my understanding of reading changed. I no longer see reading and writing as steps from phonics up to reading, but rather as a cycle of formulating and re-formulating text information while reading and writing, in order to unlock the meaning (Hornsby, 2000:8; Clay, 1991:14). Another important change in my theoretical perspective is the reciprocity of reading and writing (See 2.4). Learners must know, and then be guided to apply what they know, from reading to writing and vice versa (Clay, 2002:22). Thus the cycle of learning to read and write is never-ending, and fosters life-long literacy practices.

My theoretical perspective, which will be discussed at length in Chapter two, guided the practical implementation of the intervention in my research. I also used Reading Recovery®: *A guidebook for teachers in training* (Clay, 1993), which assisted my planning and presenting of lessons during the research. The successful application of Reading Recovery® (Clay, 1993) in New Zealand, Australia, the United States, Canada, Great Britain, Ireland and Bermuda over the past 20 years informed my decision to apply some of its principles in my study (Pinnell & Fountas, 2006:368).

## **1.5 JUSTIFICATION FOR THE RESEARCH**

The discussion thus far points to the need for an investigation into an alternative approach to the current South African skills-based approach to teaching literacy. A proper study of literature that supports the theories mentioned in 1.4, informed my research-based lessons, guided by the competencies of the learners. The learners’ responses to my research-based intervention can indicate applicability to the South African context or refute it (See 5.5). The study’s hypothesis is that a research-based approach will be successful, and that it can play a role in the formulation of a new approach to teaching literacy.

## **1.6 RESEARCH DESIGN AND RESEARCH QUESTIONS**

The research design and methodology will be discussed at length in Chapter three, but a condensed outline is given here. The research can be described as a pilot study to observe and assess learners' response to a different literacy teaching approach based on the theoretical principles outlined. A comparison between two groups was made, in which the target group received research-based lessons and the control group did not, in order to evaluate a change in the target group's response. The lessons were presented on an individual basis to four learners in the target group and with the following questions in mind:

1. How does contingent teaching help individual learners develop effective strategies for comprehending texts at the appropriate grade level?

- 1.1 What are the effects on low-achieving learners of a different approach to literacy development?

- 1.2 How will a different approach change the teaching dynamic in the literacy classroom?

The research was divided into a pre-, mid- and post-test scheme, with research-based lessons presented between each test to the target group. Both the target and the control group were tested at the same intervals to ensure exact timeframes in their literacy growth. All these interactions and tests served as data, along with an observation of a classroom literacy lesson and short interview with the teacher who presented the lesson. All the data were taken into consideration for qualitative analysis, but only the results of the tests from the pre-, mid-, post-tests were processed for quantitative analysis.

## **1.7 OUTLINE OF THE OTHER CHAPTERS**

Chapter two reviews literature that takes the current methods of teaching literacy in South Africa into account and focuses on research that informs an alternative approach. In the review, I research effective practice and how it can be implemented. I conclude with a possible intervention design and the stumbling blocks encountered as a result of Educational Systems. In Chapter three I describe the research design and process which sets the framework for the practical implications of the study. Chapter four contains the analysis of the qualitative data and then the quantitative data in a style which assisted me to answer the questions posed in Chapter one (see 1.6). In Chapter five I seek to answer the research questions, and make recommendations for further research.

## **1.8 SUMMARY OF THE CHAPTER**

In this chapter I outlined my research and I provided reasons for conducting such research. I discussed the importance of literacy in current times and identified low literacy levels as one of the main problems facing South African primary schools. The theory base was then

described that informed my research practices, followed by the justification for this research. I then briefly described the research design and methodology, and posed the questions that I sought to answer, and I provided an outline of all the chapters.

## CHAPTER 2: BRAIN-BASED CLASSROOM AND INTERVENTION PRACTICES

### 2.1 INTRODUCTION

The purpose of this research was to develop an early literacy intervention for low-progress readers and writers in a South African school. It is based on the work of key theorists who support the Whole Language Approach (WLA), such as Weaver (1994), Flanagan (1995) and theorists who look at reading and writing from the socio-cognitive perspective, such as Clay (1991-2005), Lyons (2003), Fountas (1996 - 2009) and Pinnell (1996 – 2009). In some instances I also draw on my own teaching experiences gained in South African classrooms over a period of five years.

By undertaking this literature review, I wish to gain knowledge about the process of reading and writing with comprehension. In order to accomplish this according to a holistic and socio-cognitive perspective, my discussion first focuses on how parents and preschools can interact with children to help them acquire effective literacy behaviours that will ease the transition from informal to school learning. The discussion is informed by neuroscience and the way that knowledge of brain structures can improve literacy instruction.

Next, my discussion focuses on optimal approaches to teaching comprehension-fostering strategies. Finally, I compare current trends in literacy instruction in many South African classrooms to the knowledge I gain from my literature review. Given the low levels of literacy proficiency amongst the majority of learners in the primary school grades in South Africa (INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT, 2006; Fleisch, 2008), I hope that such a comparison will provide valuable insights for improving literacy instruction for beginner readers and writers.

Research-informed classrooms can assist interventions, and intervention programmes can inform classroom teaching. This reciprocity between classroom instruction and one-on-one instruction was highlighted by Fountas and Pinnell (2009), who used principles from Reading Recovery® (Clay, 1993) to design excellent programmes for classroom instruction, for example *Literacy Collaborative*® (Fountas & Pinnell, 2009). Therefore, in my literature review I consider both classroom and intervention situations to inform my research.

## 2.2 REFLECTING ON PRE-PRIMARY AND PRE-SCHOOL INFLUENCES

Preparation for school learning ought to start at home (Clay, 1991; Dodge, 2009). Lyons (2003) focuses on the development of the brain during the first years of a child's life at home and the way it can be used to maximise learning. She argues that childhood experience has an immense impact on the neural network development of the child's brain. "Culture, experience, the context for learning, and social interactions play major roles in who we are, how we feel, how we learn and what we learn" (Lyons, 2003:8).

Earlier and more frequent use by a child of both hemispheres of his brain results in the development of more dendrite connections, which extend across myelin. Myelin "is a fatty white sheath" that insulates each neuron and leads to smooth processing. The more myelin, the faster the processing takes place (Lyons, 2003:12). This process must occur early in the child's life to be perfected (Jensen, 2005). Early opportunities should therefore be seized to create neurological malleability, which will influence a learner's ability to apply flexible behaviours to reading and writing at a later stage (Lyons, 2003:40).

From an early age infants are sensitive to sound (if they do not experience hearing problems) and the brain constructs information on sounds according to the way phonemes are encoded in their native language in the auditory cortex (Lyons, 2003:44). Links made by the brain depend on the infant's exposure to language, sounds, sights and emotional responses from their parents and caregivers in their environment (Lyons, 2003:24). The more sensory acts that parents expose their infant or child to, the more complex become the patterns of learning, thought and creativity. This is why oral language or speech, as a sensory act, is seen as the foundation for further exploration of concepts and constructs, and helps assist the process of making meaning of texts (Fountas & Pinnell, 1996:21; Silliman & Scott, 2009:107).

Initially, emergent readers and writers will have only their oral language as epistemology of a language and literacy to depend on. They have to link this body of language knowledge to phonological and visual aspects of what they are reading (Clay, 1991:263). From this point, not only the ear is involved in receiving messages, but the eye is included also in the equation. What the child hears and what he<sup>1</sup> sees has to be incorporated and related to reading in order to match auditory and visual cues, which help the child realise that the print, not the illustrations, is the main carrier of the message and meaning (Clay, 1991:95).

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<sup>1</sup> Please note that when I refer to "he"/"him" in the text, I also refer to "she"/"her", although I might not mention it.

A practical example that illustrates how important oral language knowledge is to literacy learning is the action of writing. Clay (2002:111) points out that the ability to hear the sounds in the words one wants to write is an authentic, real-world task. Because this action requires children to listen to sounds in words in order to write those sounds, it teaches them to make the connection between phonemes in their own speech streams and the letters that represent these sounds. This contrasts with the traditional phonics method which teaches children to identify the "sounds" letters make e.g. "this letter says /a/ or /a/ for apple". Since school entrants already know how to speak and use the sounds of their language, this method enables them to draw on one of the most valuable resources they already possess, namely their oral language. In addition, writing one's own messages contributes to the analysis of words, sound by sound and letter by letter, while simultaneously providing experience with the whole word within its language context (Clay, 1991:315). Writing their own messages also allows learners to take ownership of their messages and to know their voice counts.

Knowing about a child's brain-connections and dependence on oral interaction is very important for my intervention, since the research was conducted with Grade one learners. This knowledge informed my understanding that each learner's process of information construction was the basis for further learning in Grade one. However, it is not only the years at home that have an influence on how a child constructs knowledge; it is also the year before school, namely pre-school or the "Reception" year (Jensen, 2005:26, 27).

### **2.2.1 Pre-school knowledge patterns**

When they enter pre-school, learners from a variety of social and cultural contexts will have knowledge about, and attend to, different aspects of literacy (DeFord *et al.*, 1991:61). This means they each have their own way of comprehending letters, print, reading and words, based on the print they observe and experience in their environment (Caine, 2008:132; Clay, 1993:9). These factors influence and develop the child's concept about books, newspapers, messages, and what it means to be read to (Clay, 2002:9). Thus learners from various backgrounds learn from several dimensions, which contribute to their reading and writing and their foundation for future success (Clay, 1993:3). In this, then, lies the warning against underestimating a pre-schooler's ability to write. In the majority of South African pre-schools, learners are not expected to write yet, but that should not hinder them from trying, or prevent the teacher from promoting writing experiences (Clay, 2002:19).

As soon as a child in the pre-school shows interest in words and word play, the teacher and parent can increase the child's exposure to language encounters (Clay, 1991:29). Such exposure helps build the patterns that the child has constructed up to this point, by, for

example, learning from the parent or teacher who constantly offers opinions, ideas and comments (Fountas & Pinnell, 1996:21).

### **2.2.2 The transition: Guiding learners for fluent adaptation**

During the pre-school period and Reception year (Grade R) learners gain literacy knowledge, which requires an adaptation and a change in learners' reading and writing behaviours once they enter Grade one. Thus instruction in the Grade R classroom impacts on a learner's reading and writing skills, and could lead to a learner either succeeding in literacy or falling behind. As learners' literacy behaviours develop during Grade R and in Grade one, they begin to control their reading and writing behaviours. Thus they realise that they make left to right movements while they read, they see how letters are grouped in sequence, and how words differ from one another, and they use this knowledge to create their own bank of high-frequency words (Fountas & Pinnell, 2006:6). Lyons (2003:36) depicts this process as the intentional activation of motor senses, which, when practised, leads to automation. Once a process has become automated by the learner, (for example, replacement of the finger by only the eyes to read from left to right without thinking about it), the new knowledge has been linked to a category in the brain (Lyons, 2003:17). This implies that the transition from the initial reading to effective reading behaviour should be closely guided to prevent ineffective behaviour systems from taking a place in the automation process (Clay, 1991:209).

In order for learners to apply effective behaviour systems in future activities via sensory pathways, the literacy programme should include reading and writing activities which contain exploration by the learners (Lyons, 2003:16). It is the responsibility of Grade-R and Grade-one teachers to plan such literacy activities for the learners' fluent adaptation from Grade R to Grade one. These types of explorative tasks are categorised by each learner's brain as he seeks for solutions, and creates the capacity to learn. Thus for information to remain part of permanent storage, explorative activities need to be meaningful and applicable, otherwise the linking patterns in the brain will be lost (Lyons, 2003:66).

This neurological view stresses the malleability of learners' brains and the ability to learn in an individualised way through different links made in their brains. This means that my intervention had to take account of the participating learner's prior and individual knowledge before planning a programme for each individual. The important process of linking existing knowledge to new knowledge is a neurological action which is critical to the integrated construction of knowledge. This linking process will be fully investigated in the next section.



## **2.3 MAKING LINKS: ADDING NEW INFORMATION TO EXISTING KNOWLEDGE**

Research in neuroscience has provided some valuable principles of learning which educators can use to help struggling learners maximise learning (Lyons, 2003). These principles state that learning depends on connecting new knowledge with prior knowledge, and on how well learners work with what they know, in order to discover new knowledge.

### **2.3.1 The role of existing knowledge**

The neurons that form maps in the brain do not consist of bits and pieces of processed information; they construct a network in an individual way for every person, uniquely linked according to each person's own experience (Lyons, 2003:16). Thus when working with literacy learning, the most effective way to create these intricate links in the brain is to work from a learner's own sources of knowledge and strengths (DeFord *et al.*, 1991:6). These may include prior knowledge of literacy, of language, the world, how books work and personal experiences (Caine, 2008:132; Clay, 1993:39, Pinnell, 2001:10). In terms of literacy, a child first starts to explore the literacy behaviours he or she already controls, and then applies such behaviours when interacting with texts (Cazden & Clay, 1992:118).

When reading, learners can be helped to become aware of their various behaviours and strategies. They then practise these on easy materials to build fluency and confidence in the act of reading and writing (Clay, 2002:25). Working from existing knowledge and venturing into literacy to discover new ways to learn makes the learner feel more secure, and allows the beginner reader to draw on "valuable stores of prior knowledge that will support their reading of new texts" (DeFord *et al.*, 1991:63; 221). It is not only various types of "static"<sup>2</sup> knowledge, for example, emotional knowledge, visual knowledge and an ability to play with words, that support the learner in literacy learning, but also "dynamic" knowledge, for example the left-to-right movement in reading and writing (Clay, 1991:62).

It is therefore important for learners to have confidence in their own reading-and-writing ability in order to accumulate new literacy knowledge. From this, it is apparent that the emotional dimension plays an important role in learning. Coleman (1995), O'Neil (1996) and Dodge (2009) agree that Emotional Intelligence (EI) is more important than Intelligence Quotient (IQ), yet this aspect of learning is largely ignored by policy makers, who strongly advocate accountability and test scores as mechanisms for improving literacy levels. To help children become competent, self-reliant learners who engage in reading and writing, Vygotsky takes an alternative view. He describes a useful feature, namely the "Zone of

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<sup>2</sup> Static here refers more to the body of the learner, not the knowledge, since knowledge is constantly developing and increasing, thus dynamic in its essence.

Development” which is categorised into two parts, namely the Zone of Actual Development (ZAD) and the Zone of Proximal Development (ZPD). The ZAD resembles the learner’s current level of competence and provides knowledge of what they can do independently, acting as supportive information for the planning of a possible individualised or group-specific literacy lesson. The ZPD is part of the learning-teaching process and helps teachers to observe learners (DeFord *et al.*, 1991:98). Dorn *et al.* (1998:4) describe the ZPD as “the distance between the actual level of development and the potential level of development”. This is the zone within which the learning process should be scaffolded until learners can function independently. Each learner’s ZPD was therefore an important element for me to consider in planning the individual intervention lessons to assist each learner towards more literacy independence. In addition, it informed my lesson plans for each learner in order to use their existing knowledge as a base to accumulate new knowledge.

### **2.3.2 Making the connection to new texts**

The introduction of new texts to a learner by a teacher constitutes a valuable literacy learning experience. Learning depends on the integration of brain structures, since the various points of integration open up possibilities regarding which links can be made between existing and new knowledge (Lyons, 2003:8). One of the ways to make connections between new and the existing knowledge is by repetitive learning (e.g. repetitive exposures to the same books) and creating links between books and experiences (DeFord *et al.*, 1991:83; 85; Paivio, 2008: 101).

In contrast to this, the behaviouristic view typically promotes the extraction of sentences from one of the books in a reading series, and the introduction of these sentences, in isolation, to the learners (Flanagan, 1995:14; Weaver, 1994:90). These isolated sentences are then read repeatedly. The difference between this type of repetitive learning and the type where whole text exposures are repeated lies within the model of learning. Repetitive learning of sentences in isolation constitutes the Transmission Model of Learning and only requires a learner to focus on isolated knowledge devoid of context to assist the linking process in his brain (Ekwall & Shanker, 1993:1; Weaver, 1994). This type of Transmission Model requires learners to read decontextualised sentences with no structural support to unlock the meaning of the text as a whole. In contrast, the repetitive holistic exposures to texts represent the Transactional Model of Learning, which emphasises practicing behaviours on easier texts in order to apply behaviours, such as “prediction”, to more difficult texts (Weaver, 1994). The Transactional Model of Learning is consistent with the psycholinguistic view, which opposes the behaviouristic view. This psycholinguistic view – which plays a part in informing my research – involves repetition in a different way, by using the redundancy

principle in language e.g. children read whole books or a wide variety of books with recurring vocabulary, which assists the learners to “make sense of language, and learn how to use all the cues on the page” (Flanagan, 1995:17). More importantly, reading whole stories and writing authentic messages, develops children’s “sense of self” as readers and writers (Hornsby, 2000). Indeed, Dahl and Freppon (1998:272) make a strong case against phonics-driven programmes on grounds that many children do not get personally involved in reading and writing, and consequently disengage from the literacy process, which has serious consequences for their future. Learners should rather have the opportunity to constantly engage in literacy activities and to experience success therein, which will assist future learning in a wide spectrum of subjects.

### **2.3.2.1 Constant engagement in literacy learning for brain growth**

“The more work the brain does, the more it becomes capable of doing” (Lyons, 2003:14).

Lyons (2003) found that when neurons are stimulated, synapses are strengthened.

Synapses are the points where messages are sent from one dendrite of a neuron to the next dendrite of another neuron (See Addendum C1). These message-giving dendrites develop new dendrites when stimulated. However, when the neurons do not grow, synapses are weakened and the dendrites fail to grow; thus it is apparent that the brain grows through making connections.

The approach of a set curriculum with very specific learning outcomes, planned for each day, where one aspect has to be introduced to understand the next, is clearly not supportive of stimulating the growth of some learners’ brains in terms of literacy. Such a set curriculum determines that learners all start at the same point, expects standard growth in their literacy knowledge, and implies that learners make the same connections while working with texts. However, learners each take their own routes through learning, even if they reach the same point by the end of working through a text (Clay, 1991:16). Consequently, for a supportive shift to take place in learning, teachers need to realise the importance of cognitive functioning, and incorporate this into their ways of thinking about and preparing for literacy guidance. Clay (2002:17) stresses how learners’ lack of engagement in literate activities results in learners who do not create linked pathways in the brain. On the other hand, learners who do engage in literacy activities, experience success and develop their own system of problem-solving, become successful independent readers and writers.

### **2.3.2.2 Experiencing success with the old, to transfer and integrate with the new**

According to Dorn and Soffos (2001:9), all new learning is grounded in existing knowledge. This knowledge is used to regulate a learner’s activities and organise them into a “well orchestrated network of related experiences”. This network of experiences allows quicker

access to new knowledge because of its interrelatedness and malleability. (Lyons, 2003:183). Once a learner becomes aware and applies his interrelated knowledge to new texts, he will be able to search for links, and relate knowledge of the old and the new in a flexible manner (Clay, 2002:33).

Based on the above-mentioned arguments, it stands to reason that instruction based on isolated bits of information does not allow learners to build the integrated brain structures and neural plasticity needed to learn. On the other hand, the use of problem-solving in literacy activities forces each learner to think and rethink possible routes to find solutions. Problem-solving therefore supports the concept of integrated brain structures and the need for neural plasticity in order to develop the necessary brain structures for literacy learning. The use of problem-solving is an integral part of Guided Reading and will therefore be discussed as a part of Guided Reading lessons (See 2.5.2). With regard to the current section, there are some practical examples of the integration of existing and new knowledge to consider.

### **2.3.2.3 Practical examples for learners to make connections**

In order for learners to make valuable brain connections, their known context should be used to introduce new work or a new activity (Clay, 1993:8), such as drawing on connections from past experiences, or teachers including texts that learners have encountered before (DeFord *et al.*, 1991:99, 108; Fountas & Pinnell, 2006:137). On a word level, known words can be used to decode new words, or connections can be made between the classroom learners' names and other words. For example, the name *Shane* on a class list can assist learners to read *shake* or *shine* in a text because of the similarities to *Shane's* name (Fountas & Pinnell, 2006:12, 164). On an even smaller scale, known sounds can be connected from the alphabet chart to other words that start with the same letter (Calkins, Hartman & White, 2005:93). This is done in some South African schools, but the starting point will not always be from a known word or structure. In the majority of such cases, teachers introduce new knowledge without consulting a learner's knowledge to use that existing knowledge as the platform to learn from. Instead, learners should be equipped with ways to unlock new knowledge in strategic ways in order to become more independent, which is the ultimate goal of any teacher in a literacy classroom.

### **2.3.2.4 The learner-teacher roles in the act of becoming more independent**

Becoming independent readers and writers entails the following process: as a learner becomes more capable of performing a complex system of strategies, the teacher begins to reduce assistance. The teacher still shares the cognitive work with the learner, but the learner is the one who takes the initiative while the teacher guides the activity. After this

point, the teacher allows the learner to take over the activity as soon as he is able, and the teacher's role is decreased to one of a supportive audience. In this process, a learner gathers literacy knowledge at his or her own rate and becomes more independent (Palincsar & Brown, 1984:123). Mooney (1995) describes the shift from working dependently to working independently as the gradual release of responsibility model.

In the process described above, the brain is activated as a pattern seeker and synthesiser. The way of categorising, organising and synthesising information is coded into the learner's memory and retrieved when needed to work independently (Lyons, 2003:22). A prerequisite to fostering independent learners is the creation of an enriched environment where positive social interaction takes place. Such positive influences can serve as motivation amongst readers and writers, and create a feeling of being part of the literacy community, resulting in constant engagement with reading and writing (Lyons, 2003:23).

A teacher's knowledge of cognitive functioning and the individuality of learning of each learner's neural network is key to plan an individualised contingency intervention. This knowledge assists the teacher to plan for meaningful and applicable activities. Another essential that teachers can benefit from, is knowledge of the reciprocity of reading and writing. This reciprocity can lead to integrated planning for reading and writing, which saves planning time and fosters a learner's understanding of how his reading can assist his writing and vice versa.

## **2.4 THINKING ABOUT THE RECIPROCITY AND INTEGRATION OF READING AND WRITING**

"Learners who fail to read also struggle with writing stories" (Clay, 1993:10). This statement says something about the interactivity and interdependency between reading and writing. Reading and writing both contribute to learning about print and gaining control over literacy concepts (Clay, 1991:109; Clay, 1993:11). Learners who write daily attend to letter detail and order, sound and letter sequence and segmentation within print, take spatial concepts into consideration and link oral and written language to one another until the words they struggle with at first become familiar (Clay, 1993:11, Clay, 1991:109). Writing also gives learners a different perspective on the reading process, seeing that they activate structural and meaning cues as they construct their messages (DeFord *et al.*, 1991:87, 88, 105; Dorn & Soffos, 2001:1, 4). Therefore, in the act of writing, the learner not only keeps in mind the message he wants to write, but also develops a deep understanding of letters, letter sequences and words.

In support of the WLA and socio-cognitive approach, Buckenmeyer (2005:25) writes that kindergarten learners who were taught reading and writing as an integrated process from the beginning, developed better as readers and writers than learners taught on a traditional phonics-based and isolated-skills approach. This is the crux of my research intervention, since the learners in my study do not receive integrated lessons, but participate in phonics-based and isolated-skills lessons. However, the integrated approach to teaching reading and writing benefits not only the learners, but the teachers too. An integrated system of teaching reading and writing saves time in the planning as well as the presentation stages of literacy lessons (Buckenmeyer, 2005:33).

Shanahan (1988) suggests that the concept of reciprocity should be taught with the following principles incorporated into lesson frameworks: Learners have to read and write every day and they should start at an early age because they CAN. Furthermore, the initial transfer between reading and writing is not always automatic; it should be made explicit by the teacher to the learner. In addition, content and process should both be stressed while the writer thinks of the reader's needs. Lastly, the activities of both reading and writing should take place within a meaningful context since both are a form of communication. Learners can help shape the learning experience by contributing their knowledge to a class activity (Dorn, French & Jones, 1998:58). By making activities fun to participate in, a teacher can foster learners' desire to start writing and reading at the same time (Clay, 1991:96; Margolis & McCabe, 2006:445). As a result, the learning experience that cultivates the concept of reciprocity can also foster a learner's ability to read and write with comprehension.

It is evident that comprehension serves as basis to teach reading and writing. However, in my research school, comprehension was taught in isolation and not until the third term (See 4.3.2, Figure 4.2). This contrasts with what the research-base on comprehension instruction recommends, such as the learner's deeper understanding of a text, his attention to language, the strategies he applies and the rich discussion which should be included in reading and writing activities in order to have authentic purposes linked to every literacy activity (Nathanson, 2008:17; Clay, 1993:7; 2002). Yet the learners in my research were not used to this research-based approach, which in turn demanded my investigation into how comprehension can be supported by my understanding of the development of each learner's background knowledge and then linking this knowledge to comprehension-fostering strategies.

## 2.5 COMPREHENSION-FOSTERING AS AN APPROACH

Fountas and Pinnell (1996:156) say that “[r]eading is the construction of meaning. Comprehension is not a product of reading; it is the process”. Learners make use of cues as they read for comprehension, search for meaning, and sustain fluency and phrasing. These strategic behaviours are influenced by knowledge of the domain, prior achievement, motivation and cognitive individual differences (Dermitzaki, Andreou & Paraskeva, 2008:472). This means that there is interactivity between prior knowledge and the use of strategies while reading and writing.

The afore-mentioned interactivity results in a cycle or process that a reader applies while reading a text. The reader’s comprehension process involves solving words, monitoring his understanding as he reads, searching for visual information, integrating background knowledge, summarizing, sustaining fluency, predicting, making personal connections and inferring (Fountas & Pinnell, 2007:224 – 226). This meaning-making process provides the confirmation that the story makes sense and that the reader can proceed coherently (Dorn *et al.*, 1998:14). Likewise, a writer puts his written piece through a process of producing, organising, monitoring and revising his written piece with the goal of communicating with a particular audience (Dorn & Soffos, 2001:3). Thus it can be said that comprehending is a “fluid process” of predicting, monitoring and re-predicting in a continuous cycle (Block & Duffy, 2008:29). This entire process of comprehension should be modelled or guided by the teacher and taught as early as possible. Also, the same continuous cycle of predicting, monitoring and re-predicting is taught on each grade level, it is only the complexity of the texts that increases.

In the majority of traditional South African schools where item-based knowledge is taught, learners who struggle with reading and writing find the comprehension process difficult (Ekwall & Shanker, 1993:113; Fleisch, 2008). The separate items are “isolated” in that learners are not provided with links to prior knowledge and do not relate to the comprehension of a whole text. In contrast to the practice of item-based teaching, it is important for learners rather to activate their cueing systems through correct reading and writing behaviours and strategy use than to complete question-answer worksheets as the main source of comprehension-learning (Olin, Saka, Crowe, Forman, & Hoagwood, 2009.)

Fisher (2008:19) recommends a shared responsibility between teacher and learner to use problem-solving to bridge the gap between the new and the known. Adding to this, the act of problem-solving requires that the learner has a collection of strategies in order to make meaning of the text.

### **2.5.1 Problem-solving as a way to comprehend texts**

Learners “operate on print as Piaget’s children [the ‘children’ refer to the participants in Piaget’s studies] operate on problems, searching for relationships which order the complexity of print and therefore simplify it” (Clay, 1993:39, 2002:33). Learners plan or problem-solve how to link knowledge together, so when prior knowledge is activated, it goes through a linked process of decisions on how to recall information to apply it to the knowledge how to read or write (Clay, 1991:100). This process assists learners when a problem arises in deciding how to gain meaning from new texts, and leads them to engage in problem-solving by applying strategies for reading and writing effectively (Clay, 2002:33). For this to happen, many opportunities should be created to practise problem-solving on new texts. A way to create problem-solving activities is by the teacher’s application of constructivist principles in her or his teaching. The concept of constructivism underlies a theory of constructing new knowledge from existing knowledge (Clay, 1993:43). Learners use their prior network of knowledge and experience to construct their own new knowledge (Weaver, 1994:87). This is made practically possible through the reciprocity of reading and writing (Clay, 1993:44; See 2.4). Once learners realise how they are working as they read texts, they construct knowledge that they can use for writing texts and *vice versa*.

Constructivism is also seen as the construction of meaning by invention, self-organisation and engagement in conversation (Lyons, 2003:184), which lead to reflection (See 2.5.4). In studying the process of how children construct their own oral competencies from not being able to talk as an infant into an emerging language, and how they construct meaning during this process, it becomes obvious that learners can build their own knowledge (Clay, 1991:61). Similarly, learners invent their own system of self-improved reading and writing by means of engagement in literacy activities (DeFord *et al.*, 1991:97, Fountas & Pinnell, 2006:43). Learners teach themselves from their own efforts while they process literacy information. As they teach themselves from their own efforts, they become independent readers and writers, and maintain this growth in literacy throughout their lives (DeFord *et al.*, 1991:58).

### **2.5.2 Strategies used by readers and writers**

From the discussion thus far, it is evident that instruction in comprehension should involve the use of strategies to solve and get a message from texts in the act of reading (Clay, 2002:34; Block & Duffy, 2008:20). Unfortunately, this does not happen in the majority of South Africa’s Grade one and learning support classes. Rather, the standard approach to comprehension is an isolated action where a learner answers questions after he has read a decontextualised passage generally taken from a whole text (Bloch, 2006; Flanagan,



1995:19; Nathanson, 2008:105). This signals a gap in pre-service teacher education concerning instruction in comprehension and strategy-use. My study of strategies that good readers use has enabled me to help struggling learners to achieve these strategies. It is also important for class teachers and learning support teachers to become aware of these strategies in order to encourage their learners to read with comprehension (Hornsby, 2000:6). Dorn *et al.* (1998) define “strategies” as the cognitive actions observed while a learner is engaged in meaning-making and problem-solving as he reads (Dorn *et al.*, 1998:26; Yang, 2006:336). In her framework of *Systems of Strategies for Comprehending Texts*, Pinnell (2001:5) identifies two groups of strategies: strategies for sustaining reading and strategies for expanding meaning. I will draw from her framework to discuss the various strategies.

### **2.5.2.1 Strategies for sustaining reading**

To sustain the process of reading, several different kinds of information are orchestrated while a reader’s eyes move across print (Pinnell, 2001:6). The systems of strategies that sustain the reading comprise “various sources of information, including meaning, language knowledge, and the visual information in print”(Pinnell, 2001:5). These sources of information are applied through six main strategies, namely solving words, monitoring and correcting, gathering, predicting, maintaining fluency and adjusting.

“Solving words” depends on the malleability of a reader’s brain structures in order to be a flexible reader. A learner who reads and writes in a flexible manner can solve a text in multiple ways. Accordingly, a flexible reader will, for example use the plurality of a text as assistance to cross-check for consistency or inconsistency. For example *three dogs* can be checked if the reader takes into account that there is more than one dog, thus the plural, “dogs”, will follow (Fountas & Pinnell, 1996:153). In this example the three cues that the reader would have had at his disposal were the word *three*, an illustration of three dogs, and the plural marker –s. Other ways to solve words include: re-read up to the problem word and pronounce the first letter, link it to known words, observe a part of the word that “looks like” a part in another word, and do cumulative letter-by-letter analysis of the word (Fountas & Pinnell, 1996:156). An important point is that phonics plays only a small part of word-solving within continuous texts (Fountas & Pinnell, 2007:232). Instruction in phonics skills can be isolated, but within the context of a continuous text where the learner provides feedback for checking and confirming what he reads, not for merely reading “correctly” (Dorn *et al.*, 1998:88, 89, Ellery, 2010:434). Therefore I do not refute the use of phonics in literacy lessons, though I do not agree with the use of phonics-teaching and phonics-focused lessons as isolated from a context.

"Monitoring and correcting" occur when a reader's prediction of meaning, syntax and use of visual information clusters do not meet up, and the reader realises he has to cross-check with other meaning-making systems to correct his error (Fountas & Pinnell, 1996:151). These self-correcting and -monitoring learners are independent readers who exhibit signs of inner control and development through their habituated monitoring, searching, discovering, checking, repeating and correcting behaviours (Clay, 2002:22; 1991:252). In order to apply self-correction, a learner applies multipurpose behaviours or strategies and makes use of mental operations to solve text slightly more difficult than that of his or her current literacy competence (Cazden & Clay, 1992:116). Through this process of self-monitoring and problem-solving, a learner will realise that something from the text might be missing from his understanding of it, which motivates re-reading of the passage (Yang, 2006:313). While re-reading the passage, a more deliberate and reflective manner of reading assists the learner to obtain the meaning of the passage (Dermatzaki *et al.*, 2008:476).

"Gathering" refers to the reader's grasp of "the basic information provided by the text" (Pinnell, 2001:8). This may seem an easy task, but given all the various sources of information, the task can become quite sophisticated. What is gathered from the text enables the reader to apply the "prediction" strategy. Learners can predict or anticipate on different levels, for instance predicting a series of events in a story, anticipating upcoming words and anticipating visual letter-to-sound or sound-to-letter associations to cross-check with the meaning (Fountas & Pinnell, 2006:2; Clay, 1991:32). The rate of gathering and interpretation of visual information impacts the "maintained fluency" of reading which implies that problems have to be solved as a reader reads. (Fountas & Pinnell, 1996:151). In addition, good readers "adjust" their approach to the reading task according to their knowledge of various texts, for example, different genres such as narrative or informational texts (Pinnell, 2001:9). However, there is more information in a text than what is written in the book, that is the meaning that stretches beyond a text. A learner discovers these meanings with the help of strategies that assist the expansion of meaning, as discussed in the next section.

### **2.5.2.2 Strategies for expanding meaning**

Strategies are applied by a reader to help him or her go beyond the literal meaning of a text to construct "unique interpretations" by bringing his or her own experience to the text (Pinnell, 2001:5, 10). Learners are able to do this by means of six strategies, namely connecting, inferring, summarising, synthesising, analysing and critiquing.

Before, during and after the action of reading and writing, readers and writers make connections to their funds of knowledge, derived from personal experiences, world

knowledge and text knowledge (Pinnell, 2001:10). They also think beyond a text by “reading between the lines” (Pinnell, 2001:11; Fountas & Pinnell, 2007:226). Through the use of this background knowledge, readers can reflect on the text, draw conclusions from it, and think about what the writer really implies. As readers move through a text they encapsulate important information. They do not merely put together main ideas after reading the text; they rather make meaning of text in progress (Adams, 1990; Pinnell, 2001:11). This coincides with Block and Duffy’s (2008) research about comprehension instruction and how their research evidence can be applied in classroom practice. They found that struggling readers benefit from the explicit explanation of cognitive processing or strategies used as they read, in order to apply them to future literacy activities. Block and Duffy (2008) stress the vital importance of strategies for intervention with struggling learners.

Accordingly, insights into comprehension strategies were also an important consideration in my research, since the majority of traditional South African Grade one teachers plan on “teaching” comprehension only by the third school term (See Addendum A4). This implies that learners do not read with comprehension from the beginning of the year, and are also made to believe that comprehension is defined by tasks that require answers to fragmented questions after reading an abstract or paragraph from a whole text. Therefore, these learners are not familiar with meaning-making strategies and how to apply such strategies as they are reading a text. In fact, the meaning-making process is central to comprehension and ultimately knowledge gain, since new concepts or ideas can be connected to other stories and the to reader’s context or existing knowledge, which results in the expansion or adjustment of the reader’s current knowledge (Fountas & Pinnell, 2006:2, Pinnell, 2001:12).

Another aspect that contributes to the essential “meaning making” process is the analysis of a text (Clay, 2002:17; Martin & Hydén, 2006). A good reader will notice how a text was put together by the author, for example how a series of events could affect the outcome of a story (Pinnell, 2001:13). Finally, the learners’ opinions on texts should be asked more frequently, to help them think about the text more critically and, in the case of beginner readers, to decide whether they like or dislike the text and why (Fountas & Pinnell, 2007:226; Pinnell, 2001:13). This type of reflection on texts teaches learners to analyse critically what they have read and to become more aware of how they were able to extract meaning from the texts.

### **2.5.3 Reflection on use of strategies in reading and writing**

It is not only the learners who need to reflect on their work and thoughts concerning literacy, but also teachers need to become reflective and responsive facilitators of reading and writing (Clay, 1993:4). Lyons (2003:51) refers to the Vygotskian concept of “social speech” to

communicate and understand ideas, to think about your own thinking by means of either "specific language" or "conversations". "Specific language" is used to adjust the conversation between a learner and teacher to increase the challenge of an activity, whereas "conversations" provide a shared opportunity between the mind of the teacher and the mind of the learner in order to "create a shared understanding and successfully complete the task at hand" (Lyons, 2003:51). Through these two types of reflective actions, learners realise that you can "know about how we [the teacher and the learner] know" and transform this type of knowledge into a controllable mental process (Cazden & Clay, 1992:132).

### **2.5.3.1 Reflective learners**

Learners need to become aware of the behaviours and strategies they apply during reading and writing. This "awareness" can be established through reflection on whole texts. Once a learner becomes aware of his strategic actions, he can apply this knowledge to new texts, as discussed in the paragraphs below.

Particular reading strategies and behaviours can be recognised and made explicit to a learner through observation and conversation (Yang 2006:336). Thus talking to a learner about what he is doing while he is reading or writing will also make him aware of his actions. This will mostly occur during re-reading, or a point in the story where the learner solved the text with successful strategy use. A learner can now use the awareness of his strategic actions to check his own behaviour, to recall previous learned knowledge through feedback loops, and persevere until he has solved the literacy problem he encountered (Lyons, 2003:33). In such an instance, reflection will help the learner discover the collection of strategies that he can use to be a strategic reader (DeFord *et al.*, 1991:114).

DeFord *et al.* (1991:115) recommend that learners reflect on their behaviours during the process of reading a whole text, and not on isolated bits detached from a context. However, my observations and experiences showed that the majority of the learners in my study were accustomed to the latter. Therefore explicit reflection on whole texts was important for the learners to understand how they could solve text successfully. Lyons (2003:185) describes reflection on reading and writing as thinking about how information (knowledge) is linked, in order to organise and retrieve it. For each learner this entails thinking about how their reading and writing knowledge is individually linked, and how they can apply what they know about literacy concepts in various ways. In basic terms, it can be said that their knowledge becomes generalised to a variety of literacy encounters or contexts.

### **2.5.3.2 Reflective teachers**

There are two reasons why a teacher should reflect on her teaching before, during and after lessons; namely (1) to inform her decision-making during individual or classroom literacy instruction, and (2) to help her gain understanding of the learner(s).

Teachers should reflect with understanding on the decisions they make during teaching situations. This is not only for their knowledge of how they act and react with learners, but also for the development of a “repertoire of actions and responses” which can be related to learners’ needs at a specific point in time (DeFord *et al.*, 1991:181). In addition, teachers can identify points of discussion for further development of learners within their ZPD through continuous reflection (Fountas & Pinnell, 2006:187). For example, the teacher can ask the learners questions about their literacy accomplishments to see which skills have been acquired, or how to proceed from there (Dorn *et al.*, 1998:22). In this way, the teacher’s understanding and awareness of the learners’ processing behaviours can grow (Cazden & Clay, 1992:132). Further, Cassady, Smith and Putman (2008:527) identify two types of awareness – epilinguistic awareness and metalinguistic awareness. “Epilinguistic awareness” refers to the strategies that individuals can use, but that they are unable to articulate or identify. “Metalinguistic awareness” is the knowing about what you know.

It is not possible to identify all strategies that learners use while reading, since they might have an epilinguistic awareness about those particular reading and writing skills. However, some of the learners’ strategies can still be observed by the teacher. It is thus apparent that a teacher might be able to observe strategy use by a learner, although the learner might not be aware of his own strategy-use (Yang, 2006:336). It is important in such situations that the strategy be made explicit to the learner for his or her future use. A matter of importance is how and when the teacher is able to identify the strategies as the learner applies them. One solution is to use systematic observation in the Individualised Education Programmes (IEPs) or Interventions (O’Connor and Yasik, 2007).

From the literature that informed my research intervention, I have taken into account the important role that a learner’s prior knowledge plays in informing further learning (see 2.3.1). I also considered how learners use this prior knowledge to make neurological links to new information (see 2.2.3.2). I described the role of reciprocity between reading and writing and the strategies that learners use to comprehend a text (see 2.2.4 and 2.2.5). Based on my review, I endorse a complex theory of literacy learning, one that states that, on the foundation of early reading, writing and emotional experiences, young learners begin to construct cognitive networks that increase in sophistication, and that help them to process text in a meaningful way.

Finally, to guide a learner in his knowledge of comprehending a text, a supportive and comprehension-fostering classroom environment is necessary. Therefore, in the next section, I consider a research-based classroom and how such a classroom environment can accommodate a literacy intervention for learners who need it.

## **2.6 CONSIDERING THE RESEARCH-BASED CLASSROOM AND INTERVENTION**

As mentioned in the introduction of my literature review, research-informed classrooms can assist interventions, and intervention programmes can inform classroom teaching. An important element in classroom instruction is Guided Reading. Various aspects of Guided Reading informed my research intervention, namely, literacy taught with comprehension and a focus on teachers, texts and classroom organisation (Dorn *et al.*, 1998; Hornsby, 2000). Therefore the Guided Reading principles also informed my intervention programme.

### **2.6.1 Guided reading as an organisational tool in the classroom and in the intervention programme**

Hornsby describes guided reading as follows (Hornsby, 2000:26):

*Guided reading provides an opportunity for small groups of children within the same developmental reading stage to apply strategies they already know to texts they do not know. The texts are carefully matched to the children so that they can apply their strategies to overcome the challenges in the text and read it independently, with success. Guided reading allows children to show how they manage a text on the first reading.*

Guided reading gives each individual in a literacy classroom the opportunity to learn from and share with their peers the knowledge they currently possess, as well as their emerging knowledge. The implementation of guided reading requires strategic grouping of learners according to their reading and writing behaviours. However, Kruizinga's (2010) study reveals that the six South African schools which participated in her research did not implement the principles of Guided Reading as research stipulates. Because of a lack of knowledge concerning the research base of Guided Reading, strategic grouping of learners according to their literacy behaviours did not take place. A possible contribution to this lack of strategic grouping might be the number of children that teachers are faced with in one classroom.

If large learner numbers and incorrect Guided Reading grouping characterise some South African classrooms, then it can be concluded that optimum instruction does not take place (Clay, 1993:3). Several South African classes have up to 45 or more learners, which makes grouping according to literacy levels a very difficult task. Strategic grouping should give learners a space of optimum learning. Unfortunately these large groups can hinder the

teacher from paying close attention to how learners ought to be grouped according to their literacy behaviours (Fountas & Pinnell, 1996:99).

Guided Reading also requires continuous observation and assessment of learners, in order to be aware of their reading and writing development. However, this is another problem in the South African context since learners' reading and writing is not observed on a regular basis (Nathanson, 2008:143). The implication is that texts cannot be matched to groups or learners for effective teaching, since the teacher is unaware of her learners' current reading and writing competencies (Fountas & Pinnell, 2006). Instead, learners are put into one of three ability groups, leaving quite a variation of levels between learners in any one such group. Moreover, because grouping is not dynamic, learners remain in one group for quite a while before and if they are moved to another ability group, as seen in local studies (Kruizinga, 2010). This situation is not limited to South African classrooms. Clay's study of the quality of teachers' judgements in promoting children to new book levels indicated that they often moved children to new books too quickly, and they did not prepare children adequately for new content (Clay, 1991:214). Consequently, many children developed insecure reading strategies.

A class division of only three groups, as mentioned above, could result in a non-strategic grouping of learners' according to literacy levels on a continuum of low to high proficiency within the classroom as well as within a group. In these groups the faster learners acquire good literacy behaviours at a faster pace than the slower learners, which increases the gap between their reading levels and their slow progressing peers' reading levels (Clay, 1993:5). Rather, the class and groups should be organised in such a way that more time can be allocated to working with the slower learners, who are left behind and struggle to catch up. To be able to catch up with the average-progress learners, the slower learners need more instruction time and an accelerated programme which makes them gain at a pace faster than that of the average-progress learners (Lai, McNaughton, Amituanai-Toloa, Turner & Hsiao, 2009:31). This raises the question of how teaching in such an accelerative programme should inform my research-based lessons.

### **2.6.2 Instructional approach in the classroom**

Instruction in the South African context tends to reflect a teaching approach that sees learners as empty vessels in need of knowledge that should be "poured" into them (Weaver, 1994: 86). However, learners ought to be guided into reading and writing in a more natural way. Some learners will struggle to keep up with the average learners in a classroom (Clay, 2002:29). Unfortunately, in such cases, South African teachers tend to work from a discrepancy model, where the reader is seen as the centre of the problem (Naicker, 1999:

31; McEneaney, Lose & Shwartz, 2006:122). The application of the discrepancy model involves delayed intervention, and the hope that the learner may "catch up" somehow. Yet, in reality this results in an increased gap between the at-risk learners and their normal-progressing peers.

When intervention can no longer be delayed and extra assistance is given to a learner, many teachers focus on what a learner cannot do, as dictated by the discrepancy model, instead of focusing on what a learner **can do** at the start of instruction. If instruction meets the learner at his level of competency, at the level of what he can do, it will be possible for that learner to exit a learning support programme with self-extending strategies (Clay, 1993). A learner should only need extra support as a "safety net" after Grade three, since this is the age and grade where a learner should use self-extending and self-monitoring behaviours during reading and writing (Fountas & Pinnell, 1996: 190). The recommended solution for learners in the intervention classroom is to have an individualised contingent programme planned for them day by day, but this does not happen in the majority of South African schools because it seems an expensive option, classes might be too big, and well-trained learning support teachers are few. However, a successful, research-based contingent literacy programme is important to create an opportunity for accelerated learning in order to elevate individual struggling learners to the standard of the average-progress learners.

### **2.6.3 Individuality of intervention programmes**

Individualised lessons can simultaneously provide a challenge to a struggling learner and bring him back to the level of the classroom's average learner in a short amount of time (Clay, 1993:1; Lyons, 2003:2). For these reasons individualised lessons have the best chance of success, and allow each learner to use his "unique combination of strategies" in reading and writing lessons (Yang, 2006:315). In order to accommodate the individuality of a learner's literacy needs through individualised intervention lessons, teachers need to determine what learners already know, to establish at what level intervention must begin, since "[e]very child is ready to learn more than he or she already knows" (Clay, 2002:9).

The level of intervention needed will determine the level and type of book a teacher identifies for a learner. Through careful and systematic observation, a teacher will be able to determine when a learner can move to a new book level. However, in some cases learners complete one book on one level and then advance to the next book level as prescribed by the book-series used. Some teachers simply advance a learner to the next level without careful consideration of whether the child is really ready for the challenges in new texts (Clay, 1991:216). On the other hand, slow learners are sometimes handed one book and they focus on that text over stretches of time, e.g. a whole week. Any group or any learner,



whether on an individualised programme or in the classroom, should constantly read a varied collection of books, to foster flexibility and deepen understanding.

In addition, guided reading lessons should provide gradients of text for learners who progress in order to advance to increasingly challenging texts. This builds their experience across texts. Alternatively, if the child is not ready for more difficult texts, he should be able to practise and consolidate learning on a variety of new texts of similar difficulty. This means that each class should have a collection of different titles at the same level, so that learners can practise reading strategies without memorising a text. Once a learner has memorised a text, the prediction, monitoring and self-correction cycle, which is essential for comprehension, breaks down (Fountas & Pinnell, 1996:99; Block & Duffy, 2008:22).

A research-based informed classroom structure will be incomplete without the teacher's proper knowledge of her learners' literacy capabilities. To provide a literacy teacher with information on her learners' literacy capabilities, assessments that demonstrate the learners' information-seeking skills in printed texts and how the learners work with this information, are essential (Clay, 2002:13). Clay (2002) designed such assessments and described them in *An Observation Survey of Early Achievement*.

#### **2.6.4 The need for observation of learners**

Systematic observation, such as tasks in *An Observation Survey of Early Literacy Achievement* (Clay, 2002) assists a teacher with vital information on what strategies readers use as they are reading (Clay, 1991:5; Clay, 2002:13). Each learner will have his own dominant set of strategies based on what elements of interaction the learner focuses on during lessons, for example verbal, visual or interpersonal interaction (Ellery, 2010:435). Continuous assessment will reveal which strategies learners use. It will also reveal what the learner does not control, almost controls, or can control (Fountas & Pinnell, 2006:3).

Research thus shows that continuous observation and assessment keep the teacher informed on her learners' literacy knowledge. South African teachers, however, are expected to complete their sequence of instruction and then assess the learners. The assessment at the completion of instruction actually measures the achievement levels of the education system and what led to these achievement levels, rather than assessment of the learner (Clay, 2002:5). Also at the end of a learning cycle, it is too late to intervene and change the outcome of such a learner's literacy performance. To improve this type of assessment, Fountas and Pinnell (1996:74) argue for continuous observations to be an integral part of teaching and time management. Use of a systematic observation tool allows the teacher to refer back to the behaviours of the learners before and after instruction, and avoids reliance

on the teacher's memory. Fountas and Pinnell (1996) argue for the inclusion of aspects such as the multidimensionality of appropriate observations and the use of observation results across the literacy curriculum, e.g. reading observations that support writing lessons. Feedback from observations can be used to reflect on the improvement of future instruction. Systematic observations thus serve a greater purpose than assessments indicating the end product of instruction.

During systematic observations, learners who make mistakes should not experience the literacy activities as a daunting encounter for them. Making mistakes should be a point of discovery towards comprehension (Clay, 1993:15). This also reflects what the learner is "on the brink" of understanding, and creates a Zone of Proximal Development (See 2.3.1). Since each learner's ZPD is likely to differ from another learner's ZPD, instruction should occur within each learner's ZPD (Schnotz and Kürschner, 2007). In contrast, the practice of standardised tests where children are quantifiable, learners' abilities are reduced to impersonal numbers. In keeping with Vygotsky's perspective, Dodge (2009:2) argues that standardised testing removes the need to "follow the messy and complicated development change children undergo" or to attend to their creative, artistic and emotional growth. Likewise, Clay (2001:236) disagrees with the theoretical simplification inherent in standardised tests. She argues that the scores provided by standardised tests come "after the fact" i.e. when the learning cycle has been completed. In contrast to this, she argues that a "complex theory in the developmental perspective" holds the most promise for changing the outcome of a learning cycle and preventing failure.

Although the South African context is not completely void of good teaching and assessment practices, there are specific problem areas in the current application of the literacy curriculum to consider in my research. These aspects can influence the outcome of the research, since the learners who participated came from such a curriculum-based South African model of teaching. In light of the afore mentioned, a comparison between the strategies and incoherent approaches in South African classrooms to research-informed approaches is made in the following section.

## **2.7 CONTEMPLATING SEVERAL CURRENT SOUTH AFRICAN TRENDS**

The following discussions deal with what I have observed during my practical teaching periods and how it fits in with the theory and research-base of the whole language- and cognitive-processing advocates. The importance of learners' existing knowledge was my first concern, since activities should be aligned with a learner's capabilities (Schnotz & Kürschner, 2007:490; See 2.3). My second concern was the separation of reading and

writing in the South African context, which contrasts with the reciprocity view of reading and writing (See 2.4). Thirdly, I consider whether comprehension-fostering methods and activities are applied in the South African classroom. Lastly, I describe the word-attack and phonics-based approach which is prevalent in the majority of Foundation Phase South African classrooms and interventions.

### **2.7.1 Ignoring vs. using existing knowledge**

The assumption underlying the South African model is that reading and writing are new skills that need to be taught to learners in Grade one (Nathanson, 2008). Therefore educators base their programmes on an analysis of the nature of skills, without referring to what the learners can already do (DeFord *et al.*, 1991:56). However, lessons based on what learners do not know is in direct opposition to how the brain acquires information (Dorn *et al.*, 1998:24).

In the learning support class, the focus on what learners cannot do becomes even more intense where, as Weaver (1994) and Eldon & James (1993) have shown, lessons are based on errors such as omissions, incorrect phrasing, poor pronunciation, repetitions, inversions, reversal, insertions, substitutions and guessing words. These mistakes should not be the main focus, because this can result in a negative stance towards literacy as well as a negative self-image for the learner. “A transactional view of reading *ability* [recognizing that all learners have knowledge although it might differ from one to the other], provides the best basis for research on systems that support the literacy learning of all students” (McEneaney *et al.*, 2006:125). Therefore a learner’s existing knowledge should be the point of origin to plan for the learning support lesson. From here, teachers and individual learners discover what a learner knows as he reads books, and engages at a level where he experiences success through ongoing observation and reflective discussions between teacher and learner (Clay, 1993:23; Palincsar & Brown, 1984:122).

### **2.7.2 The separation of reading and writing**

In a traditional South African approach, which separates reading and writing, reading takes place in “ability” groups, but writing is presented as a class activity. This separation between reading as ability-orientated but writing as whole class-oriented is problematic because “successful readers and writers show us how they use what they know in reading to help their writing and vice versa, and that therefore both must be part of an early literacy intervention program for second-chance learners” (DeFord *et al.*, 1991:56). Therefore the separation of a learner’s reading ability and writing ability divorces him from his true writing potential and from the reciprocal use between reading and writing. DeFord *et al.* (1991:56)

also describe this as separating reading and writing in theory and practice, disconnecting these two literacy activities while in reality they are intertwined (See 2.4).

### **2.7.3 The use of skills instead of strategies to comprehend reading and writing**

Once again, as happens in the majority of South African classrooms, the argument between teaching skills and teaching for comprehension via the use of strategies arises (Nathanson, 2008; Kruizinga, 2010). “Skills” can be defined as a limited number of repeated actions applied in the same way in every activity, whereas “strategies” are reasoned plans, connected to a network of knowledge, used in a flexible way in any activity (Block & Duffy, 2008:20-21). Strategies are taught in the reading of a text, whereas skills are detached and “drilled” into learners to be used for specific activities. Skills-orientated teaching generates learners who are constantly dependent on their teacher to teach another strategy when they cannot solve a text (DeFord *et al.*, 1991:98, 100). At times skill-drilling leads to a learner memorising a text instead of applying problem-solving through strategy use (Clay, 1993:39; See 2.5.1).

Skills-orientated teaching constitutes the discrepancy model, in which inadequate comprehension is described as the inability to “answer questions about subject matter he has read or cannot retell what he has read” (Eldon & James, 1993:125). Most activities in the discrepancy model require the use of inadequate comprehension to complete the task. For example, “fill in the blank” activities are inadequate comprehension-fostering activities, because they focus a learner’s attention on the correct answer instead of an understanding of the language relationships in whole texts (DeFord *et al.*, 1991:87). Rather, a teacher’s literacy programme should focus on strategies, i.e. re-reading texts to build literacy skills and not tedious, repetitive worksheet drills which are still widely used in South African mainstream and learning support classrooms (Dorn *et al.*, 1998:32; Bloch, 2006).

In contrast to the South African approach, learners should bring their own knowledge of language to structure their process of reading and cultivate a flexible approach to text, while maintaining comprehension incessantly (Fountas & Pinnell, 2006:3; Pinnell, 2001:7).

Therefore I focused on the comprehension-fostering method by incorporating each learner’s prior knowledge and teaching reading and writing strategies in each of the research lessons.

### **2.7.4 Word-attack and the phonics-based approach**

In the South African context we frequently see what Weaver (1994:87) describes as the “transmission model” of learning. In this model, the learners are seen as detached from any previous knowledge base. Therefore, teachers have to provide them with knowledge through

a practice of reading and writing skills in isolation, and unnecessary amounts of worksheets and workbook activities.

The skills taught and practised start at the level of a “Phonics lesson”. In some cases schools even take another step back, and start with pictures and geometric shapes at the beginning of reading instruction, although this teaching method is unhelpful in learning to read and write (Clay, 2002:31). This phonics-based approach might guide the learner to know all the names of letters in the alphabet, but it does not mean that they can read or write continuous texts (Dorn *et al.*, 1998:89, Clay, 1993:10). While theorists agree on the importance of phonics instruction, they do not necessarily agree on what is the best way to teach phonics (Adams, 1990; Weaver, 1994).

From phonics teaching the lessons move towards word-lessons, which consist of learning high-frequency words and words in isolation. Word-lessons consist of what Eldon and James (1993) describe as “consonant-vowel-consonant” (CVC) word lists. Inappropriately, the CVC words taught are not linked to a text. The approach to teaching such words is so focused on phonics that “nonsense words” such as “*loc, pid, de, ra, po*” are used to teach and memorise the alphabet (Eldon & James, 1993:263). These decontextualised, item-based activities do not help learners develop essential comprehension strategies for reading continuous texts, e.g. strategies such as prediction, monitoring and self-correction (Block & Duffy, 2008). In some cases the words from a text used in a classroom serve as items in word-lessons, but the learners do not see the text before they know the words (Clay, 1991:186). Once they start to read the text, they become so focused on recognising each sound and word they know, that they forget about the message in the text (Cazden & Clay, 1992:116; Fountas & Pinnell, 1991:163). Rather, learners should be allowed to test and change their theories of the world when engaging with reading and writing, and not just focus on the completed activity as “correct” (Cazden & Clay, 1992:116). This is where the WLA and cognitive processing differ from the phonics approach as the latter is predominantly used in South Africa.

The WLA allows the reader to take detours in the act of reading when a strategy is needed in order to problem-solve. In contrast to this, the phonics based approach leaves the child with only one skill, namely word-attack by sounding out the letters in a word. It is not wrong to have learners use skills, but the approach is oversimplified and limits the learner to the use of “look and say”, “sight words” and “phonics” to read and understand a text (Flanagan, 1995; Bloch, 2006; Clay, 2002:14). A better strategy for learning sound-letter relationships would be to help the child hear sounds in oral language, and then find ways to record them (Cazden & Clay, 1992:129-130). However, in support of the South African approach,

learners need to be aware of phonics. For this, five- to six-minute mini-lessons in phonics are appropriate, provided they are based on the text from which a learner seeks to make meaning (Dorn *et al.*, 1998:91). This allows the reader or writer to practise their sensitivity to "whole" or authentic language by making a "detour" to smaller parts in texts, rather than noticing phonemes and from there building their knowledge of words (Cassady, Smith & Putman, 2008:510, Clay, 1993:10, Fountas & Pinnell, 1996:163).

The general concern of WLA theorists about phonics and word-attack is adequately captured in the words of Clay (1993:7): "a theory of reading continuous texts cannot arise from a theory of word reading because it involves the integration of many behaviours not stud[ied] in a theory of reading words". An approach which adapts to the level of a reader and writer's use of behaviours can be more successful than set outcomes which are mandatory for every learner to achieve, and which does not take into consideration the fact that individuals work at their own speed.

The disparity between a traditional South African approach and the research-based practice has certain implications for my research intervention as well as general school interventions. I consider these disparities in the following division, in order to inform the development of an intervention strategy which is preventative rather than allowing a learner to fall behind before intervention. In light of a traditional South African context, the need for informed teachers arises – teachers who consider current research trends and are able to find creative ways to incorporate this knowledge into their classroom teaching.

## **2.8 INFORMING TEACHERS**

Teachers are people who apply their practical and theoretical literacy knowledge in the classroom. They therefore need to be informed on both practical and theoretical grounds by means of keeping up to date with new methods of teaching, being informed about various theories, and observing the learners in the literacy environment created in the classroom. Ultimately, a teacher's knowledge of new methods and theories, as well as her personal observations, are the factors that will inform her instruction.

### **2.8.1 Teacher as knowledgeable literacy practitioners**

"[N]o teacher, beginner or experienced, is wholly innocent of theory, of having an underlying philosophy" (Hogan & Smith, 2003:177). Knowledge gained by literacy teachers in the classroom is more complex than facts or instructional routines stipulated in guides (McEeany *et al.*, 2006:125). This does not mean, however, that teachers can ignore current texts on literacy. They should keep up with research, and see to it that they know enough to think

about an appropriate reading programme for their class (Clay, 2002:25). Clay (1993:7) and Dorn *et al.* (1998:11) advise educators to know how readers learn to read, and how writers learn to write, in order to understand learners' processes and then teach for transfer accordingly. With knowledge about readers, texts and the reading process, comes the responsibility of applying it coherently (Fountas & Pinnell, 2006:1).

Teachers should therefore verify their assumptions about learners and appropriate instruction against the learners' behaviours during instruction, in order to interact with each learner accordingly. Observation of learners will sometimes bring a gradual change in a teacher's theories and tasks (Clay, 1991:69; Fountas & Pinnell, 2006:232). Teachers become effective experts at the application of their repertoire of instructions as they observe learners, and customise lessons suitably (Lyons, 2003:153).

### **2.8.2 Teacher as observer**

Observation of readers and writers should not be taken lightly, because the more a teacher observes, the more she improves the ability to observe and respond appropriately to learners (DeFord *et al.*, 1991:101). This will also allow a teacher to oversee the process of emergent literacy to independent literacy, and help her abandon the idea of "readiness", since learners naturally develop an interest in reading and writing, as described by Depree and Iversen (1994:17).

Depree and Iversen (1994) suggest that educators should ask themselves a number of questions concerning a learner's developing knowledge of the characteristics of a language, for example rhyme and alliteration. Teachers should listen to a learner, observe him at work, and look at the work that he does. Such observations shape a lesson and help a learner improve his current activity as well as his future writing or reading (Calkins *et al.*, 2005:4; Clay, 1991:73). Dorn *et al.* describe this as "the complementary process of validation by acknowledgment of the child's epistemology applied to the activity as a bridge to new information" (1998:2). Observations not only inform teachers' teaching; they also assist her in proper moment-to-moment decisions (DeFord *et al.*, 1991:181).

### **2.8.3 Teacher as demonstrator or model**

Learners need powerful demonstrations in effective teaching as a resource to draw from (Fountas & Pinnell, 1996:43, Lyons, 2003:57). A demonstration can show learners how to think about text. Fountas and Pinnell (1996:7) describe a method of instruction that includes thinking about the text:

Select the appropriate text, prepare and present an appropriate introduction to the story using meaning, language, visual, previous knowledge, experience and the skills

of the reader. Let the learners observe and partake behaviours and the use of strategies by leaving questions unanswered for them to problem solve, talk about or even extend the story to other activities through assistance.

To convey the use of a cueing system, the teacher can make use of three types of knowledge in her demonstration. The first is “declarative knowledge” if she makes explicit statements about strategies. The second is “procedural knowledge” which includes comments on guiding cues that point to a strategy to be applied. Thirdly, the teacher can make use of “conditional knowledge” which guides the learners to understand why and when they can use a specific strategy during reading (Dewitz, Jones & Leahy, 2009:104). A flexible application of these three types of knowledge in demonstrations is important to sustain the learner’s problem-solving situation in the text.

#### **2.8.4 Flexible teaching**

“Contingent instruction is difficult. It is a skill that can never be mastered completely, it needs to be constantly developed and refined in the context of working with children” (McEneay *et al.*, 2006:123). For McEneay *et al.*’s statement to become practice, teachers need to be able to adjust to multiple aspects in the classroom, the most important of which is to adjust instruction to suit the learners.

Learners’ brains organise experiences differently, therefore they learn differently, which implicates a need for flexibility in instruction (Lyons, 2003:24). This is quite a daunting task for the teacher, as she has to challenge each learner to prevent his processing systems from shutting down. This “shutting down” happens if no personal or emotional connection is asked of the brain to perform (Block & Parris, 2008:122; Caine, 2008:130; Lyons, 2003:30). To organise individual experiences, teachers should know what the desired end-result of an instruction is, and use various routes and organisational sequences to reach such a desired end-result (Clay, 1993:10). The difficulty of teaching thus lies in the “across-case irregularity” that each child offers (McEneay, 2006:124). However, this must not de-motivate teachers; they must be relentless and stop at nothing to adjust the lesson to a learner’s response, in order to continue the activity on a level that suits the learner (Block & Duffy, 2008:27). This can support learners to work on their self-correction and be open to receive guidance in order to find their own solutions to text-driven problems (DeFord *et al.*, 1991:111, Lyons, 2003:92, Clay, 1991:67).

#### **2.8.5 A change in perspective**

Change is inevitable; new theories are researched and that lead to new insights, which lead to new practices and could ultimately result in transformation at schools. Teachers have to



deal with new approaches and ways of thinking about teaching with every change. Changes leave teachers with four main options to adjust to new educational systems, namely cooperation, retreatism, resistance or incorporation (Osborn, Broadfoot, Abbott, Croll & Pollard, 1992:139, 140). Cooperation produces a teacher who accepts and uses the imposed changes in her theory and practice, whereas retreatism is reluctant submission to the changes. Retreatism takes place without change in professional ideology and creates a resentful, demoralised teacher. A resisting teacher ignores the changes in the hope that their enforcement will not be compulsory. Lastly, the effect of incorporation is a teacher who changes her existing teaching system with an adaptation to the existing methods, rather than application and total change.

Unfortunately, some educators have trouble adjusting to changes, which makes them feel "threatened" or "disrupted" in their own educational capabilities (Churchill, Williamson & Grady, 1997:146). Policy makers should provide teachers with the correct information in a manner that motivates teachers to make the change and that allows time for them to familiarise themselves with the change.

## **2.9 DEVELOPING A PREVENTION STRATEGY**

In earlier years, reading disabilities were seen as problems internal to the reader (See 2.7.3). However, the transactional view has broadened this perspective to include the variable social, cognitive and motivational contexts of learners who struggle with reading and writing (Caine, 2008: 129; McEneay *et al.*, 2006:117; Weaver, 1994:334). This view includes starting intervention at an early age, and preferably working individually with learners who need help. My discussion on developing a prevention based intervention, first takes the social context in which learning occurs into consideration, i.e. during shared reading and writing. In the following two sub-sections I consider early and individualised intervention. I conclude this chapter with a section on the possible stumbling blocks caused by an educational system's approaches to providing intervention.

### **2.9.1 Applying shared reading and writing**

"Learning is a social process", therefore it is very important to manage reading and writing lessons accordingly (Fountas & Pinnell, 1996:43). Lessons should create opportunities for learners to turn their experiences and ideas into good materials for their peers to read (Fountas & Pinnell, 1996:32). In this way the whole class can share their knowledge of writing and give feedback to the writer, thus supporting each other's efforts (Palincsar & Brown, 1984:123). Learners can also learn from each other about various ways to implement strategies when they share oral and written language (DeFord *et al.*, 1991:230).

With the focus on individualised lessons, book-sharing presents itself as an opportunity for the teacher to model the use of strategies for reading and writing, as well as exposure to correct spelling for writing (DeFord *et al.*, 1991:228; Dorn, *et al.*, 1998:34). Such individually planned intervention lessons are vital for some struggling learners as well as learners who respond better in individualised situations. Unless these learners receive the right kind of support they will continue to fall behind with each year of schooling (Clay, 1991).

### **2.9.2 Individualised comprehension-fostering encounters through guided reading**

Contrary to popular opinion, learners respond positively to being taken from the classroom to work individually with a trained teacher on an individualised contingency programme (Clay, 1993:7). This type of intervention has to take place at an early stage when the learner's frustration with activities first becomes apparent (Lyons, 2003:24). The Guided Reading framework described in 2.6.1 can be adapted to an individualised situation and presented as a comprehension-fostering approach.

A great concern in a South African context is the isolated instruction of comprehension (See 4.3.2, Figure 4.2). The isolated classroom instruction is then carried over to isolated intervention practice which ignores the fact that struggling learners already have networks of knowledge. It also denies a learner the opportunity of integrating strategies according to his networks of knowledge. The way in which a learner orchestrates his strengths and weaknesses in a situation creates very different reading behaviours between various learners (O'Connor & Yasik, 2007:137). Each reader combines behaviours in his own way to comprehend a text. The behaviours become an integrated network by the use of cues on easy texts, which leads to a balance of strategies while reading and writing (Fountas & Pinnell, 1996:16). Although the strategies are important for comprehension, it is essential to keep the focus on the larger purpose of texts.

An extreme example where strategies become the main focus is when a learner is expected to make predictions from a text he has already read. The focus is thus turned to prediction as a strategy, but it has no purpose since the learner already knows the text. Alternatively, learners have to apply comprehension strategies to a text so devoid of meaning that there is little to nothing for the learner to comprehend. In order to deal with these problems, teachers should pay greater attention to the context of comprehension instruction. They need to contextualise comprehension instruction in order to build content area knowledge (Nathanson, 2008:149). For this type of contextualisation, teachers can look to book clubs that have long flourished outside schooling. In book clubs readers select a text they would like to read and then meet to discuss their understanding, interpretation and response to the

text. Literacy interaction at each book club meeting can supply learners with the opportunity to engage in age-appropriate and authentic responses to literature as they are practising comprehension strategies in conversation and writing (Sloan, 2002:121, 122; Raphael, Florio-Ruane, George, Smith & Compton-Lilly, 2001:160). In support of authentic literacy experiences, informational and procedural texts found in the world outside school can be incorporated in lessons (See 2.9). Likewise, individualised lessons can comprise discussions around text as a form of exploration into culture and society. Ultimately, an individualised intervention should foster critical-thinking learners.

In order to plan for an intervention programme that fosters comprehension and ultimately critical-thinking learners, it is up to the intervention teacher to provide differentiated learning opportunities to meet learners' strengths (Lyons, 2003:25), as described in Guided Reading (See 2.6.1). To identify each diverse learner's particular points of strength, measurement instruments such as *An Observation Survey of Early Literacy Achievement* (Clay, 2002) can be used. Regular assessment will point out the learner's strengths as well as what he is not quite competent in yet, and directs the intervention to how lessons should be prepared for that individual (Margolis & McCabe, 2006:440). Early assessment and intervention can be a preventative strategy that prevents a struggling learner from continuing with unsuccessful reading and writing behaviours.

In addition to prevention through the preventative approach, texts that allow for strategy-use and authentic discussion can assist in comprehension-fostering in an individualised intervention. A selection of appropriate texts was central to the success of my contingent intervention.

### **2.9.3 Identifying texts**

Some schools trust publishers' claims that a particular reading scheme contains all that is needed at each predetermined book-level. With this in mind, schools purchase the books without consideration of the knowledge each learner brings to the literacy classroom (Clay, 1991:179). However, deeper understanding and consideration of texts are necessary for educators to realise the importance and influence of texts on reading. For example, authentic real-world texts are important in learners' curriculums in order for them to understand that people read and write for different reasons. It is also important for the teacher to grasp this concept, in order not to simply identify texts for the sake of fulfilling school assignments (Hall & Sabey, 2007). Texts should be a means to an end rather than the end unto itself. In order to guide learners to adapt to informational and authentic texts, teachers should teach strategies such as skimming and scanning, that are particular to informational and authentic texts. "Therefore, teachers must consider instructional strategies

to help young children master varied literacy skills and, at the same time, learn new content as they read” (Hall & Sabey, 2007:261).

#### **2.9.4 Introduction of continuous texts**

The introduction of a text is a very important step, because it opens possibilities for a learner to apply strategies to the particular type of text. A good way for a teacher to introduce a text is to guide a learner’s interactions between himself and the text and to discuss the meaning of the text (Fountas & Pinnell, 2007:230-231; Fried, 2001). The introduction can give the teacher an indication of the learner’s level of interaction with the text, which then serves as teaching and planning points to help extend the learner’s understanding of the text. Each book should be introduced as a whole book, to ensure the use of continuous text, not a location of pages to do on one day and the rest on another day (Clay, 1993:8, Clay, 1991:199).

#### **2.9.5 Text gradient or levels**

“A difficult text is a text which is difficult for a particular child. An easy text is easy because a particular child can read it” (Clay, 1991:201). In support, Block and Parris (2008:118) state that through brain imaging, it is apparent that the depth, scope and location of mental activity vary according to a learner’s ability levels. Therefore each learner is assigned to a certain text level according to how he is able to deploy strategies to read a book with comprehension. Thus suitable books, categorised along a continuum, should be available to match particular books to each individual learner (Pinnell & Fountas, 2007).

A teacher organises the literacy environment for her classroom or an individual according to a selection of suitable books for instruction (Fountas & Pinnell, 1996:107). A good suggestion is to make use of “little books” as they foster comprehension more than workbooks and are successful in any grade, ability group, gender, home language or ethnicity (Block & Duffy, 2008:26). It is the responsibility of the teacher to organise books into a continuum in accordance to criteria and specific descriptions for every level on the continuum (Fountas & Pinnell 1996:107, 113). Fountas and Pinnell also explain that graded texts are still not individualised enough to suit each learner on a particular level on the continuum. The teacher has to observe how learners react to texts and then refine her decision-making to the point where a text is “just right” for a particular child (Fountas & Pinnell, 1996:113; Fountas & Pinnell 2006:9, 84).

To support progress in reading, texts should be arranged in a gradient of difficulty. At each level of difficulty there should be enough books in case it is necessary for the learner to remain at a particular level for a certain amount of time (Fountas & Pinnell, 1996:110, 113,

117; See Addendum C4). Matching of the book-level to the learner is critical, especially for emergent readers, as this is their first encounter with making meaning of text (Fountas & Pinnell, 2006:1).

As masters on the subject of levelling texts, Fountas and Pinnell list a number of factors that teachers should take into consideration when they level texts (Fountas & Pinnell, 2006:38-45, 50-54; Fountas & Pinnell 2007:48-50):

- a) GENRE: whether the book is fiction or non-fiction;
- b) TEXT STRUCTURE: organisation, presentation and the use of humour and rhyme;
- c) CONTENT: the text should connect to the learner's prior knowledge or experiences and not be too long, so that meaning and memory can be sustained;
- d) THEMES AND IDEAS: this should be suitable to the age of the learners, bearing a suitable underlying message;
- e) LANGUAGE AND LITERARY FEATURES: language and voice change will determine whether a learner comprehends these features; also the vocabulary used will indicate a level of difficulty;
- f) SENTENCE COMPLEXITY: learners are able to understand more complex sentences than they are able to read, therefore teachers must carefully select the types of sentences included in the book, e.g. simple, compound or complex sentences, but also keep in mind learners' natural/oral language;
- g) ILLUSTRATIONS: as this will help learners interpret the text;
- h) BOOK AND PRINT FEATURES: this concerns the layout, length, font and number of lines on each page.

Teachers who share books and information concerning "levelling texts" among themselves, help each other in developing a support system. By the disclosure of valuable knowledge they become informed facilitators who can work together to see their literacy learners flourish (Fountas & Pinnell, 1996:107).

### **2.9.6 Personal resources**

A personal interaction between learners and what they read is vital since it can assist the learners to fuse book knowledge and personal knowledge as they read (DeFord *et al.*, 1991:121, Fountas & Pinnell, 1996:12). In a country such as South Africa, the multicultural aspect will come into play as prior knowledge or experience for any learner. When different cultures are portrayed in a text, the text should be examined for stereotyping, especially of race and gender (Fountas & Pinnell, 1996:108). The most elementary level of text that appeals to learners, which is also likely to contain their own cultural background, is their own

dictated messages or stories (DeFord *et al.*, 1991:179). Natural texts and language-experience texts dictated or written by the reader form the bridge between oral language and true book-language (DeFord *et al.*, 1991:191).

### **2.9.7 Allowing for strategies**

Strategy-use on text can only be exercised by the reader if the text level allows for it. Texts are too complicated once the self-monitoring and cross-checking processes become too difficult for a reader. It is more important for a beginner reader to be able to use and cross-check strategies on texts than to read correctly (Fountas & Pinnell, 1996:6). Keeping this in mind, only known strategies can be applied and used as support for problem-solving of new texts (Clay, 1991:215). Easy texts will accommodate and contain the reader's natural or accessible book-language with regard to phonemic richness, vocabulary and semantic and syntactic aspects (Clay, 1991:187; Clay, 2002:33; McCarrier, Pinnell & Fountas, 2000:20). Readers need to engage in the text and problem-solving, not struggle through a text. In order to engage a learner with text, predictability provides opportunities to think beyond the text and to make connections amongst texts (DeFord *et al.*, 1991:122; Fountas & Pinnell, 2007:51). Also, learners should think within the text to process and solve it for the literal meaning, as well as consider its structure (See 2.5.2.1; 2.5.2). Thinking beyond and within a text helps a learner expand his cueing systems beyond his current development (Fountas & Pinnell, 2006:4).

A learner should be able to problem-solve with ease, read fluently, construct meaning and be supported but also challenged to expand his knowledge of reading (Dorn, *et al.*, 1998:43). Ultimately, the learner has to enjoy reading and writing. To read and find reading easy means nothing if a learner does not enjoy what he is reading. Whether a learner is read to or is the one who reads, it should be enjoyable and encourage the learner to want to read more (DeFord *et al.*, 1991:136, Fountas & Pinnell, 2006:3).

In developing my intervention strategy there were stumbling blocks caused by the educational system that needed consideration as it affected my teaching approach.

### **2.9.8 Stumbling blocks encountered as a result of educational systems**

A number of educational systems prescribe that teachers must identify the disability of a learner in need of additional literacy help. This preoccupies the educator to identify what is "wrong" with a learner instead of what the learner is capable of. Therefore some educational prescriptions hinder teachers from working with an individual learner's natural variability (McEneaney *et al.*, 2006:121). In addition, educational prescriptions advise teachers to wait before assisting struggling literacy learners with intervention systems (Clay, 2002:5).

However, intervention needs to start at an early stage. This contrasts with the "readiness" approach, which waits for maturity to arrive before assistance is offered (Flanagan, 1995:12). Two reasons why educators decide to wait before they recommend a child for intervention are: (1) they wait for the learner to settle into the programme or (2) they believe that reading problems arise because children do not know their alphabet, and that once they do, they will be able to read (Clay, 2002:28). This, however, is a big misconception. Waiting too long can result in a big backlog to make up.

Refusing learners any help until Grade three (about age nine) makes the chance of later success minimal (Dorn *et al.*, 1998:15). Learners may try hard to compensate for the lost time, but the combination of skills they apply is likely to be limited and ineffective (Clay, 2002:28). If they continue with an ineffective approach to solve texts in reading and writing, it can result in a difficult encounter with content-based subjects in later grades. Consequently, if intervention is provided at a later grade, the learner has to change his strategies through a process where he has to unlearn his ineffective strategies and relearn effective strategies (Clay, 1991:313; Clay, 2002:27). The unlearn-relearn cycle can have an emotional effect on the learner since he might feel the knowledge he possessed and relied on is now taken away.

The deficit approach can have emotional effects on learners' personality and confidence. In addition, it reinforces the self-image of incompetence in important school skills, and can increase the literacy gap with the learner's peer group (Clay, 2002:28, Cazden & Clay, 1992:133). Early intervention does not always guarantee success, but without it, failure is guaranteed (Fountas & Pinnell, 2006:193). If intervention does start early, the question of the type of curricula delivered to learners in an intervention still stands.

Clay (2001:105) makes the point that education systems tend to deliver curricula to low achievers which are based on a simple theory, namely, curricula that are made up of "item learning and/or skills relating to how to 'attack' new items". In contrast to this, my understanding of the literature suggests that a complex theory is needed to deal with the diverse needs of low achievers. It is critically important for such learners to engage with continuous text, because richer texts provide supporting structures which help learners construct complex and interwoven mental networks (Clay, 2001:113). Many of the sparse texts and materials used in mainstream and traditional learning support classrooms do not facilitate this kind of learning (Clay, 2001; Hornsby, 2000; Calkins, 2006).

"If literacy teaching only brings a simple theory to a set of complex activities, then the learner has to bridge the gaps created by the theoretical simplification. The lowest literacy achievers

will have extreme difficulty bridging any gaps in the teaching programme and linking together things that have been taught separately” (Clay, 2001:105).

Teachers’ adherence to standards in an isolated curriculum programme, for example, some assessment standards in the South African curriculum such as “Develop sound-awareness: recognise and name alphabet-letters”, impede responsive instruction based on a transactional view of reading difficulties (McEneaney *et al.*, 2006:121). The assessment-standard focus isolates the literacy knowledge taught and generally will result in an educator who teaches isolated items of knowledge to accommodate assessment standards (See Addendum B2). On the other hand, an intervention approach which takes into account the natural variability of each learner can support learners in achieving at their own rate, and support teachers in applying a more successful approach to teaching. This is very necessary in the South African context, where the numbers in the Western Cape (See 1.2) indicate a real need for help in the form of intervention programmes and a need to foster teachers’ knowledge in literacy to prevent failures in later grades.

## **2.10 CONCLUSION**

All the discussions in this literature review mean nothing without teachers who accept research-based literacy, test the research, and realise the importance of successful theories and practices in their classrooms. With my research I want teachers to see and realise what successful readers and writers look like, how learners react to a contingent teaching programme, and how important it is that even the slow-progress learners deserve an early chance to catch up. However, the majority of South African foundation-phase teachers rely on an items-based approach (Nathanson, 2008:102). They need to consider new perspectives, and rely less on “skills-orientated” approaches in order to help learners orchestrate a range of skills and knowledge in reading and writing (Clay, 1993:63, DeFord *et al.*, 1991:178).

I have experienced that constant changes over the last ten or more years have seen teachers grow weary of “workshops” or “informational meetings”. However, a change of literacy strategies in the classroom cannot be perceived as a once-off procedure. It is an ongoing flexible process of enrichment (Block & Duffy, 2008). There should be periods of thinking new information through, creating collegial networks for support in which discoveries can be made, and being reflective – thinking about what teachers have observed and its possible implications (Pressley & El-Dinary, 1997:467). Teachers who give up total control in their teaching approach and relinquish some of it to their learners, can foster learners who



are independent interpreters of texts. This is one of the things I wish to reveal to teachers through my research (Pressley & El-Dinary, 1997:487).

The next chapter consists of the theoretical background and methodological framework in which my research was grounded, designed and analysed.

## **CHAPTER 3: RESEARCH DESIGN AND PROCESS**

### **3.1 INTRODUCTION**

This chapter describes the practical and theoretical implications of the research. To set the context for the theoretical framework I give a brief description of how my research was conducted.

There were four Grade one classrooms at the school where the research was conducted. Each of the four classroom teachers identified two learners from their classroom. These two learners were chosen according to their literacy development level and assessment records kept by their teacher. One learner from each class was a low-progress learner and the other an average-progress learner. Thus, the group of four low-progress literacy learners (one from each class) made up the target group for the study and participated in the research-based literacy lessons. The four average-progress literacy learners were used as a control group and only participated in the pre-, mid- and post-test assessments.

The data gathered from the pre-, mid- and post-test assessments yielded both qualitative and quantitative data, which were used to analyse the progress of each low-progress learner in the target group (see 4.4.). Qualitative data obtained from each learner during the intervention lessons were also interpreted (see 4.4). The data provided by the assessments of control group, i.e. the average-progress learners, were used for quantitative analysis in the comparison of the target group with the control group (see 4.5).

### **3.2 THEORY OF EDUCATIONAL RESEARCH**

To answer the question "What is research?", Leedy (1993:11) describes research as a critical examination or experimentation to discover new facts, interpret the facts correctly and use the outcome to revise "accepted conclusions, theories, or laws in the light of newly discovered facts or the practical application of such conclusion, theories, or laws". This journey of discovery to new theories and its application to laws and policies are grounded in a certain framework of thinking, namely a "paradigm". Educational research paradigms serve as an outline for research projects in order to produce information consistent with a study's goals (Fien, 2002:145, Cooper, 1997:559). A particular paradigm thus involves a specific point of view and a way of interpreting data (See table 3.1). For this reason the proper paradigm fit for each research is very important and will entail "using methods that depend on and further the goals of the research paradigm" (Cooper, 1997:559). When the

researcher has identified the proper research paradigm for his study, he also has to take into consideration the philosophical, moral and political values bound to the practical implications of the particular paradigm (Paul & Marfo, 2001:525).

I agree with Cooper (1997:556) who “strongly supports the use of multiple paradigms of research in composition” because, although paradigms differ, they also share some assumptions with regard to ontology and epistemology. This stance endorses an overlapping methodology by using qualitative and quantitative methods in various ways, for example in both observational and experimental processes (Cooper, 1997:557). The use of more than one method of research, as with triangulation, provides the means to cross-check data to establish its validity (Bush, 2002:68). However, there still exists an ongoing qualitative-quantitative research debate that could provide a different perspective on whether my research uses methods “correctly” or “incorrect”.

Floden (2009:488-490) concludes that for every researcher who has a different paradigm, “truth” will vary because of the composition of each paradigm’s ontology, epistemology and resulting research methodology. Based on the discussion thus far, it became evident that the structures of my data would produce a multi-dimensional study, created by means of observation during the intervention lessons, assessments and interviews. My research thus required insights from more than one paradigm (see 3.3.5). For this reason, I incorporated a mixture of paradigms into my study to fit my research. The rationale for my choice of paradigms will be discussed in the following paragraphs.

Fien (2002:147) identifies three research paradigms and their tasks, namely Empirical-analytical positivism and Empirical-analytical postpositivism (to describe, control and predict), Interpretivism or Constructivism (to empathise and understand) and Critical (to change). The following table was adapted from Table 1 in Fien’s (2002:148) presentation of the ontological, epistemological and methodological aspects of three research paradigms. The highlighted areas are applicable to my study. A short discussion which supports and explains each of these paradigms in the research will follow after the table.

**Table 3.1: Applicable ontology, epistemology, methodology and research methods**

<b>RESEARCH PARADIGM</b>	<b>ONTOLOGY</b> (What is the nature of reality?)	<b>EPISTEMOLOGY</b> (What is the nature of knowledge?)	<b>METHODOLOGY</b> (How is knowledge developed?)	<b>COMMON RESEARCH METHODS</b>
Empirical-analytical postpositivism	Reality is 'out there' and independent of us, but we can never fully understand it. Generalisations can be made free of context.	Objectivity is the ideal goal but values and other factors can produce some bias if not regulated or controlled for.	Knowledge grows from the gradual accumulation of findings and theories and testing the significance of relationships	Sample survey  Quasi-experimental pre-and post test designs
Critical	Reality is 'out there'; it is material and independent of us, but we can never fully understand it.	Knowledge is not objective but subjective. Values and power play a pivotal role in the construction of knowledge. Knowledge and issues of equity and power are closely intertwined.	Research seeks to understand the practices and effects of power and inequality, and to empower people to transform environmental and social conditions.	Participatory action research. Critical ethnography. Collaborative enquiry. Critical semiotics.
Interpretivism/Constructivism	Reality is conditional upon human experiences and interpretation. Reality is not independent but socially constructed and can have varied meanings.	Knowledge is not objective but subjective. Knowledge is constructed through the interaction of the researcher and the objects of enquiry.	Identification of the varied constructions or interpretations of reality that exists and an attempt to recognise patterns in them or bring them into some consensus.	Ethnographic case study. Focus group. Historical research.

### 3.2.1 Postpositivism paradigm

The use of the quasi-experimental design is the focal reason for the inclusion of the postpositivism paradigm in my study. This design will be further discussed in 3.3.1.

### 3.2.2 Critical paradigm

The critical paradigm permits interaction between the researcher and the eight identified learners, where the method of research allows for investigation and enlarging the understanding of individual behaviour in the individualised lessons and during the pre-, mid-

and post-tests (Cooper, 1997:558). In the one-to-one individualised lessons the personal stance of the researcher in relation to the subject is important for observation of the learner.

The empowerment of learners to become more independent was a reflection of the critical paradigm. The independence gave learners a voice in the classroom with the realisation that they have knowledge to share. On the other hand my research can assist teachers to become less authoritarian and more interactive to balance power relations in the classroom.

### **3.2.3 Interpretive paradigm**

Conole (1993) describes the role of the interpretive paradigm:

The task of the researcher becomes that of understanding what is going on, the *definition of the situations*, at least in the first instance. To do this requires not detachment but active involvement in the process of negotiated meaning, using the researcher's social competencies. Action takes place within a context and is often ambiguous. The interpretive perspective places primary emphasis on this process of understanding (p.20).

The observations made and interviews conducted in my research were all of a social nature, in which interaction took place between the subject and me. From these interactions I gained an improved understanding of the individuality of the subject within his context. The interpretive paradigm thus assisted me to comprehend, define and discuss what I observed throughout my research.

## **3.3 RESEARCH DESIGN**

A research design must illustrate to the reader that the research has been planned logically, and that the researcher is competent to do the research, using set methods and sustained effort to complete the study successfully (Marshall & Rosmann, 2006:52).

### **3.3.1 Quasi-experimental design**

As mentioned in 3.2.1, this research made use of a quasi-experimental design for examining programme impact (Purcell-Gates, 2006:2). In this case, it examined the impact of an individually designed literacy intervention based on a contingent teaching approach (McEneaney *et al.*, 2006). The research design can be categorised as a quasi-experimental design, which does not make use of full experimental control (Singleton, Straits & Straits, 1993:230). The research design I selected is similar to that in Mujis and Reynold's (2003) study on the effectiveness of the use of learning support assistants to improve the achievements of low-achieving pupils in primary school. In my study, I wished to answer the question of the effectiveness of a contingent, individualised programme by comparing

learners who had received added literacy support to those who had not. My research also included the pre-test-post-test design, with the addition of a mid-test to observe the learners' literacy progress (Singleton *et al.*, 1993:230).

In experimental designs there is an emphasis on randomisation of a target group composition. However, my study presents a situation where random selection assignment is not possible (Leedy, 1993:302). Therefore the evaluation of the effectiveness of the contingent literacy programme must rely on a quasi-experimental design to take uncontrollable variables into consideration in the interpretation of the data (Leedy, 1993:302). The learners who received the added literacy support were "low" achievers and the learners in the control group were "average" achievers in literacy, according to their class teacher's assessments and observations. The decision to use average learners in the control group was based partly on the view that "[i]ndividually designed and individually delivered lessons can bring the child's progress back into the average band of achievement in a very short time" (Clay, 1993:1). Therefore, the design must include the variable towards which the individualised programme strives, namely, the literacy level of an average learner in the same class as the literacy research programme participant. However, a quasi-experimental design is limited in that it does not provide insight into causes that are of central concern in education, for example, differential achievement rates between children from low socio-economic backgrounds and children from socio-politically empowered groups (Purcell-Gates, 2006:2). I could only consider the extent of the learners' backgrounds within their classroom and school context.

### **3.3.2 Context of the research**

South Africa has implemented the policy outlined in the *Education WHITE PAPER 6* (2001) in schools across the country. This Paper provides for learners with disabilities, whether "due to age, gender, ethnicity, language, class, disability, HIV or other infectious diseases", to be respected and accommodated in every classroom (*Education WHITE PAPER 6*, 2010:6). Each school district receives a "district support team" which "evaluates programmes, diagnoses their effectiveness and suggests modifications" (*Education WHITE PAPER 6*, 2010:29). A special-needs teacher from each school communicates with the support team about special-needs learners.

Learners with specific difficulties related to reading and writing competency are also taken into consideration. However, I have observed at four different Western Cape, South Africa, Schools that the special-needs teachers still use an isolated items-based approach to reading and writing. The "remedial literacy" learners go to see the special-needs teacher for longer than one year, irrespective of whether they have serious literacy disabilities or slight

confusions. It is in this context that a new approach is needed, one that fosters independent readers and writers. This is what I want to accomplish through my research. The 'in-between learners', with slight problems, need to be accommodated to become self-managed learners. Learners who cannot be released successfully from such a programme need further help, and this is what *Education WHITE PAPER 6* should then provide for.

### **3.3.2.1 Research questions**

My involvement with the school where the research was conducted (see 3.3.2.2) as well as previous encounters with South African classrooms during practical periods for my undergraduate study years, led me to my research. As a teacher-in-training and a facilitator, I observed a discrepancy between the practice and theory of literacy teaching in traditional South African primary classrooms. In these classrooms each teacher had a set method of whole classroom teaching, which corresponded with the behaviouristic approach (see 2.2.3; 2.4.2). However, not all learners could respond to their teacher's methods, and some seemed to be bored with the repetitive scheme of the lessons. A closer observation revealed that assessments that followed instruction were done in the class situation, and at times learners could seek assistance or "clues" when struggling. There was thus no true reflection of the learners' capabilities. If this kind of teaching and assessment is what has been taking place in the majority of South African classrooms, then it could have contributed to the problem of low literacy levels in many primary schools in the Western Cape (See 2.3.3). Closer observation of the way learners are taught in the mainstream classroom can reveal a possible area for change in the system towards the improvement of the literacy levels, particularly those of Foundation-Phase learners.

The questions used to focus and guide the research were as follows:

#### **Main question:**

- a) How does contingent teaching help individual learners develop effective strategies for comprehending texts at the appropriate grade level?

To answer this question, the following two sub-questions helped me view the main problem through the sub-problems and gain "a better global view of the entire research endeavour" (Leedy, 1993:70). These sub-questions made answering the main question more manageable (Leedy, 1993:73).

#### **Sub-questions:**

- b) What are the effects of a different approach to literacy development on low-achieving learners?

This question was answered by means of close observation, interaction and research-based literacy lessons conducted with each individual learner in the target group.

- c) How will a different approach change the teaching dynamic in the special-needs classroom and influence literacy instruction?

Consideration of this second sub-question might lead to changes in reading and writing instruction in the special-needs classroom, which, in turn, can influence teachers in the mainstream classroom to adopt research-based instructional practices.

### **3.3.2.2 Research site: Selection and characteristics**

The school selection depended on accessibility. For this reason I chose to conduct the research at the primary school where I was employed as a facilitator in 2009 and currently as tutor in the afternoons. The school is set in the Helderberg basin in a wealthy neighbourhood, although the learners range from lower-middle to high socio-economic status. It is a public school, which embraces the new challenges and realities of teaching, especially in relation to the law on inclusivity (*Education WHITE PAPER 6*). It is this openness of the school that encourages tutors and facilitators to work in the school. The medium of instruction is English, although many learners come from Afrikaans and other linguistic and cultural backgrounds.

### **3.3.2.3 Participants: Selection and characteristics**

“The results of a survey are no more trustworthy than the quality of the population or the representativeness of the sample” (Leedy, 1993:198). There were two possible ways of identifying the subjects for my study, namely by Nonprobability sampling, which consists of Convenience or Accidental sampling, Quota sampling, Purposive sampling, Dimensional sampling and Snowball sampling or Probability sampling, which consists of Random sampling, systematic sampling, Stratified sampling, Cluster sampling and Stage sampling (Leedy, 1993:200-201, Fogelman, 2002:99-102). I made use of aspects of both Nonprobability and Probability sampling. The Probability method of sampling I used was cluster sampling, which allows for individuals of the sample to be grouped together geographically, in this case one school (Fogelman, 2002:99). The types of Nonprobability sampling I used were Convenience and Purposive sampling. This was because the teachers and learners were all clustered together conveniently in one geographical area within one context, and specific learners were chosen to participate as judged representative by their classroom teachers for this research case (Fogelman, 2002:101). Therefore learners were not chosen at random, but according to their teachers’ observations, previous personal records, and class assessments. Eight learners were asked to participate and both the



parents and the learners had to complete either written or oral consent forms (See 3.3.4; Addendum A3i, A3iii).

Table 3.2 describes the characteristics of these eight learners in terms of home language, age, gender, grade and classroom.

**Table 3.2: Basic background information about participants**

<b>LEARNER</b>	<b>Home Language</b>	<b>Age</b>	<b>Gender</b>	<b>Grade</b>	<b>Classroom</b>
Mia*	English	6	Female	1	A
Marc*	English	6	Male	1	B
Peter*	English	6	Male	1	C
Suzy*	English	7	Female	1	D
Dan*	English	7	Male	1	A
John*	English	6	Male	1	B
Rudolph*	Afrikaans	6	Male	1	C
Bart*	English	6	Male	1	D

\*Pseudonym

The other participant in this study was classroom B's teacher at the school, who was interviewed and observed to provide an example of how classroom teaching is conducted and learners with literacy needs are managed.

#### **3.3.2.4 Aims**

With this research, I sought to improve the reading and writing competencies of individual learners with specific literacy needs to that of the grade level. This involved placing comprehension at the center of learning how to read and write, and avoiding mindless drills or unsuccessful methods for a particular learner (Flanagan, 1995:12; 18). If it succeeded, the opportunity could arise to advocate and implement this approach permanently in schools – either in the literacy classroom or as a framework for teaching low-achieving foundation-phase readers and writers.

#### **3.3.2.5 Justification**

The literacy lessons were based on feedback obtained from the assessment tasks in *An Observation Survey of Early Literacy Achievements* (Clay, 2002), on Reading Recovery® principles (Clay, 1993), and on the premise that literacy instruction can be made applicable to all learners through individualisation. Fien (2002:152) states that any justification for conducting research should be “locally relevant and culturally appropriate”. My research meets both these criteria in that individualised lessons are relevant to the participants who require the kind of help that is geared to their needs. In addition, the research is locally

relevant because many special-needs teachers mainly make use of a step-wise, items-based approach rather than a theoretically sound, research-based approach to guide learners into literacy (See 2.1.5). Despite the documented success of the Reading Recovery® programme, the teacher I observed and interviewed was not familiar with the programme or its instructional principles (Clay, 1993). Therefore it is safe to say that the need for this approach, or at least for testing its impact, justifies the study, and allows for a possible different approach to improving the current low literacy levels in South African schools. However, the school where the research was conducted is known for its high literacy levels according to Western Cape test standards – tests which assess language abilities, visual discrimination, phonemic awareness and spelling (See Addendum A4), but not the reading of continuous texts.

### **3.3.3 Research methodology**

There are various methods for collecting data; therefore different methodologies are employed by different researchers (Leedy, 1993:113). The method and methodology of a study should not be confused – “methods” are the techniques used to collect data or evidence, whereas “methodology” is the study of the ever-developing methods, “the theory of knowledge and the interpretive framework guiding a particular research project” (Leedy, 1993:137 & Le Grange, 2007:422). The methodology used in my study had to embrace both qualitative and quantitative research because of the methods I employed and the data I obtained. These will be discussed in the next section. The combination of quantitative and qualitative methods brought about triangulation (Leedy, 1993:143, Singleton *et al.*, 1993:391; Bush, 2002:68-70). I will explain the qualitative and quantitative aspects first, and then the need for triangulation.

#### **3.3.3.1 Qualitative aspects of the study**

“Qualitative research methodologies comprise distinct traditions, each of which is based on its own assumptions and discrete methods for collecting, analyzing and reporting data” (Mears, 2008:407). These qualitative studies are field-focused, and fit into a certain context to help avoid ambiguity (Connole, 1993:20 & Leedy, 1993:141). The researcher has to understand the situation or behaviour observed to be able to define the situation and identify patterns according to which data can be analysed (Connole, 1993:20). Therefore, a feature of qualitative study is its interpretive character (Leedy, 1993:141; Paul & Marfo, 2001:532). The following aspects of my study were qualitative: the interpretation of strategies applied by individual learners during their literacy interactions and of any change towards improvement in their strategy use, and the interpretation of the interview with Teacher B to understand the classroom contexts from which the learners came and to which they returned.

### **3.3.3.2 Quantitative aspects of the study**

The raw scores from each learners' pre-, mid- and post-tests were calculated into averages and then processed and represented in figures. Mixed model repeated measures ANOVA'S were conducted at the Stellenbosch University's Centre of Statistical Consultation (Kidd, 2010) with children (nested within groups) taken as random effect, time and group as fixed effects. Thus three fixed effects with the following hypotheses were tested, namely:

- Time null hypothesis: averages for all the time points are equal, regardless of group;
- Group null hypothesis: averages of the two groups are equal, regardless of time;
- Time\*Group interaction null hypothesis: differences between groups (if any) are equal for all time points.

A 5% significance level ( $p < 0.05$ ) was used as guideline for significant effects (rejecting the null hypothesis). In the case of significant (or near significant) effects, Fisher least significant (LSD) post-hoc tests were conducted. The figures and discussions either proved or refuted an increase in the target group's average in comparison to that of the control group. Thus the figures showed whether the intervention was successful or not in raising the target group's average to that of the comparison group.

### **3.3.3.3 Triangulation**

Qualitative and quantitative research designs have their own inherent ways of collecting data. By using more than one research method, the researcher seeks to use "triangulation between methods" (Bush, 2002:68) or "Methodological Triangulation" (Leedy, 1993:143). Both Singleton *et al.* (1993:391) and Leedy (1993:144) advise the use of multiple methods that do not share corresponding innate weaknesses, so that the strengths and weaknesses of each method complement each other. The methods used to triangulate in this study were the interviews, non-participant (classroom) observation, participant observation (i.e. observing the learner as he/she was working), the work the learners did in the intervention and the statistical data gained from their assessments.

### **3.3.4 Research process**

The theories and philosophies explained thus far guided the data collection process. In this section, I elaborate on how the data was collected, presented and analysed. Before the practical research could commence, I applied for and received Ethical Clearance from the Western Cape Education Department (See Addendum A1) and the University of Stellenbosch (See Addendum A2). The Grade one teacher signed a written consent to allow me to conduct an interview with her and observe one of her literacy lessons, and each participant's parent(s) signed a written consent for their child to participate in the study. Each learner-participant also had to sign their name to a written consent that I read out to them, if

they wanted to be included in the study. They were allowed to exit the research at any time without consequences (See Addendum A3i; A3ii; A3iii).

The research implementation that followed was based on the typical Reading Recovery lesson® (See 3.3.4.1.i.b). This Reading Recovery® lesson format was conducted with each learner individually, every week for twelve weeks from Mondays to Thursdays, which amounted to 23 lessons per learner. Each lesson was 30 minutes long, in order to include all the aspects in one lesson as described by Reading Recovery® (Clay, 1993). The lessons were embedded between the pre-test and the mid-test, and the mid-test and the post-test, which I also conducted.

A distinction can be made between the tutoring sessions of the intervention and the pre-mid-post tests I conducted, concerning my involvement. During the tutoring sessions I acted as participant observer, where I guided each learner's lessons and observed them as they worked. In order to maintain objectivity in these lessons, I consulted with my study-leader and Sue Duncan (Personal Communication, 2010) on how to conduct and observe lessons simultaneously. However, during the pre-,mid-,post-assessments I acted as researcher while no teaching took place, so that the data were not contaminated.

#### **3.3.4.1 Data collection**

I fulfilled a dual role during the data collection period of my research. I was both the researcher and the teacher who conducted the research-based literacy lessons and the pre-, mid- and post-tests as described in the previous section.

##### **i) Qualitative data**

This consisted of a) an interview and classroom observation of the Grade one teacher, b) observation of the learners at work and c) data obtained from the Observation Survey assessments.

##### **a) Interviews with teachers**

An abstraction such as “education” is best understood through the experiences of the teachers and other individuals who work in such abstractions (Seidman, 1998:4). Therefore, researchers should talk to these subjects individually, for they are the people who constitute these schools. Seidman (1998:4-5) states that when the research goal is to understand the meaning that people in education make of their experience, “then interviewing provides a necessary, if not always completely sufficient, avenue of inquiry” (Seidman, 1998:4-5).

My mid-research interview with the Grade one teacher was centred round literacy-management and teaching questions (See Addendum D1). These were open-ended questions in a face-to-face interview, giving the teacher the opportunity to state her opinion and knowledge in her own words and enabled me to obtain answers to all the questions in the interview (Singleton, 1993:260).

b) Observing the learners at work

The lessons conducted with the learners were based on the Reading Recovery® (Clay, 1993) principles and typical tutoring framework (Clay, 1993:14):

- Rereading two or more familiar books
- Rereading yesterday's new book and taking a running record
- Letter identification and/or word-making and breaking
- Writing a story
- Cut-up story to be rearranged
- New book introduced
- New book attempted

This broad framework was used as the basis for the lessons in each tutoring session. However, lessons were moulded according to each learner's competencies, as revealed by the assessments, and their Zone of Proximal Development (See 2.1.8), which resulted in a variation in the content of the above-mentioned tutoring session. The observations were made by means of participant observation, which Singleton *et al.* (1993:324-327) describes as "a very delicate situation". The observer can influence the outcome and has to decide where the fine line between observing and helping lies. In this research situation, I was both the observer and the facilitator in the tutoring situation. My facilitating role demanded helping and guiding the participants through the lessons, which is representative of what is expected of any teacher. Thus the tutoring situation might have influenced the data results collected during these sessions, but these tutoring actions remained true to cognitive and holistic teaching practice. In addition, the tutoring fit into Vygotsky's concept of measuring achievement within each learner's Zone of Proximal Achievement. Also, I made observations and field notes during these lessons to determine the strong and weak points of each learner, to help me design the following day's lesson (Clay, 2002; See F1& H1). The observations I made during the lessons served as data for how the learners responded to the new teaching approach from the facilitating observer's perspective.

I collected completed work from the learners, which served as evidence of what I observed, and informed further lessons.

ii) Using assessments for both Qualitative and Quantitative Data

Data was collected through a process of assessments of various literacy facets, by using Clay's *An Observation Survey of Early Literacy Achievement* (2002). This Observation Survey consists of six assessment tasks, namely, Letter Identification; Word Reading; Writing Vocabulary; Hearing and Recording Sounds in Words; Concepts About Print, and the Running Record. The content answers to the assessment tasks were used as qualitative data for interpretation. The numerical results, in percentage form, were used as quantitative data. To ensure validity and reliability in using this task as a measurement of progress or change, it was important to have rules. Clay (2002:114 - 117) outlines rules to follow when the Observation Survey is conducted. I followed these rules meticulously in order to remain true to the nature and results of the tasks. A brief explanation follows of the way each assessment was administered and scored according to Clay's (2002) rules. These assessments were conducted during pre-, mid- and post-tests with the individual learners:

a) Letter identification (See Addendum C4i)

All letters of the alphabet in upper and lower case, as well as the typesets of *a* and *g*, were assessed. The letters on the assessment sheet are not placed in alphabetical order, to avoid any possible pattern that a learner might recognise and follow, to name the letters. One score was given to each correctly identified letter as an alphabet name *or* sound that was acceptable for the letter, *or* by giving a word that started with the same letter or sound.

b) Word Reading (See Addendum C4ii)

On the assessment sheet there are three word lists. I identified one list and concealed the other two lists. With my help, the learner read the practice word at the top of the list, and from there he read the rest of the list on his own. For each word read correctly, the learner received one mark, except for the practice word. Since the lists are of parallel difficulty, I used list one in the pre-test and list two in the mid- and post-test.

c) Writing Vocabulary (See Addendum C4iii)

In ten minutes, the learner had to write all the words he knew how to write. There was no assistance with the writing of the words, only specified prompts if necessary. Each correctly spelled word received a point, while keeping in mind the word intended, reversed letters, writing from left to right, series of words and capital letters.

d) Hearing and Recording Sounds in Words (See Addendum C4iv)

One of five sentences of parallel difficulty was selected for the observation. I made use of three different sentences, one for each test-time. I read the sentence out word by word, while the learner recorded each word as he listened to the sounds he heard in each word.

For each correct phoneme the learner wrote, he received one score.

a) Concepts About Print (CAP) (See Addendum C4v)

Clay wrote specific books for this assessment, e.g. *Sand; Stones; Follow Me, Moon and No Shoes*. Therefore for this assessment as well as the procedure, I had to familiarise myself with the book I used, namely *Sand* (Clay, 1972). The procedure involved a set of questions applicable to *Sand* to guide the learner and score his responses as the assessment was conducted (Clay, 2002:42-43).

As the learner responded to instructions, I scored his assessment according to a “[q]uick reference for scoring standards” sheet (Clay, 2002:45). The scores were added up and awarded out of a total of 24.

b) Running Record of Continuous Text (See Addendum Cvi)

This record captured a learner’s reading behaviours on continuous texts. As the learner read the given, unseen text, I took the running record and made use of standard procedures outlined in the Observation Survey Guidebook to record the learner’s reading behaviour.

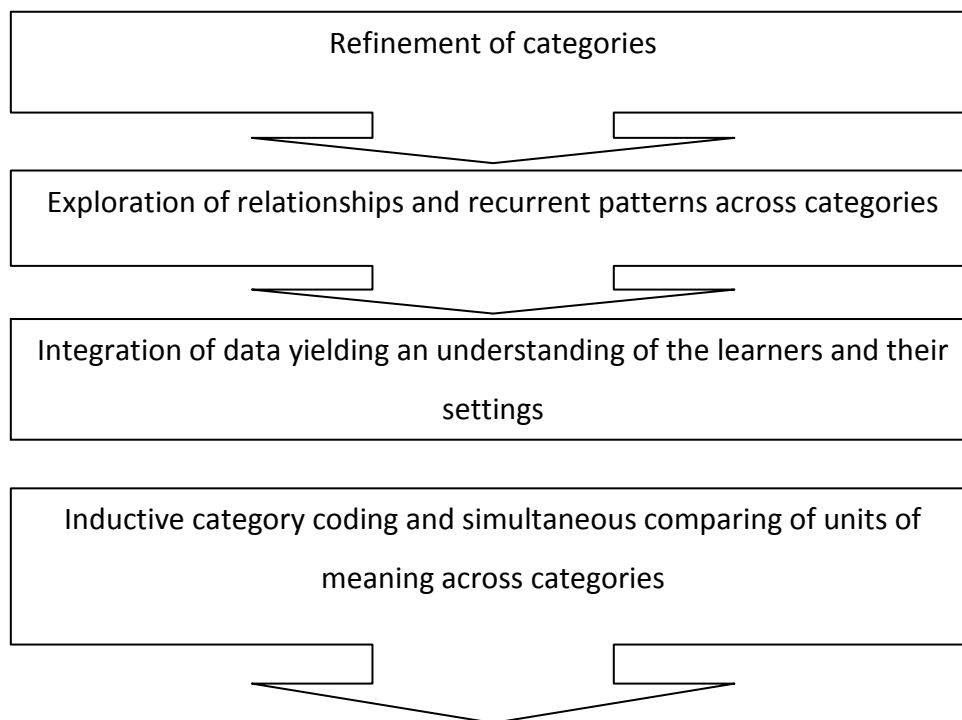
### **3.3.4.2 Data presentation**

Data should be presented in terms of the problem (Leedy, 1993:318). Therefore recurrent patterns were sought in the qualitative data, which could serve as relevant discussions under each sub-problem. To present the qualitative data, I went through a process of coding the data to link up the recurrent patterns. This forms part of the constant comparative method discussed in “Analysing Data” (See 3.3.4.3).

The results from the quantitative data were represented in a pre-designed table in the programme Microsoft Excel. The information was processed at the University of Stellenbosch’s Centrum for Statistical Consultation (Kidd, 2010) and represented in ANOVA tables, Fisher LSD tests and figures (See 4.5.3).

### **3.3.4.3 Analysing data**

The analysis approach I used was more inductive than deductive in nature – the analysis of data arose from the data itself, “out of a process of inductive reasoning” (Maykut & Morehouse, 1994:127). The process of the constant comparative method is summed up in the following figure (Maykut & Morehouse, 1994:135):



**Figure 3.1: Schematic illustration of the constant comparative method**

Maykut and Morehouse (1994) describe a process where a researcher can return to the field of inquiry and collect more data. When all the possible data has been uncovered, "redundancy" has been reached, but in some instances a constant gathering of data is possible. In such instances Lincoln and Guba (1985) recommend that data collection and analysis continue until the "theoretical saturation point" is reached and categories and relationships are well supported.

If I had followed the route of theoretical saturation as advised by Lincoln and Guba (1985), I could have collected more data and allowed a longer timeframe for learner improvement if needed. To keep my data-handling manageable, I limited my data-collection period to 12 weeks. I had to take holidays into account in my research period, but would suggest up to 20 weeks of data-gathering in accordance with Clay's (2002) recommended intervention period.

### **3.4 RELIABILITY AND VALIDITY**

The Observation Survey designed and described in *An Observation Survey of Early Literacy Achievement* (Clay, 2002:13) had "the qualities of sound assessment instruments with reliability and validity and discrimination indices established in research" and provided the lesson and assessment format of my study with reliability and validity.



### **3.5 ETHICAL ASPECTS**

Before I could commence my study, I had to apply for and receive ethical clearance from the Western Cape Education Department (See Addendum A1) and Stellenbosch University (See Addendum A2). Two ethical aspects were taken into account as possible problem areas, firstly, the identification of learners for the research-based lessons, and secondly, the low-progress learners' continual intervention.

Prior to the study there were concerns of stigmatisation of the four learners who would participate in the daily lessons. However, the classroom learners were unaware of the additional help these learners received, and therefore were not concerned with the exit of the participating learners from the classroom. DeFord *et al.* (1991) confirm that the identification of learners in this type of programme “does not harm the child; it acts diagnostically to distinguish the child who fails to accelerate” (DeFord *et al.*, 1991:59). Therefore the learners felt and displayed no shame in leaving the classroom when I arrived, but on the contrary, they were excited. Secondly, my research could not ensure that the low-progress learners would continually progress at the same rate without individual help after the research-based lessons discontinued. This responsibility was left to the school to accommodate all the learners in need of help.

### **3.6 SUMMARY**

This chapter discussed the theoretical framework of the research, including the philosophical, methodological and epistemological aspects and how the theory influenced and guided the methods I used in the research. The methods of data collection, presentation and interpretation described how data were controlled. In the next chapter I discuss the data gathered from the practical research period at the school according to the conditions set in the current chapter.

## CHAPTER 4: RESEARCH RESULTS AND DISCUSSION

### 4.1 INTRODUCTION

This intervention research was conducted at an English Primary School in the Helderberg district with a focus on Grade one learners in English First-Language classrooms. The data gathered from the school is presented and discussed in this chapter and were collected over a period of twelve weeks during the Western Cape's second school term. Data were gathered based on the hypothesis that individualised programmes would allow low-progress literacy learners to gain a better understanding of reading and writing, and subsequently progress in both reading and writing. Various types of data were collected, consequently providing multiple aspects and perspectives for consideration (see 3.3.4.1). The three types of data collection were (1) observations of the learners and a Grade one teacher, (2) a short interview with the same Grade one teacher as observed and (3) assessments of four low-progress and four average-progress learners. The observations of learners' literacy behaviours were made during each literacy lesson that I conducted with the individual learners. One observation was made of the teacher's daily literacy lesson in a Grade one classroom. The interview was conducted with the same classroom teacher with whom the observation took place. The assessments of learners were done during pre-, mid- and post-tests taken from Clay's *An Observation Survey of Early Literacy Achievement* (Clay, 2002; see 3.3.1).

During my report, I will first explain the focus of the research. After this I will give a description of the learners' classroom context, which was informed by the classroom observation and the interview that I conducted with the Grade one teacher (Teacher B; See 3.3.3.1). Next I will discuss the qualitative results of the assessments and the observations that I made during the research-based literacy lessons with each learner. I will begin by discussing the general themes that I identified (See 3.3.4.2) from the data of the four research participants, followed by an individual discussion of each learner. This is done in order to answer the research question "What are the effects of a different approach to literacy development on low-achieving learners?" (See 3.3.2.1; 5.2.1). I hope to see whether there was any change and progress in each learner's reading and writing behaviours. Then general factors and patterns, which occurred in the data of all four of the research participants, will be analysed and discussed. Third, the quantitative data will be considered. These data will either prove or refute the assumption that lower-progress learners can approach or equal the assessment averages of average-progress learners.

## **4.2 RESEARCH FOCUS**

The individual growth in reading and writing of each learner was the focus of this research. This meant observing and scoring how each learner matured in their individual programme of instruction (see 2.2.3). Although there was a focus on individual learners and how the research approach to literacy might be more supportive to them, I also used standardised assessments to compare learners' progress and change in literacy behaviour over time.

## **4.3 LITERACY PLANNING IN THE SOUTH AFRICAN CLASSROOM**

An accumulation of my previous teaching experiences, my research and my knowledge of the National Curriculum Statement (NCS) of South Africa informed the discussion in this section. As mentioned earlier, my role as both researcher and facilitator in the research school gave me unique insight into the everyday school and classroom routines (See 3.3.2.1).

It is clear from my literature review that the classroom environment, as well as the lesson planning described in this chapter, is representative of many Grade one South African literacy classrooms (see 2.1.2). What varies from teacher to teacher is the presentation of the lessons, since teachers have different social and contextual practices which in turn "can influence literacy acquisition and behaviours" (Nathanson, 2008:92).

### **4.3.1 Teacher B's literacy year in overview**

Each teacher in the Western Cape is expected to have a year-plan for literacy, which must be collapsed into term, weekly and daily planners. These consist of the outcomes stated in the NCS that every learner is expected to achieve by the end of such a planner (National Curriculum Statement, 2010). If the learner does not reach the outcome or assessment standard by the set date, it is noted on his report and he is seen as a case for extra help. My observations and interview with the Grade one teacher (Teacher B) showed that she also used such planners, and she expected her learners to have grasped set reading and writing items of knowledge by the end of the first term. The interview I conducted with Teacher B focused on the type of literacy lesson that she routinely taught at different stages during the year and on the outcomes she expected of the learners.

### **4.3.2 General aspects to set the context**

The following figures present Teacher B's responses to the interview questions concerning her approach to managing literacy lessons.

**Table 4.1: Managing reading groups**

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Reading (See Addendum D1)

- *Group reading takes place on Thursdays.*
  - *Reading groups are monitored once a week to see if everyone is on standard.*
  - *Sight words and sentences are taught together.*
  - *We [the Grade one teachers at the school] teach them [the learners] to see other words within a word, e.g. stop – (s)top [closes the ‘s’].*
- 

Table 4.1 reveals that reading instruction in Grade one is very phonics-driven and dependent on the high-frequency words learners know. The “sight words” mentioned in Table 4.1 are taught in isolation as words on “flash cards” which learners have to read in quick succession (See Addendum D-2). In this approach, the learner cannot draw on meaning or syntax cues to help him decipher unknown words, but only on letters as visual cues. This means that the phonic lessons are the learner’s main frame of reference for deciphering reading and writing. While phonics and word-level activities are needed, the research base within which I position myself questions the isolated and step-by-step manner in which these activities are traditionally taught.

Phonics lessons are presented to teach learners the individual letters in the alphabet and letter-sound correspondences. In reading, they are expected to sound out each word that they struggle with. There is, however, an inconsistency between the number of isolated items of knowledge, such as phonics and words learners know or were taught, and the books they have to read. If learners understand reading to be the sounding out of words, but they have not been taught all the letters, or any other strategies for reading, they are left with an over-simplified account of what they actually need to learn to do in order to be able to read (Clay, 2002:15). In the course of my research, it became evident that the majority of the learners in the study made use of “sounding out the word” to help them read a specific word.

Frequent monitoring of the learners through observations enabled me to identify their constant use of “sounding out the word” in order to read. In Chapter 2, I pointed out that it is important for teachers to observe their learners constantly in order to provide a way to keep them on the appropriate book level and in the correct group (See 2.6.1). Furthermore, without assessments that reveal which strategies children use in both reading and writing, the teacher will be unaware of the learners’ true capabilities. A successful assessment of learners by their teacher will reveal that some learners respond to a phonics and word-based approach to teaching, but others lose comprehension in the process because of their intense

focus on reading words correctly (Clay, 2002:15). However, many teachers do not understand that comprehension should be part of a learner's constructive process right from the start of their reading (Fountas & Pinnell, 2006). Rather, comprehension is seen as the ability to understand *words* in a story that is read to them, as can be seen in Table 4.2.

**Table 4.2: Isolated comprehension instruction**

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Comprehension (See Addendum D2)

- *We read many stories to them for comprehension...explain the difficult words in the story to build their vocabulary.*
  - *They start with comprehension in the third term. They read a small passage and answer a couple of questions.*
- 

Table 4.2 indicates that the process of comprehension that is meant to be part of reading from the very beginning of reading texts, is separated from reading. This is done through “teaching comprehension” only in the third term of the year, rather than making it an integral part of the reading process. By fragmenting learners’ understanding of reading into (1) phonics, (2) words, (3) sentences and (4) comprehension, many Grade one teachers break learners’ cycle of learning and disrupt the processing taking place in the learners’ brains. Lyons (2003) clearly states that children must not only learn how to process the information contained in print, e.g. letters, spaces, words; they also need to “comprehend the meaning in those abstracted print symbols used to form words on the pages of text, which is an individual constructive process in itself” (Lyons, 2003:179). Reading should therefore be taught as the continual construction of comprehension while reading texts.

In Table 4.3, Teacher B explains how all the Grade one teachers plan progression in writing (See Addendum D1; D2). From her explanation it is evident that the teachers separate the writing of letters from writing words, sentences and stories. I also observed this separation of skills during the literacy lesson when the group of learners had to write words in isolation (See Addendum D2).

**Table 4.3: Planning progressive writing exercises**

- 
- *The learners write on blackboards, practising letter formation. We start with the letters that look the same, e.g. c, o, a, g, q.*
  - *The teachers draw lines on the blackboards to help learners practise letter formation neatly between the lines.*
  - *Next we [the teachers] write on the board from where the learners copy it into their books.*
  - *The learners receive a worksheet to complete and help them focus on the vocabulary and sentence structure around the word.*
- 

From Table 4.3 it is evident that the focus of the school's writing plan seems to be on the mechanical aspect of writing, seeing writing as an end product, rather than a process. Although this is an important aspect of writing, Clay (2002:21) reasons that it is necessary to lower the demands of neatness and correctness for a time, and rather shift the focus to a flexible expression of ideas. The isolated nature of these exercises stifles creativity (Martin & Hydén, 2006). It also does not teach learners to plan, organise, draft and edit their writing, which are essential skills for creative and effective writing (Martin & Hydén, 2006; Scharer & Pinnell, 2008). However, the NCS's first assessment standard for writing is to write readable letters, handle writing instruments, practise letter formation by means of copying patterns and letters, and to form the letters of the alphabet successfully (Smit, 2004:23). It is only by the end of the list of assessment standards that writing reaches a point where it is stipulated that the learner's writing must be meaningful and the learner is expected to "write different kinds of factual and imaginative texts for a wide range of purposes"<sup>3</sup>. Initially, this leaves no space for learners to think about their own speech, the words they would use, the sounds that they hear in those words, and the general message they ultimately want to convey. The copying of words or messages from the board also does not contribute to the learners' expression of their own story or feelings (Boutler, 2004:139). DeFord *et al.* (1991) describe "copying" as an activity where learners simply want to copy letters correctly. It does not provide them with the opportunity to check their work against other literacy aspects or give

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<sup>3</sup>*Revised National Curriculum Statement, Grades R – 9 (Schools)*. [S.a.] [Online]. Available: <http://www.mml.co.za/app/dynamic/Grades.php?phase=foundation&type=foundation> [2010, 7 April].

meaning and purpose to their writing “other than to fill the page” (DeFord *et al.*, 1991:87). Such activities teach learners to focus on getting (or guessing) the correct answer, rather than on constructing meaning.

All the South African classrooms I have visited during the past six years rely on phonics lessons, “fill in the word”-activity sheets, copy writing from the board, and standardised writing lessons. Learners rather need to understand what the action of writing means, that it conveys a meaningful message, and that everybody has their individual message to convey in print. Preller quotes Ben Okri’s view in *A Way of Being Free*: “We live by stories, we also live in them” (Preller, 2003:1). It is not only the process of writing that learners need to understand, but also the joy of telling their own story in such a way that it can reach many readers (See 2.8.1).

Grade one is the first year of formal reading and writing in the school where I conducted research. None of the Grade one learners were sent to the remedial teacher. It is only from Grade two onwards that learners participate in remedial lessons. Instead, Grade one learners were given the opportunity to “revise” work that they struggled with, by attending Teacher Assisted Tutoring (TAT) classes. In Table 4.4 the Grade one teacher explains how the Grade one learners are accommodated in cases where the learners need extra literacy help.

**Table 4.4: Teacher Assisted Tutoring (TAT) provided by the school**

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Identification and operation of learners in need of extra help (See Addendum D1)

- *Learners go to TAT classes between one and two in the afternoons. The objectives remain the same, but the activities presented are more fun, to make it different from the more formal class situation, for example, writing letters on the mat and letting them jump out the word [jump on each letter in the word, e.g. b (jump on ‘b’) -u (jump on ‘u’) -g (jump on ‘g’) = bug].*
- 

This system, where teachers make time for learners with literacy needs, is very accommodating and can serve as a remedial platform for Grade one learners. However, the approach applied in the TAT session remains the same as the classroom approach, namely sounding out activities and isolated word practice in reading and writing (also see Table 4.3 discussion). The TAT does not make allowance for the individuality of learners, and the importance of individualised assistance is thus not realised.

The data discussed in section 4.3.2 provided me with background knowledge of the literacy-teaching context of the learners who participated in my study. It could therefore be expected that the learners' classroom context would influence their literacy skills during the research-based lessons. The following section contains the analysis of the four low-progress learners' reading and writing work and their assessment results. To keep the learners' identities unknown, I gave each learner a pseudonym.

#### **4.4 INTERPRETATION OF QUALITATIVE DATA**

In my research I intended to observe a change in literacy behaviours of low-progress learners with the help of an individualised intervention programme based on the whole language and socio-cognitive processing approaches (See 2.1). The intervention included eight learners from whom data were obtained. The eight learners were divided into two equally numbered groups. The one group (four learners) consisted of average-progress learners and served as the control group. The second group of four learners were the low-progress learners and served as the target group, who participated in the research-based lessons that I taught. Both groups participated in the pre-test, administered in mid March 2010, the mid-test at the end of April 2010, and the post-test at the beginning of June 2010. Each of the three tests (i.e. pre-, mid- and post-tests) comprised the whole Observation Survey battery, which consists of six assessments, namely (1) Letter Identification, (2) Word Reading Test, (3) Writing Vocabulary, (4) Hearing and Recording Sounds in Words, (5) Concepts About Print and (6) Running Record (See 3.3.4.1). Observations of the low-progress learners who participated in the research-based literacy lessons, were the second source of data. The assessments, which were conducted by me according to the guidelines set out in the Observation Survey guidebook (Clay, 2002), were done on an individual basis, with each learner in a one-on-one situation. The data gathered from the assessments were used for a qualitative and a quantitative analysis. The assessment scores of all eight learners were calculated and put into figures as quantitative representations (See Addendum I1; 4.5.3; Figure 4.1). The assessments and observations of the target group were analysed to obtain recurrent patterns in the data, and to inform discussions of each of the four learners' behaviours.

##### **4.4.1 The learners**

The four learners discussed in this qualitative analysis section are Mia, Marc, Peter and Suzy. The learners came from four different classrooms in the same school, and therefore had experienced a different influence and exposure to literacy according to their teacher's approach to teaching reading and writing. Each of these learners was in Grade one at the time of the study, and was identified by his/her teacher as a low-progress learner of literacy.



The teachers also identified four average-progress learners, one from each of the Grade one classrooms. These learners were Dan, John, Rudolph and Bart. They acted as the control group in the study. Hence, their results will not be discussed in this section. The classroom that each child came from is represented by Table 4.5.

**Table 4.5: School classroom grouping of low- and average-progress learners**

<b>CLASSROOM 1</b>	<b>CLASSROOM 2</b>	<b>CLASSROOM 3</b>	<b>CLASSROOM 4</b>
Mia (low-progress)	Marc (low-progress)	Peter (low-progress)	Suzy (low-progress)
Dan (average-progress)	John (average-progress)	Rudolph (average-progress)	Bart (average-progress)

The recurrent patterns in the qualitative data that were obtained from the lessons and assessment of the four low progress learners are discussed in 4.4.2.

## **4.4.2 Recurrent patterns**

### **4.4.2.1 Introduction**

During the research I noted recurrent patterns that were present across the data of the four learners in the target group's assessments and observations. I will discuss these patterns first. Nevertheless, the learners revealed individual differences since they made progress at different rates, which led me to write a short description of each individual learner in the target group (Clay, 1993:5). A possible change in the learners' behaviours, their use of cues, an increase in knowledge, and each learner's attitude towards reading and writing, could indicate a positive response to the approach I adopted in the intervention. However, based on the target group's classroom contexts (See 4.3.2), I anticipated low assessment scores and minimal use of strategic reading behaviours at the onset of the intervention. The isolated items teaching approach in the classroom created isolated knowledge stores in learners' minds without links between different kinds of knowledge. These links, therefore, first had to be taught to learners so that they could incorporate them in their approach to reading and writing.

### **4.4.2.2 The need for creating links**

The four learners in my target group reflected the case study done by Buly and Valencia (2002), which determined that policies which mandate the use of phonics instruction for learners who do not achieve at the literacy proficiency levels of their grade, miss the needs of the majority of these learners. Initially, the learners in my study were able to identify only a limited number of letters in the Letter identification assessments. In some cases they could

not capture the consistency of the letter-sound correspondence when they awarded the same sound to a variety of written letters (See Addendum D3). Some learners, therefore, made no link between the visual information of each alphabet letter and the oral representation of the same letter. Two learners also used picture symbols to represent letters or words, or named letters in numeric terms (See Addendum D4; D5). It is possible that learners who react in this way may have had a mistaken experience of letters, symbols and words in their patterning. “Patterning” refers to the categories that each person perceives and generates, in this case, during reading and writing that I planned for them from the first lesson of intervention (Caine, 2008:130).

The implication for my lesson instruction was thus to assist learners in their patterning. By patterning what they read and wrote, the learners could create a frame within which they could comprehend literacy. The learners in Buly and Valencia’s (2002) study, concurrent with the learners in my study, relied on a phonics approach, but they struggled with comprehension. They were over-committed to the idea that reading was word recognition and sounding out (Clay, 1991:310). However, meanings lie in stretches of text, not in isolated words (Clay, 1991:313). Buly and Valencia also found that some learners who had good decoding skills did not comprehend what they read. The initial patterning was thus very important for the learners in my study, to link new knowledge to existing knowledge in order to comprehend a text. The learners in my study had an over-simplified view of what they really needed to learn and to activate in their brains, in order to read and write (Clay, 2002:15).

Next, I observed that the learners in my target group made unsuccessful use of picture cues. Rather than refer briefly to picture cues, the learners were “picture-reading” without attending to the print in the text (See 4.4.5). Pictures serve as an important cueing system that helps beginner readers (Fountas & Pinnell, 2007). However, when learners become dependent on the pictures, they start to ignore the text. If the struggling learners continued their ineffective deployment of picture-cued strategies, it could later result in persistent use of this behaviour whether appropriate or inappropriate for a specific task (Dermitzki *et al.*, 2008:486). Therefore the implication for my study was to turn the learners’ attention to the text as the main source of information, but demonstrate that pictures could assist, rather than direct, their reading of a text.

It was thus apparent from my research results that the learners needed assistance from me, (and, by implication, of their classroom teacher) to “unlearn” incorrect links and behaviours and “relearn” correct knowledge and behaviours before these incorrect behaviours developed into a habit which would be resistant to change (Clay, 2002:15; 27). To

accomplish and form better links between letters, sounds and words, the target group was exposed to a number of texts during the research lessons. Through reading and writing activities and a deliberate reference to sounds in words, I was able to expose learners to the links between letters on a page, the sound each letter made, and how letter sequences represented words. The recognition of individual sounds in words was practised by the learners during writing lessons since learners had to attend to each letter more specifically while writing. The learners had to say each word out loud, and record every sound they heard in that word (Clay, 1991:84; 87). This exercise took place daily in the research intervention, with the main focus still on comprehension and writing sentences that made sense and carried a message.

The lessons were conducted in a “co-working” manner, which involves a collaboration between teacher and learner. As the teacher, I did not identify items of knowledge to “teach” the learners, but rather guided them with the relevant questions from what they knew to new language knowledge. I had to take the implications into account on a daily basis, to assist the linking process of each learner’s cognitive actions. A good example was the use of word discovery. The learners enjoyed discovering and deriving new words within and from a known word; for example *there* contains *here*; and *make* led to the discovery of words such as *shake*, *bake*, *cake*, *take* and more (See Addendum D6). It is important to exercise known and new-found knowledge repeatedly, therefore making provision for repetition throughout lessons (Clay, 1993:15). The repetition and practice elements in the intervention lessons represent Behaviourism (See 2.3.2). Although I support the opposite of Behaviourism, namely a Psycholinguistic view, the idea was to help learners form “good” habits through repetition and practice, and to prevent them practising “bad” habits by avoiding incorrect content. Therefore I incorporated these principles within a constructivist framework i.e. one in which learners constructed their own knowledge by drawing on multiple sources of information in continuous texts.

In order for me to build repetition into my lessons with the intention of assisting learners’ linking system, I had to do planning that integrated letters, words and whole texts in reading and writing (Buckenmeyer, 2005:22). Caine (2008) describes what this entails, and includes examples such as physical interaction between the teacher and learner that allows learners to ask questions (Caine, 2008:139).

The links that the learners in the target group created, formed the foundation of their process of comprehension (Hornsby, 2000:24). These links helped the learners understand the reciprocity of reading and writing in order to use what they learned in reading or writing to apply in new reading and writing situations.

#### **4.4.2.3 The need to create interactivity between reading and writing**

As seen in 4.4.2.2, the target group in my study responded positively to exposure to texts in order to establish the known and create links to new information. Considering the improvements in the target group's assessment and lesson performance (See Figure 4.1), it is possible that they had a preference for the "whole-to-part phonics" strategy as opposed to a "part-to-whole phonics" strategy (Moustafa, 1998:135). The exposure to texts influenced the low-progress learners' phonics knowledge, and impacted their word-level activities and whole-text reading level (See Addendum I1). Part of the benefit of this exposure to texts was that the learners recognised the interactivity between reading and writing, which enabled them to use it as a strategy to apply in literacy activities. At the basis of all the learners' writing was the ability to write their own name, as was also evident in Nathanson's (2008) research. For some of the learners, their names were the starting point for writing new words which contained the same letters as their names. In some cases, learners were able to transfer the knowledge of the letters in their names to reading, and apply it in a strategy of recognising letter-strings in the words of a text. In turn, whole text reading influenced the learners' oral grammar, on which they relied to write their stories. For example, this influence of narrative structure was clearly evident in one of the learner's writing samples. She made use of the high-frequency words and story structure of the text "Party Time" to write her own story, aptly named "The Bird Party" (See Addendum D7i; D7ii).

During this integration of reading and writing, it is important to consider the reading level of each individual because of the developmental nature of reading and writing. Accordingly, transfer between reading and writing must be made explicit (Buckenmeyer, 2005:24). The action of transfer should be taught by the teacher, because transfer does not take place naturally. I constantly made the target group aware of various sources of information in previously read texts or in some of their own stories. This then became my responsibility, to prompt and question the learners during the act of reading and writing in order to remind them of the various sources of knowledge that they could rely on to complete the literacy activity at hand. This type of teaching is encapsulated in Hornsby's (2000) discussion of *directive* instead of *direct* instruction (Hornsby, 2000:14). The traditional South African approach to teaching constitutes *direct* instruction, where teachers have a set curriculum and they teach with the assumption that learning is uniform to every learner (Flanagan 1995; Bloch 2000, 2006; Nathanson, 2008). However, *directive* instruction is more relevant to learners and is constantly informed by a teacher's knowledge and experience, supported by teaching with an intention to transfer. Directive instruction thus assists learners in the discovery of new knowledge and strategies in a teacher-guided situation.

#### **4.4.2.4 The need for learners to discover new strategies**

Once the learners discovered new strategies, they needed the “freedom” to apply them. In their classrooms, each of the learners in the target group was, to a great extent, taught by means of direct instruction, which often did not leave room for exploration (See 4.4.3). During the pre-test and the first segment of lessons that followed, it also became apparent that all the learners made use of a “sounding-out” strategy, whenever they could recognise the letters, in order to read (See Addendum D8). This resulted in irregular reading and led to reading without comprehension. It was thus my role to model more effective strategies in different reading and writing situations. By mid-test, the target group was already more aware of different strategies that they could deploy. For example, during text reading, one learner enjoyed inferring, linking text with personal experiences (Martin & Hydén 2006; Pinnell, 2001) and predicting what could happen next (Block & Duffy, 2008). Two other learners changed their intonation to a whisper in a situation where the text described a mouse’s careful movements with an owl lurking in the background (See Addendum D10). This change in intonation was a practical example of how the learners started to understand what they were reading, and indicated improved comprehension.

Another common strategy that all four learners in the target group developed, was the identification and use of syntactical patterns (Clay, 1991:293). This was evident in two instances: (1) reading repeated refrains in a story, and (2) understanding the syntactical pattern of the whole text. The learners quickly recognised any repeated refrains in the stories that I read to them, which were at a higher level than their own reading level (See Addendum D11). They joined in the reading of the refrain, which allowed them to be part of the reading of more difficult texts, thus motivating them to attempt more stories at higher book levels (See 4.4.7). Secondly the target group was able to identify with the syntax used in the little books they read, because it was consistent with the grammar in their own natural oral language patterns. This assisted them in predicting and reading the whole text. A good example of improvement in the use of syntax in reading was when one of the learners moved from inventing texts to problem-solving texts, in order to read the print and get a message from the book. His initial “reading” was an invention according to an inappropriate “book language” since he could not “anticipate the next word, because [he was] unaware that reading should sound like language” (Fountas & Pinnell, 2006:3). Therefore, it is very important for a teacher to use appropriate, supportive texts that allow learners to develop appropriate strategies for comprehending texts (Dewitz *et al.*, 2009:104). Mesmer (2010) has found that levelled “little” books (i.e short, interesting texts that can be read in one session) were more in accordance with children’s natural language and contained double the number of high-frequency words than decodable texts. These levelled books sustained a more

fluent reading than decodable texts, thus assisting comprehension. The books I used in my research were levelled according to international Reading Recovery® standards (See Addendum C2). In teaching reading, I used directive instruction, which included strategy-teaching in order to produce learners with self-extending systems, who could regulate their own reading and writing in the act of becoming comprehending, independent readers and writers (Clay, 1991:3). As is evident from the discussion thus far, providing learners with ample opportunities to read continuous, levelled texts is an essential part of achieving this aim.

#### **4.4.2.5     *The need for supportive materials***

As mentioned in 4.4.2.4, I made use of the international Reading Recovery® standards. The benefit of using such an internationally levelled set of books is that it provides researchers with the means to compare the reading levels of learners across grades in various countries. It also enables researchers to relate different book-leveling systems in different countries, to one another, so that they can compare research data internationally. Not only benefits derived from research should drive an Education Department to make levelled books available, but also the importance of levelled texts for each learner's individual reading support and learning (See 2.9.2). Unfortunately, a comprehensive graded system of books is not available in South Africa though there is a great need for such a system in order to provide learners with comprehension-fostering texts.

#### **4.4.2.6     *Factors that influence comprehension***

There are various complex factors involved in the act of comprehending a text. Clay (1991:6) describes reading such a text as a "message-getting, problem-solving activity which increases in power and flexibility the more it is practised". By the end of my research intervention, the target group learners were applying a number of strategies to problem-solve and comprehend a text. This demonstrated a shift in their thinking from the start to the end of the intervention. At the start of the intervention, the learners' attempts at problem-solving texts were unsuccessful, for example, although illustrations can assist in learning to read, the target group tended to focus wholly on the illustrations when they struggled with the text, rather than on the printed text. Thus, they created their own version of a story, based on the illustrations - as can be seen in Table 4.6 (See 4.4.2.2). This finding corresponds with the data in Nathanson's study (2008:129), which indicated that even in Grade 4 there were learners who were unaware that they should attend to print in a book.

**Table 4.6: Example of Picture Reading from *Ben's Bath***

<b>Actual text</b>	<b>L1's adaptation</b>
Ben has a bath.	Here is the pug.
In goes the plug.	
In goes the mat.	Falled in the bath.
In goes the water.	
In goes the soap.	Here's the brush, but the doggy was scared.
In goes the brush.	
In goes the duck.	The dog likes fish and a duck.
In goes the fish.	
In goes the frog.	
In goes the boat.	
Off come the shoes.	Time to get ready for bed.
Off come the clothes.	
In goes Ben.	
Splash!	
Out goes the water!	The doggy is funny.

Another action that stood in the way of comprehension was that the target group memorised texts. Although it might have led to fluent reading, it did not constitute comprehension of the text. Nathanson (2008:130) also described the impact of memorised or recited books as an act that does not challenge learners by “forc[ing] them to interact with texts, problem-solve and learn new things”. Block and Duffy (2008) point out that once learners memorise a text they can no longer practise prediction, which is an essential comprehension strategy. Therefore, in the intervention, the learners’ habit of memorising and then reciting texts had to be unlearned and appropriate strategies relearned in its place. By interacting with the learners and modelling good problem-solving strategies, I helped the target group develop and apply strategies more effectively. After the mid-test, the data from the intervention lessons mirrored a more appropriate use of picture-cues and no more reciting of texts (See Addendum D9). The target group was able to avoid inventing a text based on the pictures, and instead used the pictures as cues to assist them in reading the text. Importantly, this sentence-picture verification assists learners in engaging their neural processes in “dealing with visual language on one hand and nonverbal objects on the other” (Paivio, 2008:102). Another good strategy that arose from the instruction the learners received in the intervention was rereading. Block and Duffy (2008) point out that “rereading” is a comprehension strategy that has been verified by recent research (Dermitzaki *et al.*, 2008:476; Dewitz *et al.*, 2009:105; Justice, 2006:294). By rereading, the learners placed “the correct response in its correct matrix of association so that sound patterns, grammar,

intonation and meaning are all correct” (Clay, 1991:251). Therefore, rereading reinforced good strategy use, enabling the learners to transfer successful problem-solving processes to other contexts.

#### **4.4.2.7 Maturity in literacy**

Through the processes of creating links by drawing on the reciprocity of reading and writing, using strategies and ultimately pursuing comprehension, the target group developed more maturity in literacy. This maturity was reflected in the Concepts About Print Assessments (CAP) and could be observed through what learners *did* with a book and not what they *said* about it (Clay, 1991:152). All the learners’ initial CAP scores were low and indicated a lack of awareness of the rules that govern orthography of the written language, which guide the reading of a text (Justice, 2006:291; See Addendum I1). Therefore I had to concentrate on creating an awareness of CAP during the reading of texts, which included making proper terminology explicit, for example *letter, word, exclamation point*. As the target group’s scores increased, their maturity in literacy grew accordingly, and played a big part in the four learners’ motivation to work hard and take on new literacy challenges.

#### **4.4.2.8 Emotional influence and motivation**

Emotions played a big part in the target group’s willingness to attempt literacy challenges. During the pre-test and first instalment of research-based literacy lessons, there were a number of indicators that the target group’s emotional well-being influenced their reading and writing. One learner wrote in a soft, shaky and hesitant manner whenever she felt uneasy or unsure (See Addendum E1). Another learner claimed he had “stage fright” and he would rather invent his own story than attempt to read the text and make mistakes. A third learner became frustrated with writing because he could not write fluently, which resulted in an unwillingness to write (Clay, 1993:30). The fourth learner disliked making mistakes and would either rush her work to avoid discussions concerning errors in her reading and writing; or memorise texts in order not to read incorrectly. Thus the emotion of possible failure played a big role in the whole target group’s initial unwillingness to comprehend literacy via shared experiences. This could be a result of the traditional South African approach where only the “correct answer” is acceptable and the focus of interventions is on what learners *cannot* do (See 2.1.5). However, neurochemical science indicates that learners respond positively through growth from the mastery of genuine but realistic challenges (Lyons, 2003:32; 73; Caine, 2008:130). This highlights the need for activities in which a learner is successful, yet challenged on a level at which he is able to problem-solve. As the learners in the target group experienced success at a certain level, then were challenged at a new level they had previously perceived as too difficult and now experienced success, they became more positive and motivated to succeed at each successive level. In Peter’s case, such a



“next level” (level 5) was too difficult at one stage. The solution was to shift him back one level (to level 4 according to Reading Recovery® book levels) to experience success again (Clay, 2002:24). This re-established his strategies so that he regained self-confidence, after which he was able to apply his strategies successfully on the following level (level 5 according to Reading Recovery® book levels).

Dermitzaki *et al.* (2008:475) found that motivation indirectly affects learners’ performance through their persistence, amongst other factors. Based on Dermitzaki *et al.*’s (2008) argument, Margolis & McCabe (2006) identified the following two principles for motivation: the use of materials that will ensure success for a learner; and instruction linked to a learner’s interests and goals. Increased concentration and more self-assuredness for the learners in the target group were other benefits that resulted from taking account of the learners’ emotions during instruction. The feeling of success in one activity or level created an intrinsic motivation in the learners to relive the same success on the next level. From this discussion it is clear that ensuring success for each learner required great planning in terms of materials and in linking instruction to each individual learner’s interest and goals.

#### **4.4.3 Individual progress**

Although recurrent patterns and needs could be recognised in the whole target group’s data, the actions described under each recurrent pattern did not happen simultaneously in all four learners’ work. There was also a wide range of reading behaviours (See 2.5.1) that manifested in every low-progress learner’s individualistic way of reading and writing. Each learner experienced the work differently and was not on the same level as the other learners in the target group at specific points in time. In these situations, it was vital to have a levelled system of books that allowed me to suit the correct book to each learner in the same grade, at the specific point in time (See Addendum C4). A short discussion of each individual learner in the target group follows, based on the assumption that “[a]ll children are ready to learn something, but some start their learning from a different place” (Clay, 2002:9).

##### **4.4.3.1 Mia**

Mia was a six-year-old girl who started out as a very nervous reader and writer. She found it difficult to use her oral language as a resource because of her irregular pronunciation of words and absence of good sentence structure. This influenced her writing greatly, together with the fact that she had minimal knowledge of letter-sound correspondence, which was reflected in her identification of 15 letters out of 54 in the Letter Identification pre-test (See Addendum D3). Mia was in a different preschool from the school she had attended in Grade one, and might have received different instructions and exposures to literacy. Initially I had to consider Mia as an emergent reader and writer, with minimal background knowledge in

literacy. Through interactive reading and writing, she gained more literacy experience as a base on which to build and link new information (See 4.4.2.2). She was able to progress through all the lessons at a slow pace towards the post-test. Although Mia did not reach the proficiency level of the average-progress learners, she was able to improve her average results in every assessment (See Addendum E1; Figure 4.7).

#### **4.4.3.2 Marc**

Marc was a six-year-old boy with moderate conversational skills and low self-esteem concerning his reading and writing skills (See Addendum F1). He needed a very safe environment to work in if he was to participate in an activity (See 4.4.2.8). His self-confidence level rose the moment he realised he could actually read. During the pre-test, Marc seemed to have good control over sounds he heard in his speech, but he could not express this knowledge in written language. Like Mia, Marc was in a different preschool and might have received different exposures to texts. This was one of the main focuses of my instruction: to use the many loose knowledge items he had to guide him towards a better understanding of writing as well as reading. Marc thus had sufficient prior knowledge as a basis to work from and link new knowledge to. His progress, like Mia's (See Figure 4.7; Addendum I1) was slow, and did not reach the level of the average-progress learners. However, Marc made great personal gains in motivation, and sustained intervention would see him improve even more in both reading and writing.

#### **4.4.3.3 Peter**

Peter was known to me from his previous year in pre-primary, therefore we already had a good relationship to work from. At the beginning of the research he was six years old, and he turned seven in the last week during the post-test. He had good exposure to language structures and was familiar with book language. However, Peter had a lisp, which interfered with sounds such as *th*, *s*, and *z*. Also, initially, he tended to whisper answers to prompts and questions, even when they were correct, because he felt unsure of what he knew and how to use it. Peter's reading displayed use of all three cues, namely syntax, visual and meaning, but he could not orchestrate the cues to result in fluent reading. In the initial intervention lessons, I modelled how cues and strategies are applied to texts for fluent reading with comprehension. Peter's subsequent success in fluent reading affected his frustration with writing in a positive way (See 4.4.2.7), and he started to write longer stories during interactive writing (See Addendum G1).

#### **4.4.3.4 Suzy**

Suzy was a very energetic seven-year-old girl who was eager to read and write. A key aspect that hindered learning was her inability to take time and consider her actions (See

Addendum H1). Her reading and writing vocabulary were the highest in the target group in the pre-, mid- and post-tests (See Addendum E1). Her knowledge base was thus probably wider, providing more possibilities to link new knowledge to. Another specific issue that required attention in all the reading activities was Suzy's inability to think "beyond the text" (See 2.9.4). This might have been a result of her impatience and led to her ignorance to thinking beyond the text. She was only able to discuss texts when we started to link the stories to personal experiences and later to her knowledge of the world (See 2.9.3). A better awareness that texts can tell stories and/or give information developed for Suzy. This new knowledge of texts led her to enjoy texts and the discussion about them during and after reading the text. The result was increased motivation. She tested as one of the strongest learners in both the target group and the control group in the post-test (See Figure 4.7).

#### **4.4.4 Conclusion following qualitative data**

It is evident that each of the four learners made progress from where they were to somewhere else (Clay, 2002:26). An important factor in their progress was my close observations of the learners' literacy behaviours (See 3.3.4.1) in order to understand each individual's strengths and weaknesses on the task at hand, and to adjust instruction methods accordingly (Dermitzaki *et al.*, 2008:487). To this end, Clay's (2002) *An Observation Survey of Early Literacy Achievement* was very successful in providing insights into each learner's competencies (O'Connor & Yasik, 2007). The observations and instructional methods were thus pivotal for each individual in the target group's progress. Justice (2006) endorses evidence-based practice, which means that teachers have to stay "updated" on the most current successful research practices, for example, the reciprocity of reading and writing. Teachers who integrate reading and writing in their lessons will be able to manage teaching time better, by combining the teaching of skills and strategies that learners need in literacy activities (Buckenmeyer, 2005:32). It was close observation and planned teaching that led to the individual successes for each learner in the target group.

The qualitative data's focus was limited to the individual, whereas the quantitative data was utilized to compare the two research groups. In the following section the quantitative data is considered, in order to compare two groups' progress, namely the target group and the comparison group.

## **4.5 QUANTITATIVE DATA ANALYSIS**

### **4.5.1 Introduction**

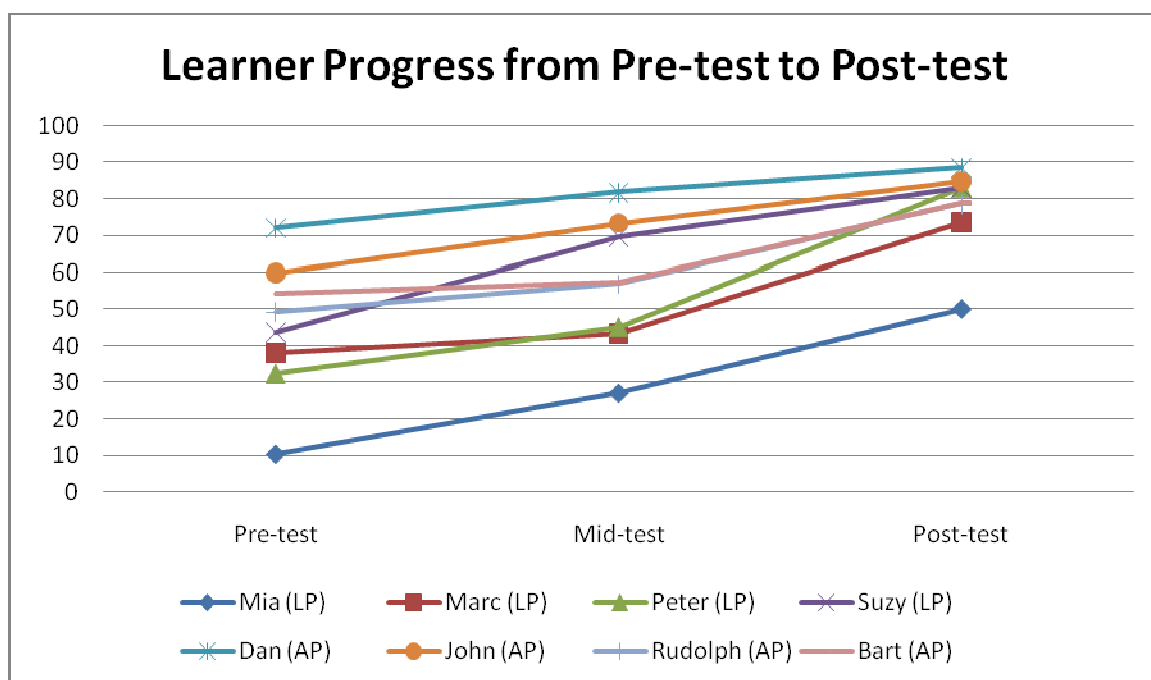
During the research, tests were conducted at three different times, namely the pre-test, mid-test and post-test (see 3.3.4). During each test, every learner (in both the target and control

groups) completed six assessments for analysis, both qualitative (see above) and quantitative. Each assessment was marked according to the guidelines set in Clay’s (2002) *An Observation Survey of Early Literacy Achievement*. Each assessment provided scores that could be processed into percentages as data for possible quantitative analysis.

#### 4.5.2 A comparison between all eight learners

##### 4.5.2.1 Introduction

As stipulated in Chapter 3, there were two groups in my research, namely the control group and the target group (See 3.1). The learners in the control group were Dan, John, Rudolph and Bart; and the learners in the target group were Mia, Marc, Peter and Suzy. The percentages of each learner’s pre-, mid- and post-test assessments were calculated and inserted into a spreadsheet on Excel. From there I used the “average” function to calculate each learner’s averages of all six assessments at each assessment time. These averages were then inserted into figure-form, and are given in Figure 4.1. The y-axis represents the average percentages achieved and the x-axis indicates the time at which each average was achieved, either at pre-, mid- or post-test.



**Figure 4.1: Learner Progress from Pre-test to Post-test**

As hypothesised, all learners’ average test scores increased from the pre- to the post-test (in Figure 4.1). Peter and Mia both started at a much lower level than Marc and Suzy in the low-progress group and made a steep incline towards the post-test (Peter by 50%; Suzy by 39%) whereas John and Bart, who did not participate in the research intervention lessons,

displayed a gradual increase towards the post-test (John by 25%; Bart by 24%). The cluster of Dan, John, Rudolph and Bart represents what the class average would be for this group of Grade ones. Mia and Marc did not reach this average grade level, but a sharp increase in scores proved their progress (Mia by 40%; Marc by 32%). Therefore all four learners in the target group, Mia, Marc, Peter and Suzy, increased their test scores from the pre-test to the post-test with the knowledge that they gained from the research-based lessons and also the knowledge each learner gained in the classroom.

These results have further implications. Consider, for example, the sharp increase in the scores of the target group after the mid-test. A reason for this increase could be that the learners were not used to the approach I took to teaching literacy. Therefore the four low-progress learners used the time from the pre-test to the mid-test to grow accustomed to the new approach. After the mid-test, they were used to my research-based approach, and they were able to use the familiarity with my approach to support their learning. It is thus possible for learners to adjust their learning to the research-based approach that I used.

A second implication of these percentages concerns accelerated progress (See 2.6.1). Every learner in the target group's average at the pre-test was lower than all the control group's learners. However, by the post-test, some of the low-progress learners had caught up with the average-progress learners, as indicated by the cluster at the post-test. This means that the low-progress learners were able to accelerate their learning over the same period of time during which the average-progress learners' learning maintained only a gradual increase. This is illustrated in the percentage increase of the low-progress learners in comparison to the average-progress learners. The low-progress learners made an improvement of 35% and above from pre-test to post-test, with Peter achieving an increase of 51%. The average-progress learners only made an increase of 29% and below from pre-test to post-test, with Rudolph making the highest increase of 29%. Therefore, in answer to my first research sub-question (See 3.3.2.1), the individualised contingent literacy programme was successful in increasing the average assessment scores of each learner in light of a quantitative perspective. Research-based literacy lessons were thus successful in the context of my research.

The third implication concerns the improvement of even the lowest progressing learners. Although Mia was still well below the average-progress group by post-test, she made a great increase in her own average scores during the research, i.e. 10.3% at pre-test, 27% at mid-test and 50% at post-test. This shows that any learner is ready to learn and improve their literacy skills, given the opportunity and proper research-informed teaching.

Although all eight learners' reading rate was calculated according to a percentage and considered in the average of their performance in Figure 4.1, each learner's level of reading by pre-test and post-test will also be represented as the following:

**Table 4.7: Reading Recovery® Book Levels at the End of the Research**

LEARNER		READING RECOVERY® BOOK LEVEL BY PRE-TEST	READING RECOVERY® BOOK LEVEL BY POST-TEST
Target group/Low progress learners	Mia*	0	1
	Marc*	0	2
	Peter*	1	4
	Suzy*	1	5
Control group/Average progress learners	Dan*	4	6
	John*	2	5
	Rudolph*	2	4
	Bart*	2	3

\*All names are pseudonyms

It is evident that Mia and Marc were still well below the average-progress learners' level, but Peter and Suzy were well within the expected average reading levels. Bart, an average progress learner, had quite a low reading level and, given the opportunity, could have shown the same results as Peter and Suzy with research-based lessons. In the control group, John advanced the most with three levels, and in the target group Suzy advanced the most with four levels and caught up with John. This mirrors the accelerated learning seen and discussed in Figure 4.1. Once again, the importance of a range of levelled books made this acceleration possible, and stresses the need for supportive material (See 4.4.2.5).

#### 4.5.3 A statistical analysis of the assessment results

Mixed model repeated measures ANOVA'S were conducted at the Stellenbosch University's Centre of Statistical Consultation (Kidd, 2010) with children (nested within groups) taken as random effect and time and group as fixed effects. Thus three fixed effects with the following hypotheses were tested:

- Time null hypothesis: average for all the time points are equal regardless of group
- Group null hypothesis: average of the two groups are equal regardless of time

- Time\*Group interaction null hypothesis: the differences between groups (if any) are equal for all time points

A 5% significance level ( $p < 0.05$ ) was used as a guideline for significant effects (rejecting the null hypothesis).

In the case of significant (or near significant) effects, Fisher least significant (LSD) post-hoc tests were conducted.

The figures mentioned above, as well as tables, are discussed in this part of Chapter four, to either prove or refute the aim of the study – assisting low-progress learners to reach the level of average-learners in terms of literacy. Each of the assessments will be discussed separately, considering all three test times, namely the pre-test, mid-test and post-test.

#### 4.5.3.1 Assessment one: LETTER IDENTIFICATION

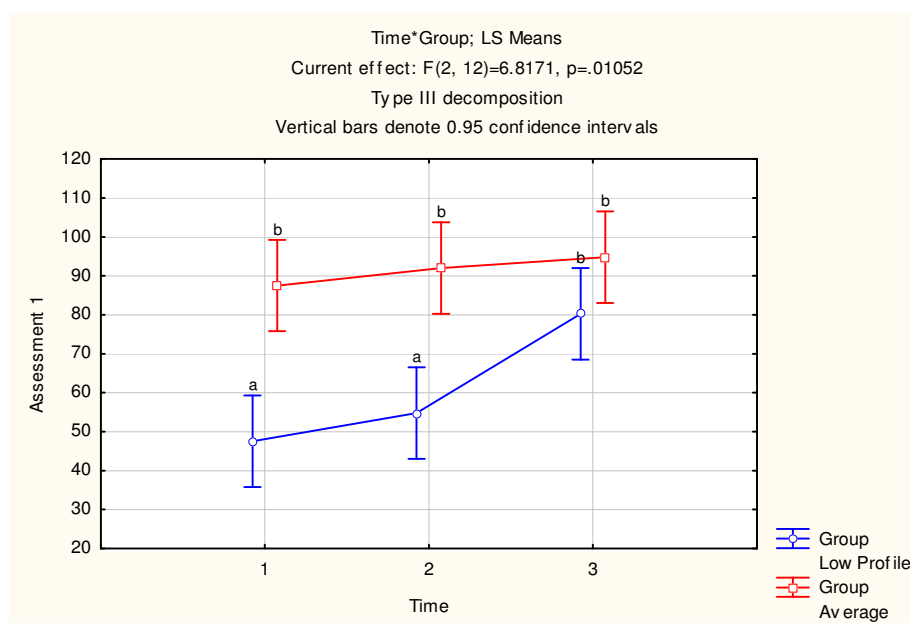
**Table 4.8: ANOVA table for Assessment 1: Letter Identification Task**

Effect	F-statistic	p-value
Time	F(2,12)=14.1	<0.01
Group	F(1,6)=24.04	<0.01
Group*Time	F(2,12)=6.82	0.01

Table 4.8 represents the ANOVA results for the Letter Identification Task that required the learners' identification of individual letters at pre-, mid- and post-test (See Addendum C4i). The interaction was significant, and therefore only the interaction figure will be analysed.

**Table 4.9: Fisher Post Hoc (Time\*Group): Letter Identification Task**

Time	Group	Assessment 1 Mean	Assessment 1 Standard Error	Assessment 1 -95.00%	Assessment 1 +95.00%
1	Low Progress	47.50	5.39	35.76	59.24
1	Average Progress	87.50	5.39	75.76	99.24
2	Low Progress	54.75	5.39	43.01	66.49
2	Average Progress	92.00	5.39	80.26	103.74
3	Low Progress	80.25	5.39	68.51	91.99
3	Average Progress	94.75	5.39	83.01	106.49



**Figure 4.2: Time\*Group; LS Means Assessment 1: Letter Identification Task**

Figure 4.2 represents Table 4.9. The low-progress group's time 1 confidence interval does not overlap with the average group's time 1 confidence interval. The same can be read from time 2. This could indicate what was known as roaming around the known with the low-progress learners (Clay, 1993:12-13). They were not taught letters directly, and had to grow accustomed to the researcher's different approach to guiding their improvement of letter identification (See 4.4.2.4).

Time three indicates a statistical overlap which shows that the low-progress learners were able to improve their assessment marks in the *Letter Identification* to meet those of the average-progress learners. The improvement achieved by the low-progress learners in turn indicated that the research approach was successful.

#### 4.5.3.2 Assessment 2: WORD READING

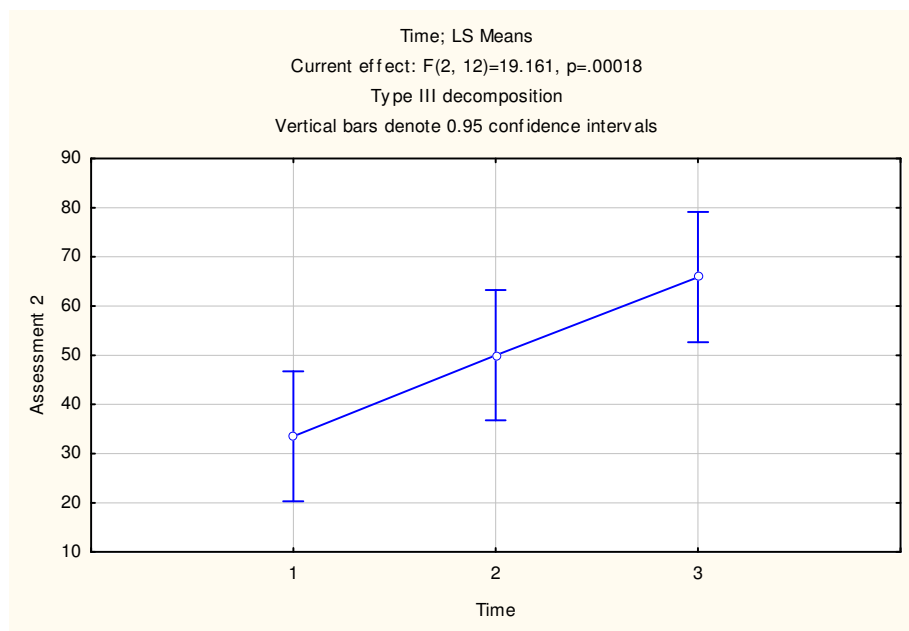
**Table 4.10: ANOVA table for Assessment 2: Word Reading Task**

Effect	F-statistic	p-value
Time	$F(2,12)=19.16$	<0.01
Group	$F(1,6)=6.13$	0.05
Group*Time	$F(2,12)=0.32$	0.74

Table 4.10 represents the ANOVA results for the Word Reading Task that required the learners to read of a list of 15 words at pre-, mid- and post-test (See Addendum C4ii). The



interaction was not significant. However, the small group size could have affected the power of the assessment. The “Time Effect” was significant and will be added to the discussion.

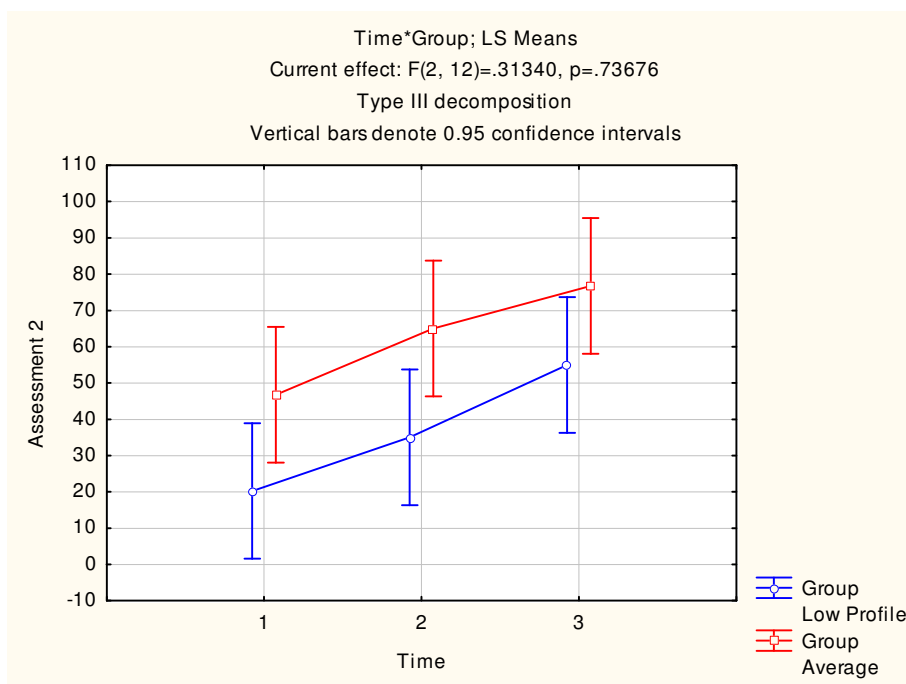


**Figure 4.3: Time; LS Means for Assessment 2: Word Reading Task**

Figure 4.3 shows that the general tendency of the whole group’s assessment average was to rise. Together, the target group and the control group sustained a natural increase in averages over the same amount of time.

**Table 4.11: Time\*Group; LS Means Assessment 2: Word Reading Task**

Time	Group	Assessment 2 Mean	Assessment 2 Standard Error	Assessment 2 -95.00%	Assessment 2 +95.00%
1	Low Progress	20.25	8.59	1.54	38.96
1	Average Progress	46.75	8.59	28.04	65.46
2	Low Progress	35.00	8.59	16.29	53.71
2	Average Progress	65.00	8.59	46.26	83.71
3	Low Progress	55.00	8.59	36.29	73.71
3	Average Progress	76.75	8.59	58.04	95.46



**Figure 4.4: Time\*Group; LS Means Assessment 2: Word Reading Task**

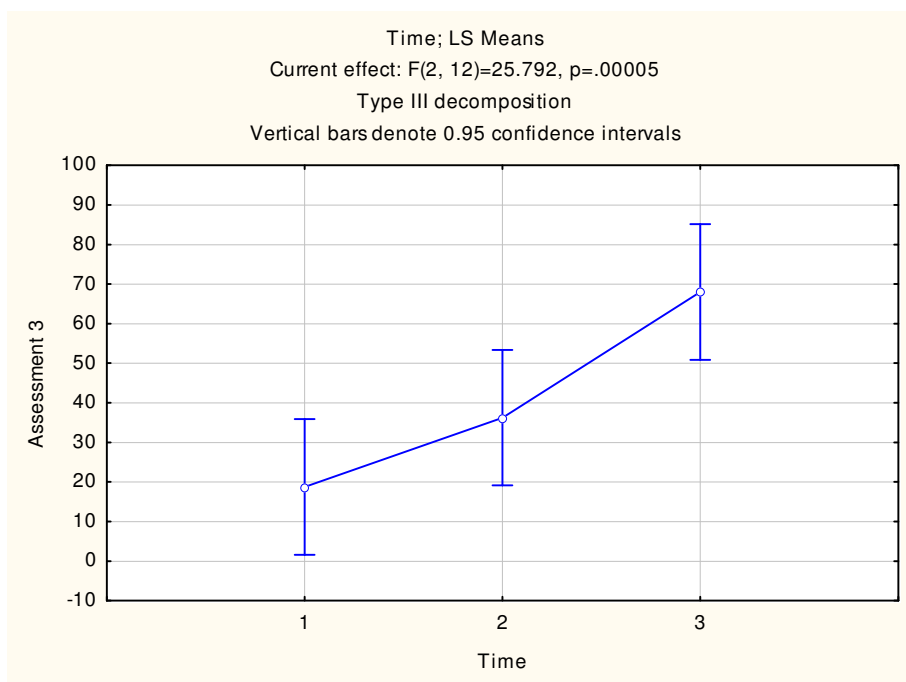
Figure 4.4 represents Table 4.11. The low-progress group remains consistent with the average-progress group. The low-progress group constantly measured lower than the average-progress group, but both display an increase in average percentages over the three test times.

#### 4.5.3.3 Assessment 3: WRITING VOCABULARY

**Table 4.12: ANOVA table for Assessment 3: Writing Vocabulary Task**

Effect	F-statistic	p-value
Time	$F(2,12)=24.79$	<0.01
Group	$F(1,6)=0.11$	0.75
Group*Time	$F(2,12)=0.03$	0.97

Table 4.12 represents the ANOVA results for the Writing Vocabulary Task that required of the learners to write as many words as they could (spelled correctly) at pre-, mid- and post-test (See Addendum C4iii). The interaction was not significant, and therefore it can be expected that the low-progress group’s test scores were consistent with those of the average-progress group’s test scores (See Figure 4.6). The “Time Effect” was the only significant effect, and will be added to the discussion.

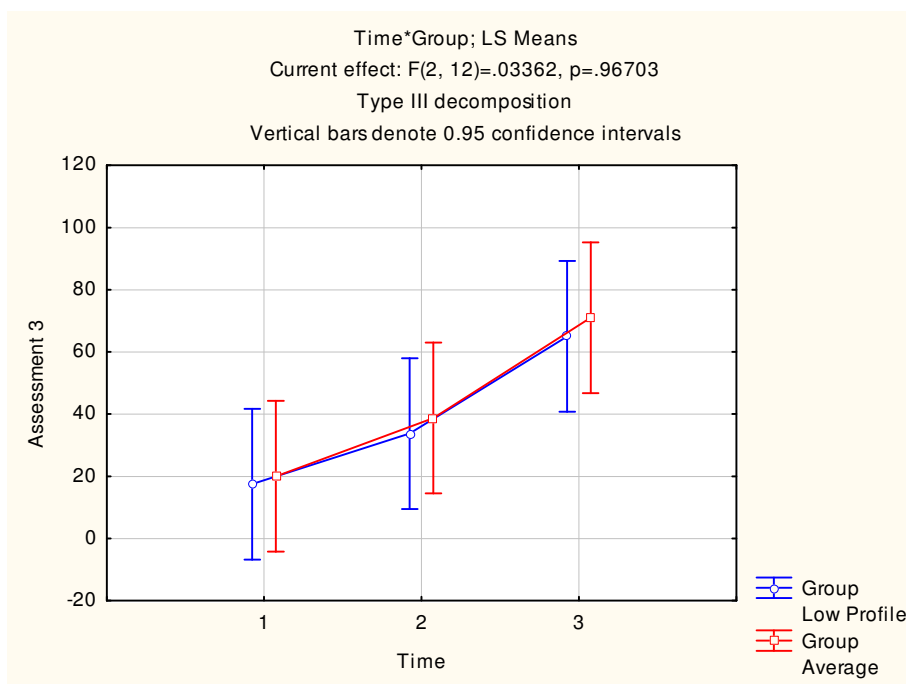


**Figure 4.5: Time; LS Means for Assessment 3: Writing Vocabulary Task**

Figure 4.5 shows a gradual increase between time 1 and time 2 for the two groups, but a sudden upsurge from time 2 to time 3. Again, as with the Word Reading Task, it was natural progression and a variety of influences that resulted in this increase.

**Table 4.13: Time\*Group; LS Means Assessment 3: Writing Vocabulary Task**

Time	Group	Assessment 3 Mean	Assessment 3 Standard Error	Assessment 3 -95.00%	Assessment 3 +95.00%
1	Low Progress	17.50	11.13	-6.74	41.74
1	Average Progress	20.00	11.13	-4.24	44.24
2	Low Progress	33.75	11.13	9.51	57.99
2	Average Progress	38.75	11.13	14.51	62.99
3	Low Progress	65.00	11.13	40.76	89.24
3	Average Progress	71.00	11.13	46.76	95.24



**Figure 4.6: Time\*Group; LS Means Assessment 3: Writing Vocabulary Task**

Figure 4.6 represents Table 4.13. The low-progress and average-progress groups measured a similar average at each test time, no influences resulted in a significant difference between the two groups. However, both groups displayed an increase between test time 2 and test time 3. Both groups thus improved in the number of words they were able to write.

**4.5.3.4 Assessment 4: HEARING AND RECORDING SOUNDS IN WORDS**

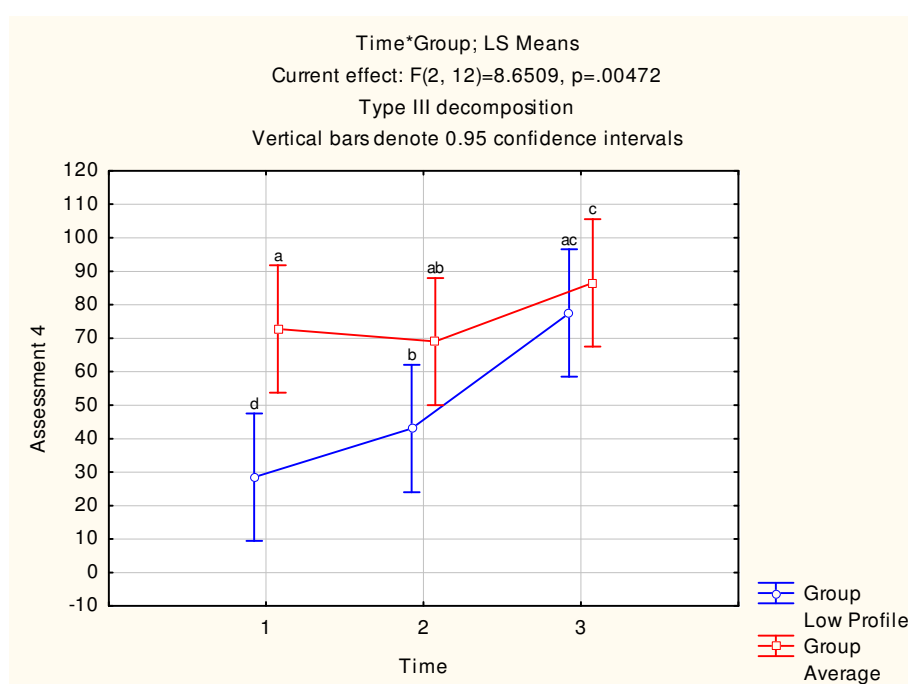
**Table 4.14: ANOVA table for Assessment 4: Hearing and Recording Sounds in Words**

Effect	F-statistic	p-value
Time	$F(2,12)=31.35$	<0.01
Group	$F(1,6)=5.43$	0.06
Group*Time	$F(2,12)=8.65$	<0.01

Table 4.14 represents the ANOVA results for the Hearing and Recording Sounds in Words Task that required the learners’ identification of individual sounds and sound sequences in words, and recording these letters, at pre-, mid- and post-test (See Addendum C4iv). The interaction was significant, and therefore only the interaction figure will be analysed.

**Table 4.15: Time\*Group; LS Means Assessment 4: Hearing and Recording Sounds in Words**

Time	Group	Assessment 4 Mean	Assessment 4 Standard Error	Assessment 4 -95.00%	Assessment 4 +95.00%
1	Low Progress	28.50	8.73	9.48	47.52
1	Average Progress	72.75	8.73	53.73	91.77
2	Low Progress	43.00	8.73	23.98	62.02
2	Average Progress	69.00	8.73	49.98	88.02
3	Low Progress	77.50	8.73	58.48	96.52
3	Average Progress	86.50	8.73	67.48	105.52



**Figure 4.7: Time\*Group; LS Means Assessment 4: Hearing and Recording Sounds in Words**

Figure 4.7 represents Table 4.15. In Figure 4.7 the low-progress group has a strong increase tendency in average, although the average-progress group also displays an increase. The average-progress group's increase is not as prominent as that of the low-progress group, considering that the low-progress group's first test time 1 was much lower than the average group, and ended on the same level by test time 3. A trend is visible here, which can imply a more significant result if the sample group was bigger.

**4.5.3.5 Assessment 5: CONCEPTS ABOUT PRINT**

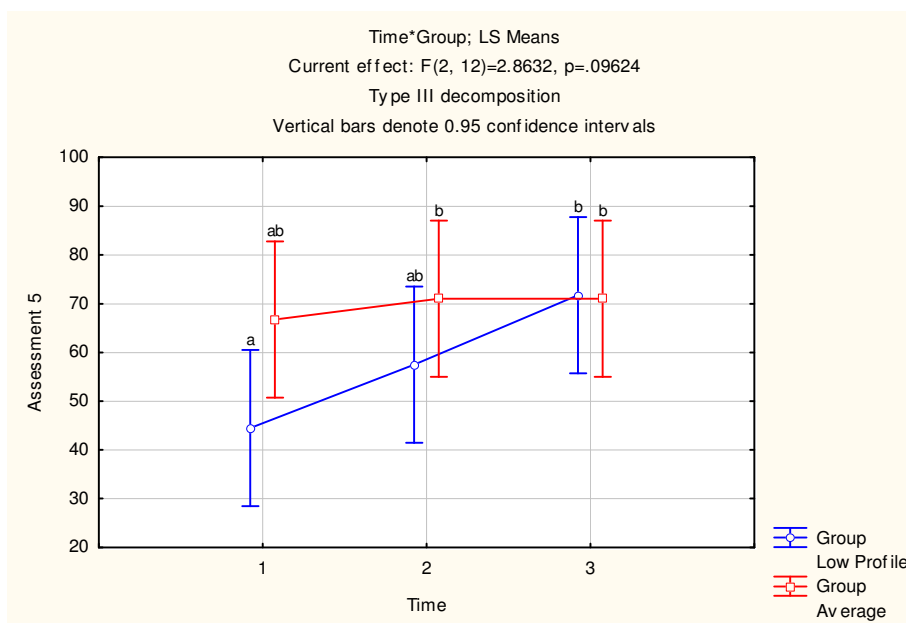
**Table 4.16: ANOVA table for Assessment 5: Concepts About Print**

<b>Effect</b>	<b>F-statistic</b>	<b>p-value</b>
Time	F(2,12)=5.29	0.02
Group	F(1,6)=1.77	0.23
Group*Time	F(2,12)=2.86	0.10

Table 4.16 represents the ANOVA results for the Concepts About Print Task that required of the learners to answer questions about a whole text at pre-, mid- and post-test (See Addendum C4v). The interaction was not significant and therefore it can be expected that the low-progress group’s test scores were consistent with those of the average-progress group’s test scores. None of the effects displayed significance; however Figure 4.8 illustrates a trend in the interaction between the low-progress and average-progress groups. The low power, as a result of a small sample group, could have affected this result. If the same assessment were done with a larger learner group, the interaction might have been significant.

**Table 4.17: Fisher Post Hoc (Time\*Group): Concepts About Print**

<b>Time</b>	<b>Group</b>	<b>Assessment 5 Mean</b>	<b>Assessment 5 Standard Error</b>	<b>Assessment 5 -95.00%</b>	<b>Assessment 5 +95.00%</b>
1	Low Progress	44.50	7.36	28.47	60.53
1	Average Progress	66.75	7.36	50.72	82.78
2	Low Progress	57.50	7.36	41.47	73.53
2	Average Progress	71.00	7.36	54.97	87.03
3	Low Progress	71.75	7.36	55.72	87.78
3	Average Progress	71.00	7.36	54.97	87.03



**Figure 4.8: Time\*Group; LS Means Assessment 5: Concepts About Print**

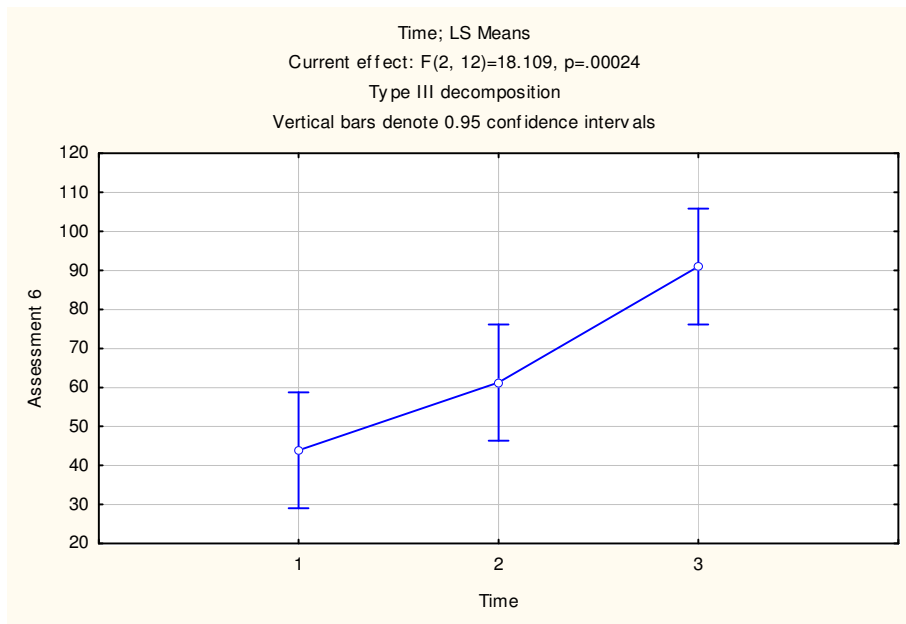
Figure 4.8 represents Table 4.17. Although the p-value does not display a great statistical significance, the interaction displays a trend between the two groups. The low-progress group started at a lower level average than the average-progress group, but ended on the same level of average. An accelerated increase in level is thus visible in the low-progress group’s figure while the average group’s level remains constant.

**4.5.3.6 Assessment 6: RUNNING RECORD**

**Table 4.18: ANOVA table for Assessment 6: Running Record**

Effect	F-statistic	p-value
Time	F(2,12)=18.11	<0.01
Group	F(1,6)=3.12	0.13
Group*Time	F(2,12)=0.95	0.42

Table 4.18 represents the ANOVA results for the Running Record that I recorded and observed while each learner read a whole text at Reading Recovery® Level 3 at pre-, mid- and post-test (See Addendum C4vi). The interaction was not significant, and therefore it can be expected that the low-progress group’s test scores were consistent with those of the average-progress group’s test scores (See Figure 4.10). The “Time Effect” shows significance and will be discussed.



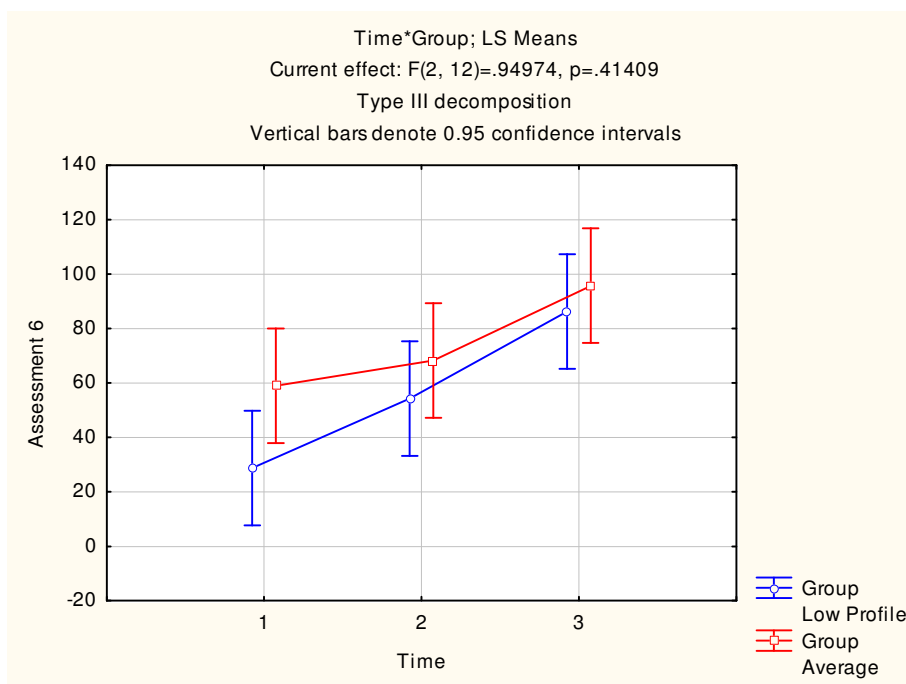
**Figure 4.9: Time; LS Means Assessment 6: Running Record**

In Figure 4.9 (Running Record) concurrent increase occurs as in Figure 4.6 (Writing Vocabulary). There is a gradual increase in levels between time 1 and time 2, but an upsurge between time 2 and time 3. This implies that the low progress learners had to measure with the average progress group by time 3, but could have brought the level down at time 1 (see Figure 4.10).

**Table 4.19: Fisher Post Hoc (Time\*Group) for Assessment 6: Running Record**

Time	Group	Assessment 1 Mean	Assessment 1 Standard Error	Assessment 1 -95.00%	Assessment 1 +95.00%
1	Low Progress	28.75	9.66	7.71	49.79
1	Average Progress	59.00	9.66	37.96	80.04
2	Low Progress	54.25	9.66	33.21	75.29
2	Average Progress	68.25	9.66	47.21	89.29
3	Low Progress	86.25	9.66	65.21	107.29
3	Average Progress	95.75	9.66	74.71	116.79





**Figure 4.10: Time\*Group; LS Means Assessment 6: Running Record**

Figure 4.10 represents Table 4.19. The low-progress and average-progress groups measured a constant, similar average at each test time. The low-progress group showed a constant increase, whereas the average-progress group showed little increase between time 1 and time 2 and a greater increase between time 2 and time 3.

#### 4.5.4 Conclusion following quantitative data

All six assessments showed a positive increase for both the average and low-progress learners as expected. The low-progress learners came within the “no significant difference” reach of the average learners in all six the assessments by time 3, bearing in mind that they were also on the same level at time 1 in cases of no significance (See 4.5.3.2; 4.5.3.3; 4.5.3.6). It is important to take note that these were group comparisons. Individual comparisons reveal either a need for further intervention and/or individual success (See figure 4.1). In addition, the size of the sample group was small and no significant results were expected. The result of two significant assessments and trends in a number of the non-significant assessments indicate a positive response to the intervention. Therefore, the results of my research, as a pilot study, were sufficient to justify further research with larger learner numbers.

#### 4.6 CONCLUSION

As seen in the quantitative data analysis, not all the statistical tests were significant. This could be a result of such a small sample size, since it was not expected that any of the

results would be significant with only four learners in the target group. Therefore I had to consider the results in light of both the quantitative and qualitative data in order to see the success or failure of my research intervention, for example, comprehension could not be measured by the statistics, but the use of comprehension strategies shows in the qualitative data. The question might arise whether the use of the assessments in my research are generalisable to other contexts. In answer to this, Lai *et al.* (2009) also made use of Clay's (2002) *An Observation Survey of Early Literacy Achievement* as their measurement instrument for data collection, and found it effective over gender and ethnicity. Therefore the assessments which provided the data in my research were applicable to every learner and therefore a trustworthy source of each learner's progress. Although this programme and assessments are applicable in many contexts, the detailed results might not always be exactly the same.

Throughout the first four chapters, further possible research areas arose from either literature or the data. The next chapter considers such research areas, answers the research questions and concludes my study.

## **CHAPTER 5: REFLECTIVE OVERVIEW AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

The purpose of the study was to observe low-progress learners' response to a research-based literacy programme using qualitative data. In addition, quantitative data was used to compare the literacy scores of low-progress learners with those of average-progress learners in order to measure the low-progress learners' improvement in relation to the average standard of their grade. The research took shape as an intervention programme with the low-progress learners, at their school. My goal was to observe a change in the literacy behaviours of the low-progress learners owing to participation in the research-based lessons. From my analysis of research results, I hope to inform future literacy interventions at schools as well as further research in the field of early literacy.

### **5.2 REFLECTIONS ON THE RESEARCH QUESTIONS**

In this subdivision I discuss the outcomes of the research according to the main research question and sub-questions, followed by recommendations for future research.

The main research question was: "How does contingent teaching help individual learners develop effective strategies for comprehending texts at the appropriate grade level?" In order to answer this question, two sub-questions were identified. Each of these sub-questions is discussed separately.

#### **5.2.1 Sub-question one: What are the effects of a different approach to literacy development on low-achieving learners?**

I identified three effects that the research-based intervention had on the learners, namely (1) the improvement in assessment scores, (2) the change in their interaction with literacy and (3) a positive emotional orientation towards reading and writing activities.

##### **5.2.1.1 *Improvement in assessment scores***

It was evident from the processed quantitative data that the low-progress learners as a cohort improved in each of the six assessments from the pre-test to the post-test (See 4.5.3). Each of the learners also improved in their individual test scores (See Figure 4.1; Addendum I1). The statistical results of the comparison between the target and the control groups, indicated that two assessments were significant and four were non-significant. The two tests that were significant were Letter Identification and Hearing and Recording Sounds in Words. Adams (1990) found that letter knowledge is an important indicator of later reading

ability. In addition, hearing and recording sounds is an important strategy for letter recognition and authentic writing. These significant tests in the target group thus indicate improvement towards better later reading ability and could therefore influence the other assessment results in a later stage, for example the Running Record.

Another possible reason for the non-significant assessment results could be due to the small sample group. The group average scores can be non-representative of each individual learner's progress, e.g. Mia who made a great gain. Statistics are usually based on bigger sample sizes and therefore it was expected that all the assessments would test non-significant (Kidd, 2010). However, two tests showed significant results. The improvement of the target group was significant in Letter Identification and Hearing and Recording sounds in words. This is also proof that letters do not have to be taught in isolation, the WLA stance that I took in the lessons was enough exposure for the learners to gain in letter knowledge. Overall, the statistical trend indicated that the pilot study merited further research on a larger scale.

Although the visual representation of the target groups' results demonstrated the good progress they made during the intervention, these clinical scores do not do justice to qualitative improvements that took place in their literacy processing behaviours. An analysis of the qualitative data bore evidence of the improvements in the target groups' comprehension, strategy use and development of a sense of story. These qualitative improvements were observed during learners' interaction with literacy, either in reading or writing.

#### **5.2.1.2 *Change in interaction with literacy***

All the learners, whether low-progress or average-progress, had the same initial strategy on reading and writing texts: they sounded out the words. This represented the phonic-based approach (See 1.4; 2.7.4) and was the only way the learners could solve a word that they wanted to read. This was thus the starting point from which the research-based lessons commenced. Therefore, one of the aims of the lessons in the intervention was to provide the low-progress learners with more strategies to unlock and process the meaning of texts and to assist in their writing (Clay, 2002:34). By the end of the research, the learners in the target group, all used a number of strategies during reading and writing activities (See 4.4.3).

Reflective discussions that took place between each learner and me, revealed that the way they work on literacy improved, as did their verbal use of language, which plays a very important part in a child's literacy development (See 2.2). In addition, the learners' vocabulary increased and their syntax improved (See 4.4.1.3). Two aspects that changed as

a result of the learners' interaction with literacy were thus (1) the development of strategies and (2) a language improvement as discussed in the following sub-sections.

#### 5.2.1.2.1 *Development of strategies*

As mentioned above, the intervention aimed to introduce learners to new strategies which they could incorporate in their repertoire of problem-solving approaches to literacy (See 2.5.2). The individuality of the lessons allowed each learner to add certain strategies in accordance with their current text-solving knowledge. To improve, it was not necessary for the learners to attain all the strategies at once, because some knowledge of items together with a few strategies can assist a learner sufficiently to work with new items in texts (Clay, 2002:35).

The development of the low-progress learners' strategies in my study reflected that of Clay (1991:224) and Nathanson's (2008:148) research. In the initial assessments, the learners displayed one or more of the behaviours discussed in the rest of this paragraph (Clay, 1991:224). They were often correct, but lacked the metacognitive strategies to know whether they were correct or not. They did not make sufficient use of syntactic and semantic structures while reading and were overdependent on memory and illustrations when reading. The exit data illustrated a shift to more controlled, thoughtful reading of texts. For example: the learners were able to detect and self-correct errors in their own reading and they used several cues simultaneously to improve their responses to the texts. In addition, the learners shifted their attention from an over reliance on illustration to integrated use of information from the print, illustrations and story meanings (DeFord *et al.*, 1991:85). Their limited use of strategies increased over a short time span. By the time the post-test was administered they were solving words, monitoring and correcting, gathering, predicting, maintaining fluency, adjusting, connecting, summarising, synthesising and critiquing (See 2.5.2).

The changes in the learners' literacy behaviours, the shift in their focus of attention and their attainment of strategies support the view that learning to read develops by reading, and learning to write develops by writing. Also, good use of strategies sustains further learning when reading more complex texts (DeFord *et al.*, 1991:79, 86; Clay, 2002:22, 26). Through the use of strategies, the low-progress learners thus develop a self-extending system that will enable them to learn other subjects.

For each of the low-progress learners, reading and understanding literature in other subjects ought to open up a new world of knowledge (see 1.2), which in turn can inform and direct their future academic success.

#### **5.2.1.2.2**      *Language improvement*

The learners' syntax and vocabulary improvement was due to a number of factors, namely the exposure to whole texts, the influence of the researcher-teacher as a demonstrator and model, and the use of good language structures during writing exercises (Calkins *et al.*, 2005:4; Clay, 1991:70; Weaver, 1994:336). The learners' language progress can assist them in the social collaborations in the classroom, such as group work. In classroom lessons where learners are required to do group work, each learner can promote his individual learning by observation of how other learners deploy their literacy strategies and behaviours (Weaver, 1994:334). Thus good language use is not only important for general conversations, but, also for the extraction of valuable information in social situations.

#### **5.2.1.3**      *Positive emotional orientation*

Each learner's improved assessment scores and their positive interactions with literacy reflected a mastery of literacy challenges. In turn, their mastery of literacy challenges supported a positive self-concept (Lyons, 2003:188). A positive self-concept was closely related to the teaching and learning process of each individual and resulted in higher expectations of themselves (Lyons, 2003:185). It can be said that the intervention set in motion a motivational cycle: each learner's accomplishments supported a positive self-concept, which in turn supported further accomplishments.

To conclude, the learners' positive self-concept was part of the foundation of their success and ensured their positive emotional orientation towards the research-based lessons and their own work. The emotional aspect attached to learning should therefore not be set aside, but constantly be taken into account in the process of learning (Lyons, 2003:188; See 2.5.3.2).

### **5.2.2 Sub-question two: How will a different approach change the teaching dynamic in the literacy classroom?**

To change the approach in classroom literacy teaching, I consider three elements, namely (1) the organisation of the classroom (See 2.6.1), (2) the materials used to teach and expose learners to literacy (See 2.9.3 – 2.9.7) and the literacy teacher (See 2.8).

#### **5.2.2.1**      *Class organisation*

The current structure and organisation of classroom literacy does not suit an approach which is governed by research-based practices, such as, guided reading, guided writing and the flexible and dynamic grouping of learners into appropriate reading and writing groups. Presently, basic aspects in many South African classrooms would have to alter to accommodate change. The aspects identified in my research were (i) learner grouping for reading and writing, (ii) seating and (iii) the literacy time table.

*i) Learner grouping for reading and writing*

Currently, learners in South African literacy classrooms are identified as either “lower”, “middle” or “higher” groups. Most classes are divided into these three groups without indicating why each learner is in their specific group. Clay (1991:218) suggests that learners be divided into groups that reflect “similar reading behaviours at a particular point in time”. Therefore it is only by means of careful observation of learners’ behaviours that learners can be placed in a certain group.

Clay (1991:219) also informs educators that regrouping should happen, and that it will not necessarily always be towards a higher reading level. This kind of flexible grouping does not happen in the majority of South African literacy classrooms. Research, such as that of Clay (2002) and Fountas and Pinnell’s (2007), shows that learners may become more independent because of a change in behaviours, and therefore should be promoted forward to a group reading at higher levels. However, a learner can also show unforeseen confusions which may lead to regrouping him with a group reading at a lower text-book level.

Importantly, whole class activities are still important and can ensure that learners in groups with lower reading levels come into contact with more difficult texts, for example, in shared reading and writing. Therefore the low-progress learners will receive exposure to texts that can enhance their own set of behaviours, which leads to progress.

*ii) Seating*

Jensen (2005) identifies seating as an important factor to learning. Seats can be grouped together or set in rows, depending on the type of the activity (Jensen, 2005:82, 83). However, the majority of classrooms I have visited prefer rows, without a change of arrangement according to activities. While class activities at the desks in rows might be more favourable for better focus and concentration on the teacher (Jensen, 2005:83), the teacher should also pay attention to the most successful way to plan seating for a particular activity. For example, a good arrangement for Guided Reading is of a half-circle of desks with the teacher in the middle, which allows for both group and individual interaction .

*iii) Literacy timetable*

Current timetables in some South African schools do not include reading in the learners’ home language everyday. Learners are not expected to interact with and practise their behaviours on texts at their level on a daily basis. This needs to change. Reading and writing should take place every day (Clay, 1993:9). Therefore the timetable should be planned in a way that will accommodate daily engagements with reading and writing.

Although the three above mentioned organisational features (i, ii and iii) may only require micro-level changes, they nevertheless play an important part in the flow of research-based literacy lessons for classroom application. The next important factor that I recognised as necessary for teaching dynamics to change, was the materials used to teach literacy.

### **5.2.2.2 Materials**

The most important materials in the literacy classroom consist of a variety of texts (see 2.9.3 – 2.9.7). Hornsby (2000:39-47) identifies different texts for different purposes:

- texts for reading aloud;
- texts for shared reading;
- texts for guided reading, and
- texts for independent reading.

A gradient of difficulty is important in each of these texts to assist the teacher to make “informed decisions about materials they select for children to read” (Clay, 1991:201). The type of text and the gradient or level of text assists a teacher’s planning for literacy according to her learners’ individual use of behaviours and strategies.

In contrast to the whole-text approach, ‘fill in the blank’ activities in the South African context do not sustain comprehension throughout a text. Also, these activities make little or no contribution to learners’ accumulation of strategies and behaviours in their development towards a self-extending system. Shorter texts that can be read in their entirety within a lesson that contains aspects of the main focus in a lesson, can be the alternative to decontextualized work-sheets (Hornsby, 2000:44, 45).

Other than the texts used and made available to learners, materials such as wall charts, an alphabet chart and word wall as well as supplementary apparatus, such as magnetic letters, are also important to aid teaching literacy in the classroom (Clay, 1993:24). Teachers should, however, be careful of when and how they implement these extra materials, not to make extra aids more important than the texts they use. Many South African classrooms have a variety of charts on the walls which are either never referred to or else over-emphasised as isolated items of knowledge, for example phonics and phonics charts.

In order to use all materials effectively and organise the literacy classroom accordingly, teachers need to be informed about research-based practices.

### **5.2.2.3 Informed teachers**

Educators in the Reading Recovery® programme participate in a year-long training programme in order to construct an academic base from which they teach (Clay, 1993:96).



This programme has led to a shift in teachers' attention "from teaching for items knowledge ...to develop in the child the willingness to use a variety of text-solving strategies" (Clay, 1993:63). As a result, it has focused instruction on the process of reading.

If this is what an appropriate training model can offer literacy teachers in other parts of the world (See 1.4), a similar training model can also be applied in the South African context. Teacher "buy-in" and a supportive educational system is the starting point of an investment in literacy classrooms and ultimately in learners' lives (Nathanson, 2008:157).

### **5.3 RECOMMENDATIONS**

The recommendations I have made for possible future research in this section were inspired by my literature review and my research questions and answers.

#### **5.3.1 Similar studies into further research-based lessons**

In light of the fact that my research was a pilot study, I recommend that more researchers do similar research in other schools. The successful implementation of research-based practices can lead to teachers who adopt approaches which are grounded in these successful research-based practices.

#### **5.3.2 Establishment of research interest groups**

The success of multiple research-based studies can lead to the formation of research interest groups. These research interest groups can create a platform for researchers to share their knowledge and use their findings to collaborate in developing early literacy development frameworks for different South African contexts.

#### **5.3.3 Development of South African texts**

As a core group of researchers start using the principles applied in this thesis, a database for South African books that have reliable levels and that can be related to Reading Recovery® levels and international levelling bands can be built up (See Addendum C2). Local studies can then help schools identify the range of books needed for each grade level. This will ensure that the books in every grade accommodate the weakest to the strongest reader.

#### **5.3.4 Research into the influence of class-organisation and environment on effective learning**

Jensen (2005) discusses physical environments for optimal learning and includes factors like seating, temperature, lighting, noise and building design, and how they can affect learning. The interplay between environmental factors and the organisational aspects mentioned in

5.2.2.1 and 5.2.2.2 can result in new insights into classroom management and planning in the literacy classroom.

### **5.3.5 Research into shaping a positive self-image to sustain learning**

Lyons (2003) explains how the connections between experiences and emotions can influence learning. The target group's positive self-worth resulted in better learning, which again resulted in a positive and accomplished self-worth (see 5.2.1.3). This cycle creates the opportunity to research the types of input that learners need in order to have a positive self-image, and how such a self-image affects literacy learning. Focusing on the role that learners' emotions play in certain instructional situations can lead to improve interpersonal approaches to learners with emotional needs which influence their academic skills.

### **5.3.6 Research into changing teachers' perspectives**

The introduction of my research-based approach to teaching literacy entails a shift from teachers' "old" way of teaching literacy, which has a number of implications for the teacher and teacher leaders or trainers. When new knowledge is imparted, teaching practices can change, and with that hopefully a transformation in perspective occurs, depending on how an educator reacts to change (See 2.8.1). Although this type of research will need an appropriate literacy programme to work with, the focus will be on how teachers react to successes in their classroom, and the implications this has for similar teacher development and training in the future.

## **5.4 LIMITATIONS OF THE STUDY**

The size of the study limits the results from being generalised. Therefore this small sample group can only be considered a pilot study. However, the qualitative data and the trends in the statistical data indicate a need for further studies with larger learner groups.

A further limitation is that the approach used in this intervention requires an extensive range of levelled texts. I was provided with adequate texts to conduct the research, however, the availability of these texts are limited in South Africa. Books that are levelled according to the Reading Recovery® standards are not printed in South Africa and therefore difficult and expensive to obtain. Future researchers could investigate developing such levelled texts that are appropriate to South Africa (See 5.3.3).

Current classroom approaches can undermine research-based practices (See 2.7). Also, classroom organisation can prevent future researchers from applying their theoretical knowledge in classrooms or intervention research designs. Therefore, a good teacher-

researcher relationship needs to be established and based on a mutual understanding of how such a research should be planned to fit into the teacher's programme.

## **5.5 VALUE OF THE RESEARCH**

Given that my research was a pilot study, its value is that it supports further research into the use of new methods for teaching literacy. The success of this research-based practice can be instituted on a larger scale in other schools and, if successful, can inform the update of the current literacy curriculum and ways of instruction. The research methods described in Chapter two have a long history of international research and theoretical support and therefore has educational worth in South Africa.

Within the South African context, this study, along with studies such as those done by Nathanson (2008), Flanagan (1995) and Bloch (2006) can inform policy on Departmental level. This can create a supportive framework for teachers to adopt a new approach to teaching literacy and to continually improve their own instruction.

My research has also led to interest from private businesses who provide extra-mural literacy assistance for learners.

Finally, my research also has personal value in that it serves as my "prior experience" from which I can grow, learn and shape my future instructional practices based on what worked and what needs rethinking.

## **5.7 CONCLUDING REFLECTIONS**

This research project stresses early detection and intervention of learners in need of a second chance at literacy learning (Clay, 2002:26;31; Clay, 1991:313). The importance of prevention instead of intervention post-instruction was highlighted. It stresses how prevention links to a need for early exposure to literacy during the emergent literacy stage (Clay, 1991:27-28). I observed the target group's existing literacy knowledge in order to build new knowledge upon the existing knowledge. This is a part of the growth process of their brains by creating links between old and new knowledge (Lyons, 2003:14).

The value of the study in terms of my personal growth was immense. From it I was inspired to learn more from the theorists I referred to in my research. I hope to use the research as a base to: (1) inform my teaching; (2) assist other teachers towards a more successful approach to teaching literacy; and (3) open doors for independent work with learners in need of a second chance at literacy learning.



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## **ADDENDA**

### **ADDENDUM A: CORRESPONDENCE FOR ETHICAL CLEARANCE AND CONSENT**

## ADDENDUM A1: Western Cape Education Department Ethical Clearance

Navrae  
Enquiries     **Dr A.T. Wyngaard**  
IMibuzo  
Telephone  
Telephone     **021 467 9272**  
IFoni  
Faks  
Fax  
IFeksi



---

Wes-Kaap Onderwysdepartement

---

Western Cape Education Department

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ISebe leMfundo leNtshona Koloni

---

Verwysing  
Reference     **20100224-0058**  
ISalathiso

Ms Marika Swart  
Universiteit Stellenbosch  
Fakulteit Opvoedkunde  
Privaatsak X1  
Matieland  
7602

**Beste Ms Marika Swart**

### NAVORSINGSVOORSTEL: ADAPTING INSTRUCTION TO MEET THE INDIVIDUAL NEEDS OF FOUNDATION PHASE READERS AND WRITERS

U aansoek om bogenoemde navorsing in skole in die Wes-Kaap te onderneem, is toegestaan onderhewig aan die volgende voorwaardes:

1. Prinsipale, opvoeders en leerders is onder geen verpligting om u in u ondersoek by te staan nie.
2. Prinsipale, opvoeders, leerders en skole mag nie op enige manier herkenbaar wees uit die uitslag van die ondersoek nie.
3. U moet al die reëlings met betrekking tot u ondersoek self tref.
4. Opvoeders se programme mag nie onderbreek word nie.
5. Die ondersoek moet onderneem word vanaf **01 Maart 2010 tot 30 June 2010**.
6. Geen navorsing mag gedurende die vierde kwartaal onderneem word nie omdat skole leerders op die eksamen (Oktober tot Desember) voorberei.
7. Indien u die tydperk van u ondersoek wil verleng, moet u asb met Dr R Cornelissen in verbinding tree by die nommer soos hierbo aangedui, en die verwysingsnommer aanhaal.
8. 'n Fotostaat van hierdie brief sal oorhandig word aan die prinsipaal van die inrigting waar die beoogde navorsing sal plaasvind.
9. U navorsing sal beperk wees tot die lys van skole soos wat by die Wes-Kaap Onderwysdepartement ingedien is.
10. 'n Kort opsomming van die inhoud, bevindinge en aanbevelings van u navorsing moet voorsien word aan die Direkteur: Onderwysnavorsing.
11. 'n Afskrif van die voltooidde navorsingsdokument moet ingedien word by:

**Die Direkteur: Navorsingsdienste  
Wes-Kaap Onderwysdepartement  
Privaatsak X9114  
KAAPSTAD  
8000**

Ons wens u sukses toe met u navorsing.  
Die uwe

Geteken: Audrey T Wyngaard  
vir: **HOOF: ONDERWYS**  
**DATUM: 26 Februarie 2010**

---

MELD ASSEBLIEF VERWYSINGSNOMMERS IN ALLE KORRESPONDENSIE / PLEASE QUOTE REFERENCE NUMBERS IN ALL CORRESPONDENCE /  
NCEDA UBHALE HINOMBOLO ZESALATHISO KUYO YONKE IMBALELWANO

GRAND CENTRAL TOWERS, LAER-PARLEMENTSTRAAT, PRIVAATSAK X9114, KAAPSTAD 8000  
GRAND CENTRAL TOWERS, LOWER PARLIAMENT STREET, PRIVATE BAG X9114, CAPE TOWN 8000

WEB: <http://wced.wcape.gov.za>

**INBELSENTRUM /CALL CENTRE**

INDIENSNEMING- EN SALARISNAVRAE/EMPLOYMENT AND SALARY QUERIES ☎0861 92 33 22  
VEILIGE SKOLE/SAFE SCHOOLS ☎ 0800 45 46 47

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## ADDENDUM A2: University of Stellenbosch Ethical Clearance



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23 April 2010

Tel.: 021 - 808-9183  
Enquiries: Sidney Engelbrecht  
Email: [sidney@sun.ac.za](mailto:sidney@sun.ac.za)

Reference No. 286/2010

Ms M Swart  
Department of Curriculum Studies  
University of Stellenbosch  
**STELLENBOSCH**  
7602

Ms M Swart

### APPLICATION FOR ETHICAL CLEARANCE

With regards to your application, I would like to inform you that the project, *Adapting instruction to meet the individual needs of low-performing readers and writers*, has been approved on condition that:

1. The researcher/s remain within the procedures and protocols indicated in the proposal;
2. The researcher/s stay within the boundaries of applicable national legislation, institutional guidelines, and applicable standards of scientific rigor that are followed within this field of study and that
3. Any substantive changes to this research project should be brought to the attention of the Ethics Committee with a view to obtain ethical clearance for it.

We wish you success with your research activities.

Best regards



*Sidney Engelbrecht*

**MR SF ENGELBRECHT**

**Secretary: Research Ethics Committee: Human Research (Non-Health)**

---

Afdeling Navorsingsontwikkeling • Division of Research Development

Privaat Sak/Private Bag X1 • 7602 Stellenbosch • Suid-Afrika/South Africa

Tel +27 21 808 9111 • Faks/Fax: +27 21 808 4537



***ADDENDUM A3i: Example of parent consent***



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**STELLENBOSCH UNIVERSITY  
CONSENT TO PARTICIPATE IN RESEARCH**

---

Adapting instruction to meet the individual needs of Foundation Phase readers and writers.

Consent form for parent of participant.

Your child is asked to participate in a research study conducted by Marika Swart (B.Ed. Foundation Phase, Hons. Language Education), from the Department of Education at Stellenbosch University. The results of this study will be published in a Masters Thesis. Your child has been selected as a possible participant in this study because he/she complies with the profile of the learner to prove the effectiveness of this new approach to reading and writing.

**1. PURPOSE OF THE STUDY**

The purpose of this research is to determine whether a contingent teaching approach makes a difference and brings literacy learners to grade level. Learners will be assessed based on Marie Clay's Observation Survey as well as reviewed literature of research on teaching reading and writing. The intention is to create a pedagogical framework that can elevate struggling learners' understanding of and competence in reading and writing. The research can provide those interested with further studies, e.g. comparing contexts and results wherein the same study took place (almost the same study is being conducted at other schools).

**2. PROCEDURES**

If you volunteer your child to participate in this study, we would ask you to allow the researcher the following things:

- Do continuous assessment tasks to keep track of changes in levels;
- Take part in daily literacy sessions of half an hour each;
- Participate in the study for at least 10 weeks;
- To be able to mention your child's age and previous academic help and achievement.

I hope to function with these sessions as would with Learning Support sessions, during school hours at the most suitable time. If not, another arrangement concerning the time can be made.

### **3. POTENTIAL RISKS AND DISCOMFORTS**

There are no risks or discomforts involved. If it happens that the child is not at ease with the study or the researcher, the learner can be withdrawn from the study.

### **4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The benefits of this study will mirror in the learner's improvement in literacy. Reading and writing as focus will improve in the sense that the learner teaches him-/herself systems whereby they learn more about reading and writing as they read and write more.

This study can also benefit society by providing Learning Support teachers as well as class teachers with more strategies to approach the processes of literacy teaching and learning. In the long run this can influence learners' holistic approach to other subjects and provide them with more successes throughout school and later stages in life.

### **5. PAYMENT FOR PARTICIPATION**

The research is not paying for participation of subjects and no fees will be expected for the tutoring sessions that the learner(subject) receives.

### **6. CONFIDENTIALITY**

Any information obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of referring to the learners as learner A/B/C, etc.

The data will be stored on my work computer, with a password to ensure privacy. Backups of the work will also be stored on a protected USB flash drive.

Results will be made available through regular correspondence with the parents. The final thesis is available to the consent-holders, they will be alerted and told where to access the information if they wish to do so.

## **7. PARTICIPATION AND WITHDRAWAL**

You can choose whether to allow your child to be in this study or not. If you volunteer your child to be in this study, you may withdraw him/her at any time without consequences of any kind. You or your child may also refuse to answer any questions you or your child don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so, e.g. if you move to another town; or your child changes schools.

## **8. IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact:

- The researcher: Marika Swart – 072 461 [3372/ 15868060@sun.ac.za](tel:337215868060); or
- Supervisor: Dr. Renee Nathanson – (021) 856 1162/ [rrn@sun.ac.za](mailto:rrn@sun.ac.za)

## **9. RIGHTS OF RESEARCH SUBJECTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [[mfouche@sun.ac.za](mailto:mfouche@sun.ac.za); 021 808 4622] at the Division for Research Development.

<b>SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE</b>
--

The information above was described to [*me/the subject/the participant*] by Marika Swart in [*Afrikaans/English/Xhosa/other*] and [*I am/the subject is/the participant is*] in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject*] was given the opportunity to ask questions and these questions were answered to [*my/his/her*] satisfaction.

*[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study. ]* I have been given a copy of this form.

\_\_\_\_\_

Name of Subject/Participant

\_\_\_\_\_

Name of Legal Representative (if applicable)

\_\_\_\_\_

Signature of Subject/Participant or Legal Representative

\_\_\_\_\_

Date

**SIGNATURE OF INVESTIGATOR**

I declare that I explained the information given in this document to \_\_\_\_\_ [*name of the subject/participant*] and/or [his/her] representative \_\_\_\_\_ [*name of the representative*]. [*He/she*] was encouraged and given ample time to ask me any questions. This conversation/correspondence was conducted in [*Afrikaans/\*English/\*Xhosa/\*Other*] and [*no translator was used/this conversation was translated into \_\_\_\_\_ by \_\_\_\_\_*].

\_\_\_\_\_

Signature of Investigator

\_\_\_\_\_

Date

**ADDENDUM A3ii: Example of teacher consent**



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**STELLENBOSCH UNIVERSITY  
CONSENT TO PARTICIPATE IN RESEARCH**

---

Adapting instruction to meet the individual needs of Foundation Phase readers and writers.

Consent form for Teacher.

You are asked to participate in a research study conducted by Marika Swart (B.Ed. Foundation Phase, Hons. Language Education), from the Department of Education at Stellenbosch University. The results of this study will be published in a Masters Thesis. Your child has been selected as a possible participant in this study because he/she complies with the profile of the learner to prove the effectiveness of this new approach to reading and writing.

**10. PURPOSE OF THE STUDY**

The purpose of this research is to determine whether a contingent teaching approach makes a difference and brings literacy learners to grade level. Learners will be assessed based on Marie Clay's Observation Survey as well as reviewed literature of research on teaching reading and writing. The intention is to create a pedagogical framework that can elevate struggling learner's understanding of and competence in reading and writing. The research can provide those interested with further studies, e.g. comparing contexts and results wherein the same study took place (almost the same study is being conducted at other schools).

The observation of a grade one literacy classroom will set the context wherein the learners are taught.

**11. PROCEDURES**

If you volunteer to participate in this study, we would ask you to do the following things:

- Continue normal teaching while the researcher observes literacy class(es);
- Agree to an initial interview and short comments on the participants/any form of correspondence to set a background to the learner's literacy history during the study.

## **12. POTENTIAL RISKS AND DISCOMFORTS**

There are no risks or discomforts involved – the researcher wishes to be of the least interference as possible.

## **13. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY**

The learner participants in the teacher's classroom can have improved literacy levels, making it easier to add these learners together with other learners in the classroom for group work or activities.

## **14. PAYMENT FOR PARTICIPATION**

No payment will be given (or expected from the learners) for participation in this research.

## **15. CONFIDENTIALITY**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of referring to the Grade one teacher as 'the class teacher/ the grade one teacher/ the teacher'. The outcome of the study will not impact negatively on the teacher or on that teacher's future career.

The data will be stored on my work computer, with a password to ensure privacy. Backups of the work will also be stored on a protected USB flash drive.

Results will be made available through regular correspondence with the parents. The final thesis is available to the consent-holders, they will be alerted and told where to access the information if they wish to do so.

## 16. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## 17. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

- The researcher: Marika Swart – 072 461 [3372/ 15868060@sun.ac.za](tel:337215868060); or
- Supervisor: Dr. Renee Nathanson – (021) 856 1162/ [rrn@sun.ac.za](mailto:rrn@sun.ac.za)

## 18. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [[mfouche@sun.ac.za](mailto:mfouche@sun.ac.za); 021 808 4622] at the Division for Research Development.

<b>SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE</b>
--

The information above was described to [*me/the subject/the participant*] by Marika Swart in [*Afrikaans/English/Xhosa/other*] and [*I am/the subject is/the participant is*] in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject*] was given the opportunity to ask questions and these questions were answered to [*my/his/her*] satisfaction.

*[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study. ]* I have been given a copy of this form.

---

Name of Subject/Participant

---

Name of Legal Representative (if applicable)

---

Signature of Subject/Participant or Legal Representative

---

Date

<b>SIGNATURE OF INVESTIGATOR</b>
----------------------------------

I declare that I explained the information given in this document to \_\_\_\_\_ [*name of the subject/participant*] and/or [his/her] representative \_\_\_\_\_ [*name of the representative*]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [*Afrikaans/\*English/\*Xhosa/\*Other*] and [*no translator was used/this conversation was translated into* \_\_\_\_\_ by \_\_\_\_\_].

---

Signature of Investigator

---

Date



**ADDENDUM A3iii: Example of learner-participant consent**

**PARTICIPANT INFORMATION SHEET**

*(Read to participant, verbal consent)*

Name: \_\_\_\_\_

Surname: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Age: \_\_\_\_\_

Grade: \_\_\_\_\_

Previous literacy programmes participated in:

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---

- I, \_\_\_\_\_, want to be part of this research project and I understand of this project.
- The researcher/facilitator explained what is expected of me, namely participating in a literacy program designed especially for me. (*Individualised*)
- I, \_\_\_\_\_, understand that my personal information will not be made available in public space. The results of my work with the facilitator will be in the project, but my name will not be mentioned.
- The researcher/facilitator explained to me that I don't have to feel forced to answer any questions and if I, for whatever reason, do not want to be part of the research project any more, I will be allowed to discontinue.

### ADDENDUM A4: School consent

---

#### PERMISSION TO CONDUCT RESEARCH IN PUBLIC SCHOOLS WITHIN THE WESTERN CAPE

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I, [Covered for school's protection] Principal of [Covered for school's protection]  
been informed on the proposed study of the researcher.

I hereby ~~[give my permission/do not give my permission]~~ give my permission IF  
the Western Cape Education Department has given ethical clearance] for the  
research to be conducted in the Foundation Phase at this school.

[Stamp covered for school's protection]

*8 grade one lessons for Reading  
and writing for 10 weeks  
during the school term.  
(one period per week + one group  
period per week)  
All lesson plans need to  
grant this permission*

**ADDENDUM B:  
EXAMPLES OF SOUTH AFRICAN LESSONS AND REQUIREMENTS**

## ADDENDUM B1: Literacy Assessment Criteria for Grade

### Grade One Minimum Requirements 2010 End October Assessment

#### First Language

##### Listening

- Story: Jack and the Beanstalk – describe the answers in detail
1. What kind of seeds did Jack's mother throw out of the window?
  2. Why did Jack have to sell the cow?
  3. Who did Jack meet on the way to market?
  4. What did Jack find in the giant's house?

##### Speaking

How did we plant our seeds and what did you do

##### Reading and Viewing

##### Word Recognition

Not more than 8 words wrong

Ginn L3 (93 words)

Selected words from Breakthrough and Ginn L2 total 100 words

brother      sister      friend      story  
down      hide      teacher

##### Comprehension

Ask questions about reading

##### Fluency

Unprepared: The three pigs: gay Way series

Prepared: Ginn L3 readers should be completed by end of term

Still busy ..... middle of Ginn L3

##### Phonics and Spelling

Knowledge of all letter sounds

sh, ch, ck, ll, ss

Not more than 3 wrong

##### Blend Sounds

Read 16 – 3 letter words, and

sh, ch, ck, ll and ss words

wax, jet, pip, rob, mud, dress

sick, hush, shed, chap, sock

mess, tell, much, smell, bill

##### Apply Phonic Sounds

Able to write 3 letter words with some assistance and

One sh, ch, ck, ll and ss word

More than 8 right

gum, top, mix, web

and duck, fish, ship

rich, mess, chat, kick, sell, hill, dish

Not more than 5 wrong

##### Thinking and Reasoning:

Ask questions and searches for explanation

Beans / Jack and the beanstalk

##### Language structure and use:

Uses plural e.g. seed, seeds etc

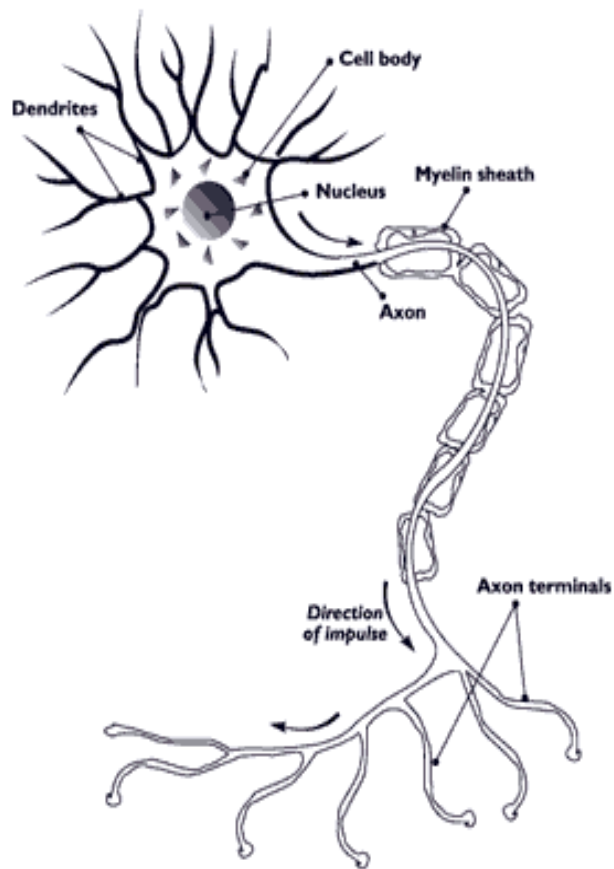


Writing

Is able to write three sentences with help  
Jack and the Beanstalk

**ADDENDUM C:  
EXAMPLES OF RESEARCH-BASED THEORY AND PRACTICE**

## ADDENDUM C1: The neuron



ADDENDUM C2: Reading Recovery® levels and related groups or bands

Getting ready for guided reading

65

**Australia / NZ**

Reading Recovery Levels	1	2	3	4	5	12	13	14	15	16	17
Developmental Stages	EMERGENT					TRANSITIONAL					
Classroom Levels	Group A					Group E			Group F		

**England (Ref: Baker et al. 1998)**

Reading Recovery Levels	1	2	3	4	5	12	13	14	15	16	17	18
Developmental Stages	EMERGENT					TRANSITIONAL						
Bands	Band 1		Band 2			Band 5		Band 6		Band 7		
National Curriculum Levels	Working towards Level 1					Working towards Level 2						

**USA (Ref: Fountas & Pinnell, 1996, 1999)**

Reading Recovery Levels	1											No need for RR Levels
Developmental Stages	EMERGENT											
Classroom Levels	A											H I J K L M

Criteria for the "Fountas & Pinnell" levels are described up to Level P.

Figure 3.1 Reading Recovery levels and related groups or bands



### ADDENDUM C3: Pairing Text Gradient with Grades

What, Why, and How?

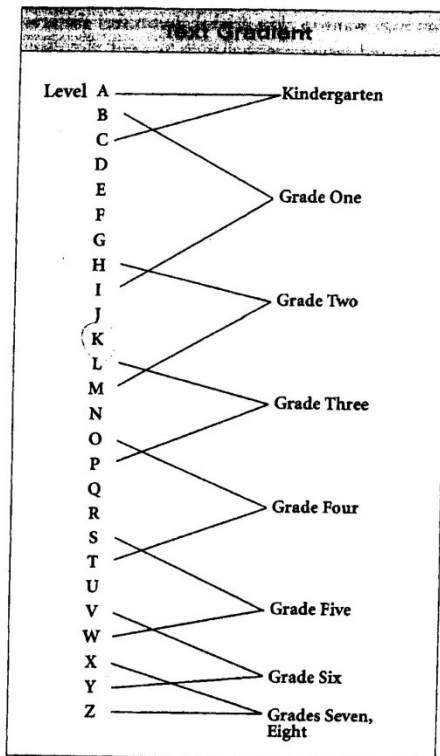


Figure 2-1. Fountas and Pinnell Text Gradient

**ADDENDUM C4i: Letter Identification**

LETTER IDENTIFICATION SCORE SHEET

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Recorder: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ TEST SCORE: 54

STANINE GROUP:

	A	S	Word	I.R.		A	S	Word	I.R.
A					a				
F					f				
K					k				
P					p				
W					w				
Z					z				
B					b				
H					h				
O					o				
J					j				
U					u				
					a				
C					c				
Y					y				
L					l				
Q					q				
M					m				
D					d				
N					n				
S					s				
X					x				
I					i				
E					e				
G					g				
R					r				
V					v				
T					t				
					g				
				TOTALS					TOTAL SCORE <span style="border: 1px solid black; display: inline-block; width: 60px; height: 20px; vertical-align: middle;"></span>

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

**ADDENDUM C4ii: Word Reading**

WORD TEST SCORE SHEET		
Use any <b>one</b> list of words.		
Name: _____	Date: _____	TEST SCORE: <input type="text"/>
Age: _____ Date of Birth: _____	STANINE GROUP: <input type="text"/>	
Recorder: _____		
Record incorrect responses beside word		
LIST A	LIST B	LIST C
I	and	Father
Mother	to	come
are	will	for
here	look	a
me	he	you
shouted	up	at
am	like	school
with	in	went
car	where	get
children	Mr	we
help	going	they
not	big	ready
too	go	this
meet	let	boys
away	on	please
COMMENT:		

**ADDENDUM C4iii: Writing Vocabulary**

WRITING VOCABULARY OBSERVATION SHEET

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Recorder: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ TEST SCORE:

(Fold heading under before child uses sheet) STANINE GROUP:

**ADDENDUM C4iv: Hearing and Recording Sounds in Words**

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

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Date: \_\_\_\_\_

Recorder: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ TEST SCORE:

(Fold heading under before child uses sheet) STANINE GROUP:

COMMENT

**ADDENDUM C4v: Concepts About Print**

44

Sand  
 Stones  
 Moon  
 Shoes

**CONCEPTS ABOUT PRINT SCORE SHEET**

Date: \_\_\_\_\_

Name: \_\_\_\_\_ Age: \_\_\_\_\_ TEST SCORE:

Recorder: \_\_\_\_\_ Date of Birth: \_\_\_\_\_ STANINE GROUP:

PAGE	SCORE	ITEM	COMMENT
Cover		1. Front of book	
2/3		2. Print contains message	
4/5		3. Where to start	
4/5		4. Which way to go	
4/5		5. Return sweep to left	
4/5		6. Word-by-word matching	
6		7. First and last concept	
7		8. Bottom of picture	
8/9		9. Begins 'The' ( <i>Sand</i> ) Begins 'l' ( <i>Stones</i> ) Begins 'l' ( <i>Moon</i> ) Begins 'Leaves' ( <i>Shoes</i> ) bottom line, then top, OR turns book	
10/11		10. Line order altered	
12/13		11. Left page before right	
12/13		12. One change in word order	
12/13		13. One change in letter order	
14/15		14. One change in letter order	
14/15		15. Meaning of a question mark	
16/17		16. Meaning of full stop (period)	
16/17		17. Meaning of comma	
16/17		18. Meaning of quotation marks	
16/17		19. Locate: m h ( <i>Sand</i> ); t b ( <i>Stones</i> ); m i ( <i>Moon</i> ); m i ( <i>Shoes</i> )	
18/19		20. Reversible words 'was', 'no'	
20		21. One letter: two letters	
20		22. One word: two words	
20		23. First and last letter of word	
20		24. Capital letter	

**ADDENDUM C4vi: Running Record**

RUNNING RECORD SHEET

Name: \_\_\_\_\_ Date: \_\_\_\_\_ D. of B.: \_\_\_\_\_ Age: \_\_\_\_\_ yrs \_\_\_\_\_ mths  
 School: \_\_\_\_\_ Recorder: \_\_\_\_\_

Text Titles	<u>Running words</u> Error	Error rate	Accuracy	Self-correction rate
1. Easy _____	_____	1: _____	_____ %	1: _____
2. Instructional _____	_____	1: _____	_____ %	1: _____
3. Hard _____	_____	1: _____	_____ %	1: _____

Directional movement \_\_\_\_\_

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

Easy \_\_\_\_\_

Instructional \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Cross-checking on information (Note that this behaviour changes over time)

\_\_\_\_\_

\_\_\_\_\_

Analysis of Errors and Self-corrections  
(see *Observation Survey* pages 30-32)

Page		E	SC	Information used	
				E MSV	SC MSV

**ADDENDUM Cvi: Running Record mark procedure**

Note that these examples were taken from Clay, 2002:58-60.

Figure 3.1 Running Record: Correct response

Mark every word read correctly with a tick.

Bill is asleep.	✓	✓	✓
‘Wake up, Bill,’	✓	✓	✓
said Peter.	✓	✓	

Figure 3.2 Running Record: incorrect response

Record a wrong response with the text under it.

Child: <u>home</u>	
Text: house	[One error]

Figure 3.3 Running Record: multiple attempts

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

Child:	here	h-	home	[One error]
Text:	house			
Child:	h-	ho-	✓	[No error]
Text:	home			



Figure 3.4 Running Record: self-correction

If a child succeeds in correcting a previous error this is recorded as 'self-correction' (written as SC).

<i>Child:</i>	<i>where</i>	<i>when</i>	<i>SC</i>	[No error]
<i>Text:</i>	were			

Figure 3.5 Running Record: insertions and omissions

If no response is given to a word it is recorded with a das. Insertions of a word are recovered over a dash.

<i>Child:</i>	-	
<i>Text:</i>	house	
<i>Child:</i>	<i>here</i>	[In each case one error]
<i>Text:</i>	-	

Figure 3.6 Running Record: told word

To preserve storyline when the learner is unable to proceed, the answer is told (written as T).

<i>Child:</i>	<i>home</i>	
<i>Text:</i>	house	T
<i>Child:</i>		
<i>Text:</i>	home	T

[One error]

Figure 3.7 Running Record: requesting help

The learner makes a verbal appeal for help (A) and the teacher responds with 'You try it' (Recorded as Y).

<i>Child:</i>	-	A		[One error]
<i>Text:</i>	house	-	Y	

Figure 3.8 Running Record: making another attempt

To extricate a learner from a state of confusion, say 'Try that again' (TTA).

Put brackets around the first attempt and count is as only one error, then let the learner start fresh and continue.

✓	<i>look</i>	<i>said</i>	✓	✓	] [One error]
Susan	went	with	the	headmaster	
<i>Timothy</i>				TTA	
to					
✓	<i>said</i>	R	SC	✓✓✓	
✓	went				

Figure 3.9 Running Record: Repetition

Repetition is noted, but not counted as error behaviour.

<i>Child:</i>	<u>Here is the home</u>	R	SC	[No error]
<i>Text:</i>	Here is the house			

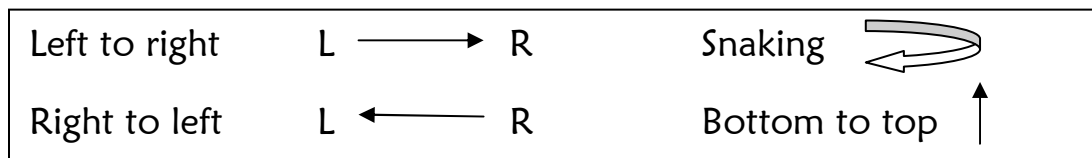
Figure 3.10 Running Record: Rereading and correcting

Sometimes the learner rereads the texts and corrects some but not all errors.

<i>Child:</i>	<u>a</u>	SC	<i>house</i>	R	[One error
<i>Text:</i>	the		home		One SC]

Figure 3.11 Running Record: Direction

Directional attack can also be noted and advised as extra support for the learner.



When a learner sounds out a word before reading it, letters or clusters breaks are recorded as “h-e-l-p-ing” and spelling out the word is recorded in capital letters (HELP) (Clay, 2002:60).

Errors the learner made are added up (self-corrections do no count as errors) and calculated toward a percent accuracy according to a formula (Clay, 2002:66).

**ADDENDUM D:  
QUALITATIVE DATA**

### **ADDENDUM D1: Questions of interview with grade one teacher**

1. What does a normal literacy lesson consist of?

Sight words and sentences are always discussed in literacy lessons. Sight words and sentences are taught together. We teach them to see other words within a word, for example. stop – (s)top [closes the 's'].

We also read many stories to them for comprehension and explain the difficult words in the story to build their vocabulary.

2. Is there a certain literacy schedule that you follow on a weekly basis?

Group reading takes place on Thursdays. They start with comprehension in the third term. In comprehension lessons they [the learners] read a small passage and answer a couple of questions.

Reading groups are monitored once a week to see if everyone is on standard.

3. How are the writing activities presented?

The learners write on blackboards, practising letter formation. We start with the letters that look the same, for example c, o, a, g, q.

The teachers draw lines on the blackboards to help learners practise letter formation neatly between the lines.

Next we [the teachers] write on the board from where the learners copy it into their books.

The learners receive a worksheet to complete and help them focus on the vocabulary and sentence structure around the word.

4. How are learners in need of individual literacy time identified and handled in the literacy class?

TAT classes are provided for the learners at school. Learners go to TAT classes between one and two in the afternoons. The objectives remain the same, but the activities presented are more fun, to make it different from the more formal class situation, for example, writing letters on the mat and letting them jump out the word [Teacher shows how learners jump on the mat on each letter in the word, e.g. b (jump on 'b') -u (jump on 'u') -g (jump on 'g') = bug].

## ADDENDUM D2: Observation of grade one literacy lesson

Today's literacy lesson: group work

### 1. Sounds

- Letter identification
- Concentrate on writing 'q'
- 'qu' – "queen never without her umbrella" (teacher)
- Today: doing the sh-sound

### 2. Word recognition

- Flash word cards at fast pace
- Game: learners (1) recognize the word, (2) sound out the word, (3) write the word without looking at the flash card, (4) check whether their word is spelled correctly
- Another game: look at the word STOP. Teacher: "If I take away one letter, another word is hiding away. What is that word?" Learners: (1) recognize 'top', (2) sound 't-o-p' out, (3) write the word.
- Compliments are focused on letter formation.
- One learner struggles to read 'dad'. Teacher tells him to close his ears and sound out the letters on the word card. "What did you hear? Now write it."

### 3. sh-sound

- "Sammy snake is chasing hairy hatman, but he is making such a noise that hairy hatman turns around and says 'sh'!"
- Teacher writes 'sh' on the mat.
- Teacher draws pictures that represent sh-words and every learner gets a turn to say what sh-word was drawn.
- Example of word-discussion: sound out **shed** (sh-e-d), read the word **shed**, match the word with the correct picture
- Trouble: sound out sh-i-p, but it sounds like 'sheep'. Teacher advises not to sound out ship, but with 'shot' (the following word) learners sound word out in order to read it. [Question to self: how do learners know when to sound out a word and when not?]
- Lesson continues in same cycle, but with different words. Learners are encouraged to participate.
- At the end of the lesson: read all the words packed out on the mat again. (Teacher tells me a next lesson will involve audiblox where words are matched with colours or numbers and learners learn to read the words by association with the colour or number on the audiblock.)

- End off with a guessing game to identify certain sh-words in turn for a sticker and for learners to return to their seats.

**ADDENDUM D3: Inconsistent letter-sound recognition**

Learner 1

**LETTER IDENTIFICATION SCORE SHEET**

Date: 15 March 2016

Age: 6 TEST SCORE: 15/54

Recorder: M. Swart Date of Birth: \_\_\_\_\_ STANINE GROUP: \_\_\_\_\_

	A	S	Word	I.R.		A	S	Word	I.R.		
A	✓			a					W		
F		✓		f					W		
K				qua	k				a		
P				D	p				W		
W		✓		w					g		
Z		✓		z					W		
B				is	b				W		
H				D	h				g		
O	✓			o		✓					
J				F	j				W		
U				qua	u				g		
C			Clever Cat	c				Clever Cat	W		
Y				W	y				w		
L				G	l				i		
Q				O	q				W		
M				D	m		✓				
D				W	d				g		
N				is	n				W		
S	✓			s		✓					
X	✓			x		✓					
I				D	i		✓				
E				G	e				b		
G				W	g		✓				
R				D	r				W		
V				D	v				k		
T				W	t				f		
				g			✓				
		<u>4</u>	<u>4</u>	<u>7</u>	TOTALS		<u>4</u>	<u>3</u>	<u>7</u>	TOTAL SCORE	<u>15</u>

**Confusions:**  
 Q-O  
 K-Qua  
 I-i  
 f-t

**Letters Unknown:**  
 P D a j e  
 B N f u r  
 H I k a v  
 J G p y  
 U E W g  
 W R z d  
 L V b d  
 Q T h n

**Comment:**  
 - Very nervous, rocking back and forth  
 - Strange pronunciation of words, can't hear sounds/word that she says clearly

**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



ADDENDUM D4: Letter-symbol confusion

LETTER IDENTIFICATION SCORE SHEET

Date: 15 March 2010

Name: 6 TEST SCORE: 31/54

Recorder: M. Swart Date of Birth: \_\_\_\_\_ STANINE GROUP: \_\_\_\_\_

	A	S	Word	I.R.		A	S	Word	I.R.
A	✓				a	✓			
F				?	l				
K	✓				k	✓			
P	✓				p				
W	✓				w	✓			
Z	✓				z	✓			
B	✓				b	✓			
H				?	h				
O	✓				o	✓			
J	✓				j				
U				?	u				
C	✓	✓			c	✓			
Y	✓				y	✓			
L	✓				l				
Q					q				
M				w	m	✓	man	p	
D					d				b
N					n				
S		✓			s	✓			
X	✓				x	✓			
I	✓				i	✓			
E	✓				e	✓			
G					g				
R					r		red		
V		✓			v	✓			
T					t				
					g				
		14	3	17	TOTALS		10	4	14

**Confusions:**  
 j-l  
 l-l  
 q-p  
 b-d

**Letters Unknown:**  
 \* F R I  
 H T  
 C H T  
 F P  
 P P  
 J  
 g t  
 g

**Comment:**  
 \* Said alphabet to get to 'b'.  
 \* Laughs, asking what is 'l' doing here. But can't say 'l's' are 'l' to fit with sounds/a/word.

**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

TOTAL SCORE 31

**ADDENDUM D5: Word-symbol confusion**

**HEARING AND RECORDING SOUNDS IN WORDS (DICTATION TASK)  
VATION SHEET**

Name: \_\_\_\_\_ Date: 15 March 2010

Recorder: M. Swart Age: 6 TEST SCORE:  / 37

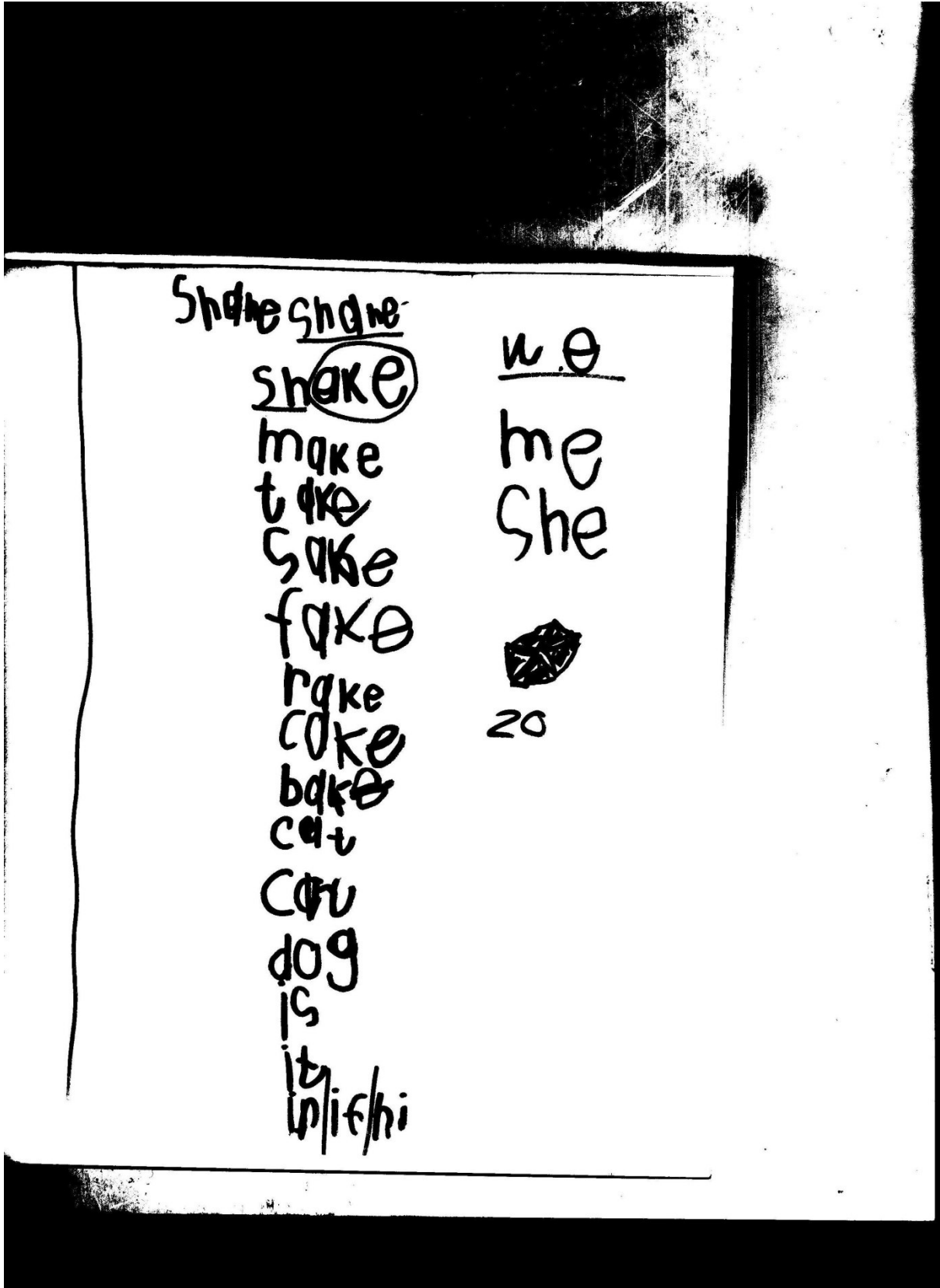
Date of Birth: \_\_\_\_\_ STANINE GROUP:

(Fold heading under before child uses sheet)

ikpfq  
be  
do  
deal  
hoent  
sing  
wing

COMMENT  
today

ADDENDUM D6: Derived words



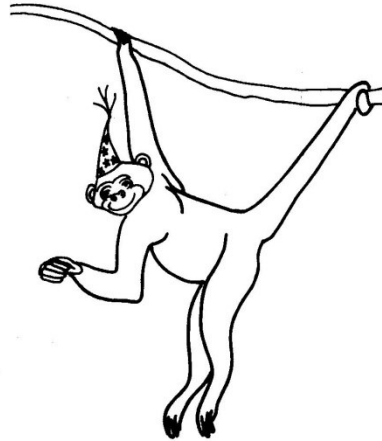
**ADDENDUM D7i: Text: 'Party Time'**

**KEEP BOOKS** were developed through grants from the Martha Holden Jennings Foundation and the Charles A. Dana Foundation.

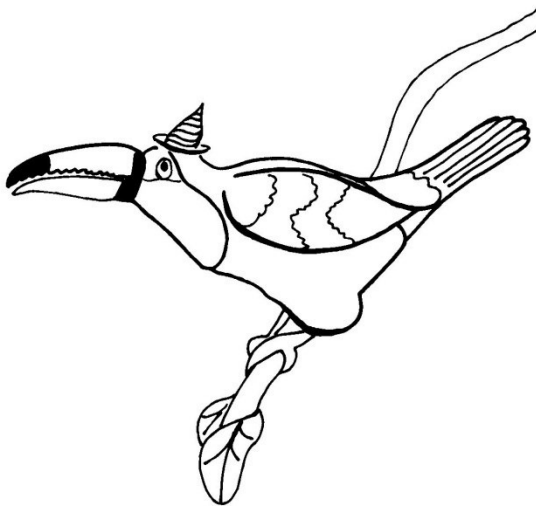
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Word Count **54** GR **C** RR **3**  
Reading Level **C**  
Beginning First Grade  
book 2-8  
ISBN 1-893966-02-0

# Party Time!

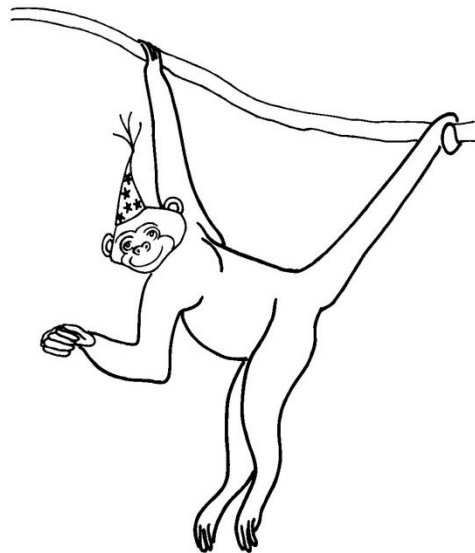


Written by Susan Gamble Weaver  
Illustrations by Cynthia Mann



"Come to my party,"  
said the bird.

2



"I will come to your party,"  
said the monkey.

3

ADDENDUM D7ii: Suzy's transfer story 'The Bird Party'

the bird party) (11 May 2010)

Bird was invitin animals to her party. She asked a Zhai. The ca shall ze said yeg. Can you come to my party? Yes! Said yeg. All the animals said yeg and they all had a nice party.

**ADDENDUM D8: Irregular reading as a result of 'sounding-out' strategy**

**RUNNING RECORD**

Name: \_\_\_\_\_ Date: 13 April 2010

Book: Joe likes playing with jets. Level: A Word count: 19  
 [own story]

Page	Record	E	SC	E	SC
				msv	msv
1	likes / will ✓ ✓ ig - loo lives jet he	3		msv msv msv	
2	wearing ✓ j-e-r-s-e-g-g-j-e-t-s- jet Ben because   T	3		msv msv msv	
3	warm / k / sc ✓ ✓ ✓ cold	1	1	msv	
4	✓ ✓				
<b>TOTAL</b>		6	1		

**OBSERVATIONS:**

SC 1:7  
 Error  $\frac{5}{19}$  1:3,8  
 reading rate: 75%

**ADDENDUM D9: Example of picture-cue strategy**

**RECORD**

Name \_\_\_\_\_ Date: 18 May 2010

Book: In the mirror Level: 1 Word count: 26

Page	Record	E	SC	E msv	SC msv
1	✓ ✓ ✓				
2	✓ ✓ ✓				
3	✓ ✓ ✓				
4	✓ ✓ ✓				
5	↓ ✓ ✓ <u>ear/R/SC</u> <u>nose</u>		1		msv
6	✓ ✓ ✓				
7	✓ ✓ ✓				
8	↓ ✓ R ✓ ✓ <u>this/SC</u> ✓ <u>that's</u>		1		msv
<b>TOTAL</b>					

**OBSERVATIONS:**

$\frac{0}{26}$  100%

SC: 1:1

**ADDENDUM D10: Observation made of a learner adjusting intonation as a sign of comprehension**

**RUNNING RECORD**

Name: \_\_\_\_\_ Date: 18 May 2010

Book: Go, go, go Word count: 20

Page	Record	E	SC	E msv	SC msv
1	✓ ✓ ✓				
2	✓ ✓				
3	✓ ✓				
4	✓ ✓				
5	✓ <u>jump</u> <u>hop</u>				
6	✓ ✓				
x 7	✓ <u>crawl</u> <u>creep</u>				
8	✓ ✓ <u>ride</u> ✓ ✓ <u>And</u>				
<b>TOTAL</b>					

**OBSERVATIONS:**

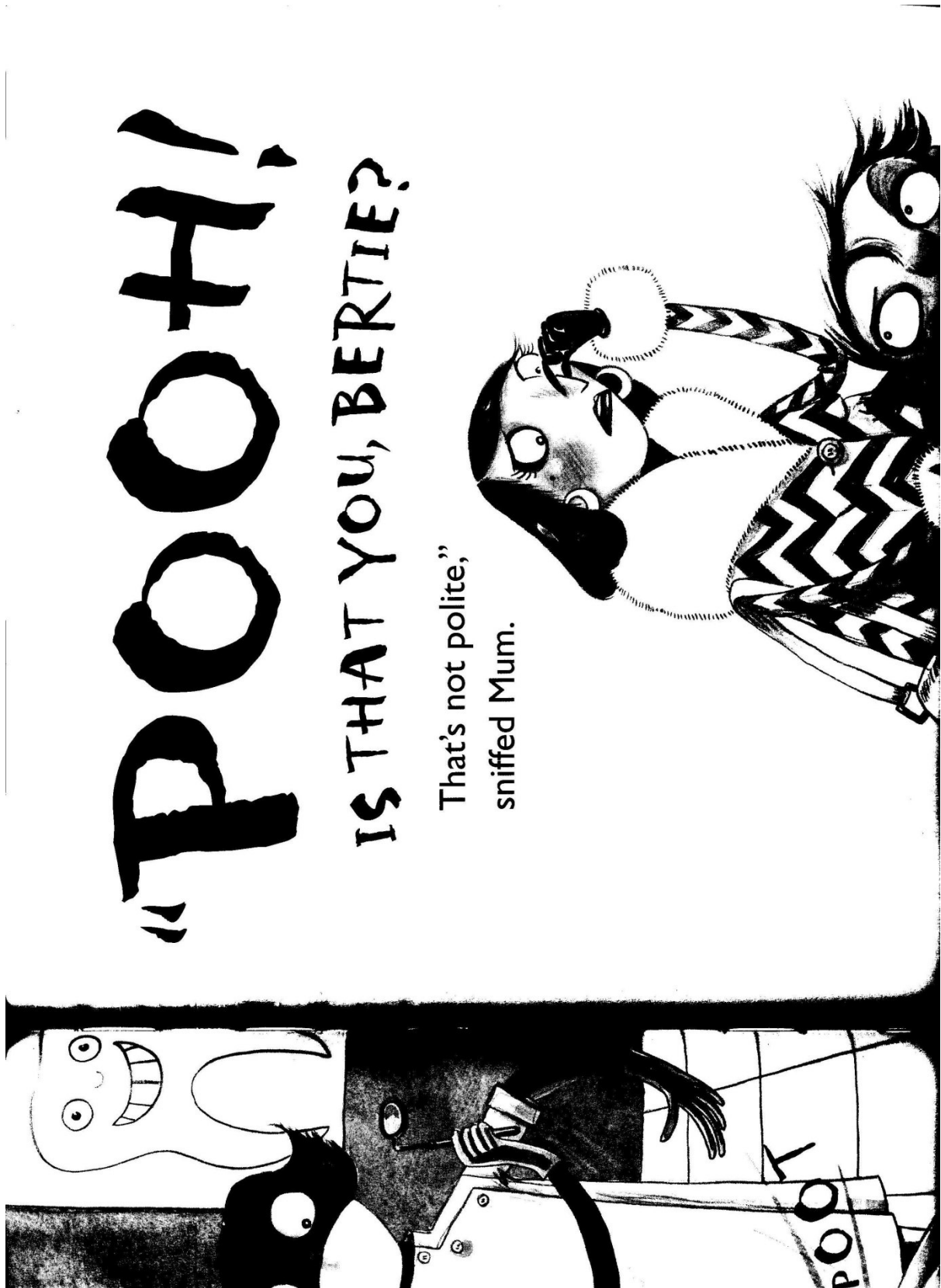
p. 7 - whispers!! good intonation.

$\frac{20}{3}$

85%



ADDENDUM D11: Refrain taken from 'POOH! Is that you, Bertie?' by David Roberts



**"POOHI!**  
**IS THAT YOU, BERTIE?**

You stink, smelly pants,"  
sniffed Suzy.



**ADDENDUM E:  
MIA**

**ADDENDUM E1: Emotional influence on writing**

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

Date: 21 April 2010

Age: 7

Recorder: M. Swart Date of Birth: \_\_\_\_\_

TEST SCORE:  / 37

STANINE GROUP:

(Fold heading under before child uses sheet)

nd d q dh dz m d .  
b m dz m q .

COMMENT

**ADDENDUM F:  
MARC**

## ADDENDUM F1: Observation of Marc's emotional influence

**GENERAL OBSERVATIONS**

No difference between sounds, words and a sentence.\*

- likes moving
- when searching for a letter, says the alphabet, then 'writes' the letter in the air, then picks out the correct letter.
- \* Although he displays a good sound-recognition.
- when struggle to read, becomes scared to try, and crouches away

**ADDENDUM G:  
PETER**

ADDENDUM G1: 'The bear', written by Peter

Three little bears

Three little bears played in the house.  
Santa came and gave them presents.  
The oldest bear took the second  
youngest bear's presents.

Baby bear took all the presents  
to Pappa's room. Everybody went to Pappa's  
bedroom and opened the presents.





**ADDENDUM H:  
SUZY**

## ADDENDUM H1: Observation of Suzy's hastiness



### GENERAL OBSERVATIONS

- memorizes stories  
to be able to  
read + guess when  
encountering new  
texts.

in ui / ni  
reversal.

it : ji

- in a hurry with  
reading and looks  
at pictures for most  
cues.

**ADDENDUM I:  
QUANTITATIVE DATA ANALYSIS RESULTS**

**ADDENDUM I1: Excel table with percentages**

Child number	Group	Time	Assessment 1	Assessment 2	Assessment 3	Assessment 4	Assessment 5	Assessment 6	Average %
Mia	Low Profile	1	28	7	5	11	11	0	10.3%
Marc	Low Profile	1	57	27	15	41	56	33	38.2%
Peter	Low Profile	1	44	20	10	16	61	44	32.5
Suzy	Low Profile	1	61	27	40	46	50	38	43.7
Dan	Average	1	94	80	15	78	67	98	72
John	Average	1	91	20	35	81	89	42	59.7
Rudolph	Average	1	91	40	10	73	39	43	49.3
Bart	Average	1	74	47	20	59	72	53	54.2
Mia	Low Profile	2	30	20	15	5	42	50	27%
Marc	Low Profile	2	54	33	15	51	67	41	43.5%
Peter	Low Profile	2	63	27	25	46	63	47	45.2
Suzy	Low Profile	2	72	60	80	70	58	79	69.8
Dan	Average	2	94	87	65	76	71	97	81.7
John	Average	2	96	67	40	86	71	79	73.2
Rudolph	Average	2	91	53	20	57	71	50	57
Bart	Average	2	87	53	30	57	71	47	57.5
Mia	Low Profile	3	76	27	28	51	54	69	50%
Marc	Low Profile	3	78	67	56	81	83	76	73.5%
Peter	Low Profile	3	89	53	84	89	83	100	83
Suzy	Low Profile	3	78	73	92	89	67	100	83.2
Dan	Average	3	96	87	100	92	67	89	88.5
John	Average	3	98	67	64	100	79	100	84.7
Rudolph	Average	3	96	80	52	73	71	100	78.7
Bart	Average	3	89	73	68	81	67	94	78.7