

**Effects of Fluency Oriented Instruction on Reading  
Achievement and Motivation among Struggling  
Readers in First Class in Irish Primary Schools**

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**Effects of Fluency Oriented Instruction on Reading Achievement and  
Motivation among Struggling Readers in First Class in Irish Primary Schools**

**by**

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A thesis submitted in fulfilment of the requirements for the award of Ph.D. in the  
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## **DECLARATION**

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy, is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

Signed:

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Student No: 112221373

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

*I dedicate this work to the memory of my parents John and Rita Mehigan.  
They departed this world far too soon, but their influence on me endures.  
I strive each day to live up to their incredible standards.*



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## ABSTRACT

This study uniquely looked at the effects of fluency oriented reading instruction (FORI) on reading achievement and motivation for reading among struggling readers in First Class in Irish primary schools. The study was conducted in two phases in DEIS Band 1 & 2 primary schools in the Dublin Northside Partnership catchment area. In Phase One, the current practice of learning support teachers in relation to teaching struggling readers was investigated along with the extent to which these teachers employed oral reading fluency strategies in their instruction. The second phase of the study examined the effects of an on-site reading intervention on the reading achievement and motivation for reading of struggling readers. The intervention, which was based on fluency oriented reading instruction, took place in learning support classrooms in three DEIS primary schools selected from participating schools in the first phase of the study.

The study was conducted through a pragmatic lens with research questions framed to shed light on the underachievement in literacy of students in First Class from disadvantaged backgrounds. A mixed methods design was employed with a sequential explanatory and a concurrent triangulation strategy adopted for the first and second of the study respectively. This facilitated the exploration of multiple research questions using questionnaires and semi-structured interviews with teachers and parents and conversational interviews and surveys with students. A wide range of assessment measures were employed to track reading achievement and motivation for reading among students.

The findings of the first phase of the study confirm that compensatory instruction for struggling readers in First Class is typified by a highly structured, bottom-up approach with an emphasis on cognitive rather than affective processes. In the second phase of the study, post-intervention results indicated that students had significantly higher achievement in oral reading fluency with modest improvement on word reading efficiency measures in comparison with pre-intervention scores.

The perspective of reading motivation guiding this study recognised the overlapping influences of teachers, parents and the student himself or herself. Findings as reported by these research informants indicate that the FORI intervention had a positive impact on the motivation for reading of struggling readers in First Class. In particular the intervention was found to decrease students' perceived difficulty with reading and increase their reading self-efficacy and orientation towards reading. The social aspect of reading was also found to play a prominent role in the motivation for reading of struggling readers. In this respect the research found parents to play a critical role in the literacy development of their children. The findings from this study suggest that in order for struggling readers to overcome both skill deficiencies in reading and any negative reading- and achievement-related self-beliefs a comprehensive approach is required. This thesis argues that there needs to be a shift from a purely cognitive interpretation of reading instruction to a motivational and emotional co-determination of beginning reading skills.

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# 1 PROLOGUE

I have had a life-long interest and professional association with literacy and the teaching of reading in particular. My career trajectory as a teacher and a teacher educator has taken me on a journey that has been punctuated by various challenges in understanding how young children learn to read and particularly how best to assist those who experience difficulty in mastering this skill. My interest in the compensatory aspect of literacy instruction was initially and most critically awakened while teaching in a DEIS Band 1 urban primary school for almost two decades. The majority of this time was spent working as a learning support teacher with children in junior classes who were experiencing difficulties in learning to read. This led to my developing a deep interest in how struggling readers were instructed in reading and how they could be supported in this process at the earliest stage.

My experience in teaching in a junior school setting also highlighted the importance of intervening with struggling readers at an early stage of their reading development. However, although some of these readers made considerable progress in their reading ability in the short term, my experience was that this initial improvement was often not sustained in the long term. It was not uncommon to find many of them presenting with reading difficulties in later years in primary school. The notable exceptions to this were those children who not only were successful in mastering the cognitive skills and strategies integral to cracking the reading code but who also were motivated to read and demonstrated engagement and confidence in the process. One such child I encountered early in my teaching career was Jason.

## **Jason's Story**

Jason was a cheerful seven-year-old whom I taught in a resource class for children with learning difficulties, many of whom were struggling readers. He had been assigned to this class because of significant difficulties in mastering the fundamental skills of reading. Standardised test scores placed Jason firmly in the bottom percentiles with his reading age scores lagging well behind his chronological age. Despite having a decontextualized knowledge of the alphabet principle, Jason had significant difficulties in decoding grade level text. He demonstrated little

enthusiasm for reading when free choice activity was available and never elected to bring books home at night to read. The report by Jason's previous class teacher had described his oral language ability as 'very poor' and indicated that there were difficulties with both his auditory and visual memory. It appeared that he did not show interest in engaging with written text of any description. My approach to helping Jason onto the ladder of reading success could best be described as a 'skills assault', using teaching methods that encompassed all the essential components of reading. It was a highly cognitive approach including teaching phonological awareness, letter sound relationships, word learning strategies, sight vocabulary, and comprehension strategies. This skills-oriented approach was underpinned by a robust oral language programme and complemented by a range of age-appropriate writing activities. Despite this seemingly comprehensive approach to literacy instruction (and Jason's best efforts as a student), the mid-year assessment of reading confirmed his status as a struggling reader.

Then a serendipitous event had a transformative effect on both my teaching approach and Jason's engagement with reading. I attended a school fundraising musical event one evening on the last day of term. As I sat and enjoyed the band singing the best of Buddy Holly's repertoire, I noticed that Jason was not only in attendance to support his Dad (the lead singer) but also was singing confidently along, knowing every word of every song. How could this child with 'poor oral language ability' who had 'auditory memory difficulties' display such a fluent rendition of learned vocabulary? He was clearly engaged by the music and songs and was *motivated* to learn in this mode. When Jason returned to school after the short vacation period, he entered a classroom festooned with pictures of his idol and charts with the words of songs he already knew by heart. The strains of Buddy Holly provided background music to the morning play activities and home-made books with the words of his songs printed in child-friendly script were strategically placed in the class library. The lyrics of these songs were highly repetitive and had a strong rhythmic pattern. It was an added bonus that they contained a healthy proportion of high frequency words as identified in the Dolch Sight Word list (Dolch, 1936). Over the remainder of the school year Jason was smuggled into reading through interaction with texts that were familiar to him and highly motivating for him to read. As his teacher, I learned that reading was not just a cognitive process but also a process where the engagement perspective plays a crucial and complementary role. I



also learned that by embracing the affective process of reading, teachers can have an influence on a reader's general attitude and interest in reading and their motivation for doing so (Paris, 2005, 2011; Pressley, 2006; Samuels & Farstrup, 2011). Jason developed the reading habit by reading frequently. His journey from being a struggling reader to a frequent reader was facilitated by two critical factors: (a) he succeeded in acquiring fundamental reading skills and (b) he was motivated to read. Both these factors had a reciprocal effect on each other.

As a learning support teacher I encountered many more children who struggled with the reading process. Upon reflection, the children whose reading attainment did not regress when progressing to the later stages of primary school were those who were motivated to read and who consistently demonstrated a sustained interest in reading (the 'Jasons' of my reading classes). Over the past twenty five years since my encounter with Jason, my professional experience has been further informed and challenged by working as coordinator of an Inservice Remedial Literacy Course, by facilitating on professional development for the introduction of the English Language Curriculum (NCCA, 1999a) and by my current role as a teacher educator and lecturer in literacy. I have continued over this time to grapple with the issue of struggling readers and how best they can be understood and assisted. During this time research in the area of beginning reading has been voluminous (Kamil, Mosenthal, Pearson & Barr, 2000; Kamil, Pearson, Moje & Afflerbach, 2011; National Reading Panel, 2000; Neuman & Dickinson, 2003; Samuels & Farstrup, 2011; Snow, Burns & Griffin, 1998) with, unsurprisingly, no single solution to the plight of the struggling reader.

A few short years ago, I happened to meet Jason, who now works in a local hardware store. He recounted his journey into the reading world with clarity and pride. In the intervening twenty-five years he has continued to be a reader. As I left Jason that day I had what could be described as a professional epiphany. What if the type of reading instruction we offered to struggling readers smuggled them into reading and had a positive influence on their motivation to read? Inspired by my early success with Jason and his ilk, I recalled and quantified the type of reading instruction I had employed with struggling readers over the years. This instruction was grounded in an engagement perspective while integrating cognitive, motivational and social aspects of reading. The engaged reading model considers motivation, strategies, social interactions, and conceptual understanding to be the ingredients for successful

reading (Guthrie & Anderson, 1999; Guthrie & Wigfield, 2000). I found that the nearest match to this teaching paradigm was in fluency oriented reading instruction (Kuhn & Stahl 2003; Stahl, Heubach, & Crammond, 1997; Stahl & Heubach, 2005).

In an attempt to find out more about fluency oriented reading instruction in the Irish context and the effect it may have on reading achievement and the motivation to read I embarked on the research shared in this thesis. My experience as a teacher educator has exposed me to a wide and varied sample of classroom pedagogy in the area of literacy education. It is safe to say that my antennae for practice in relation to struggling readers have always been engaged. In this regard, I have found that fluency instruction has not been explicitly employed as a method for teaching struggling readers. An examination of the literature on this subject corroborated this view (Pressley, Dolezal, Raphael, Mohan, Roehrig, & Bogner, 2003; Pressley, 2006; Samuels & Farstrup, 2011). This shortcoming in reading instruction for struggling readers may be a contributing factor to the comparatively poor performance of children in areas of low socio-economic status in Ireland.

Although fluency oriented reading instruction (FORI) has been documented internationally as an approach to teaching students with reading difficulties (Stahl, Heubach, & Cramond, 1997; Stahl & Heubach, 2005) it has not previously been employed in Ireland as a research project. Therefore, this study has a particular significance as it investigates potential influence of FORI on the motivational, engagement and social aspects of literacy. This will be of interest to educators and policy makers alike and thus influence future teaching approaches for struggling readers.

## 2 INTRODUCTION AND CONTEXT FOR THE STUDY

In today's society, it is absolutely critical that every child has the fullest opportunity to become an accomplished reader. Reading is continually debated as the quality of an individual's life is affected by their literacy competence which in turn is essential for an individual's personal and social fulfilment. The consequences of not learning to read proficiently are enormous, with those failing in this regard facing personal, social and economic limitations. Children who do not learn to read, write and communicate effectively at primary level are more likely to leave school early, be unemployed or be in low-skilled jobs, have poorer emotional and physical health and are more likely to end up in poverty and in our prisons (Barnardos, 2009; KPMG Foundation, 2006). The National Strategy to Improve Literacy and Numeracy in Schools (DES, 2011) states that missing out on the skills of literacy or failing to develop these skills to the best of one's capability is an enormous loss to all in Irish society. There is a strong body of literature on literacy interventions for children whose potential for achievement is at risk for reasons of socio-economic disadvantage. Within this literature, there is a consensus that children and their families need meaningful programmes of intervention involving a range of supports that must be in place early in the children's lives and that should focus on the children themselves, their families and communities (McGough, 2007).

Because our society assigns such significance to reading abilities, educators have an obligation to children to employ the most effective methods available during beginning reading instruction. This beginning stage of reading instruction has been frequently emphasised because reading proficiency in the lower primary grades is a strong predictor of achievement in the upper grades, including secondary education (Fuchs, Fuchs & Kazdan, 1999). For example, Juel (1988) found that students who were poor readers in first grade continued to read below grade level at the end of fourth grade. In addition to this low achievement in literacy in the early grades also correlates with high rates of school dropout, poverty, and underemployment (Snow, Burns, & Griffin, 1998; Wagner, 2000). Internationally, there has been considerable interest in identifying ways in which to improve literacy standards and so avert the aforementioned consequences. This has been evidenced by increased government interest and the development of policies aimed at improving literacy and an increase

in the frequency with which literacy skills have been assessed in large-scale testing initiatives. The magnitude of research over the last two decades is an indication of the growing interest amongst policy-makers in devising policies aimed at closing the gap in literacy achievement, especially between children in high-poverty settings and their more affluent peers (Knapp, 1995; Scott, Teale, Carry, Johnson & Morgan, 2009; Taylor, Pearson, Clark & Walpole, 1999). The extent of this literacy achievement gap is well documented (Eivers, Shiel & Shortt, 2004; Department for Children, Schools and Families, 2010). The past decades have seen the advent of policy initiatives such as the National Literacy Strategy in the United Kingdom (Ofsted, 2002), the No Child Left Behind Act in the United States (NCLB, 2001) and Delivering Equality of Opportunity In Schools in Ireland (DES, 2005a) in an attempt to address the problem of low literacy standards.

Notwithstanding the level of interest focused on improving literacy standards and the magnitude of policies in this regard, many children, particularly those from lower socio-economic backgrounds, continue to have difficulty achieving success in reading (DES, 2011; Gamse, Bloom, Kemple & Jacob, 2008; OECD, 2010; Ofsted, 2011; Perkins, Moran, Cosgrave & Shiel, 2010). The following review of the policy decisions internationally in relation to the teaching of literacy is indicative of the centrality of this issue in children's education.

## **2.1 Policy in the U.S.A.**

Federal legislation within the United States of America over the past two decades has had a profound effect on education, specifically on reading instruction. Arising from the increased demands of the twenty-first century workplace, concern over student reading performance is at the forefront of national education policy resulting in literacy standards and the teaching of literacy in the United States becoming highly politicised (Good, Simmons, & Kame'enui, 2001). The publication of the National Reading Panel Report (National Institute of Child Health and Human Development, 2000) marked an influential investigation into the relative effectiveness of different approaches to the teaching of reading. The National Reading Panel (NRP) was specifically assigned to analyse the previous findings of the National Reading Council's report (Snow, Burns & Griffin, 1998) where alphabets, fluency and comprehension were deemed as central to learning to read.

The report presented findings and recommendations for classroom practice on how best to teach reading. These findings were straightforward. Teachers who were deemed effective in reading instruction were found to teach phonemic awareness and phonics systematically in the early grades and to teach comprehension strategies through explicit instruction. These teachers also provided instruction in vocabulary through a range of approaches and developed fluency through oral reading practices. Although other elements of reading instruction such as motivation, engagement and the interrelatedness of reading and writing were not addressed in the NRP Report, these aspects of literacy development are also considered to be elements of best practice (Farstrup & Samuels, 2002; Gambrell, Mandel Morrow & Pressley, 2007; Pressley, 2006). Based on the findings of the NRP, a document titled, *Putting Reading First: The Research Building Blocks of Reading Instruction: Kindergarten Through Grade 3* (Armbruster, Lehr, & Osborn, 2001) was published by the Center for the Improvement of Early Reading Achievement to explain to teachers, in practical terms, how they ought to focus their literacy instruction based on the current reading research.

This document and the NRP report played an important role in influencing subsequent US federal policy regarding reading instruction. In particular, these reports informed the No Child Left Behind Act (NCLB, 2001) which identified teacher quality as an important factor in enhancing learning and specifically stipulated that all teachers need to be highly qualified to teach reading. This stipulation was based on the premise that setting high standards and establishing measurable goals can improve individual outcomes in education. The Act also mandated scientifically-based instruction for the teaching of reading and brought increased federal influence on the design and delivery of remedial reading instruction. It was expected that this increased focus on the teaching of literacy would be instrumental in significantly reducing the numbers of children in need of specific intervention outside of the classroom and that all children would leave school with reasonable literacy skills.

However, despite the focus on teaching beginning reading, a large percentage of elementary school children in the United States – particularly poor children – continue to experience tremendous difficulty learning to read through the instructional methods typically employed in schools (National Center for Education Statistics, 2013). An independent review of the effects of the NCLB Act concluded

that despite the fact that time spent on the essential reading skills had increased, there was not a statistically significant increase in children's reading comprehension or in the proportion of children reading at or above grade level (Gamse *et al.*, 2008). According to a study completed by the U.S. Department of Education's National Institute of Literacy in 2013, fourteen percent of the population in the United States are considered illiterate and twenty-one percent of adults read below a fifth grade level. The findings from these reports and the research of Taylor *et al.* (2002) indicate that the nature of the instruction in literacy is as least as critical as the content and duration of the instruction.

## **2.2 Policy in the United Kingdom**

In the United Kingdom the implementation of the National Literacy Strategy (NLS) from 1997 onwards marked an important watershed in the modern era of reading debates. This strategy, aimed at addressing levels of illiteracy in children leaving primary school, stipulated the content of teachers' instruction in literacy and the methods they were expected to employ in schools. The main aim of the strategy was to raise literacy standards by encouraging schools to use a combination of teaching approaches derived from an international review of effective practice undertaken by Literacy Task Force (LTF, 1997a, 1997b). One area of note (and indeed some controversy) in the NLS *Framework for Teaching* from this period was the prescribed emphasis on the teaching of phonics in the early years. A seminal report in 2005, *Teaching Children to Read*, strongly urged government policy makers to commission a large-scale comparative study, comparing the National Literacy Strategy with phonics fast and first approaches (House of Commons Education and Skills Committee, 2005).

A review of this policy on reading resulted in the publication of the Independent Review of the Teaching of Early Reading (DfES, 2006a) which has more commonly been referred to as the Rose Report. The findings of the Rose Report were incorporated into a restructured framework for the Primary National Strategy (DfES, 2006b). This report advocated a simple view of reading as the theoretical understanding underpinning reading development (DfES, 2006b). A central tenet of this reading theory was that reading comprehension arises from the interaction between decoding and linguistic comprehension. The prime approach for

early reading instruction promoted by this theory was multi-sensory synthetic phonics teaching. This was representative of the skills-based focus of the reading instruction continuum rather than adopting an interactive, balanced, metacognitive approach, which is a prerequisite for children in order for them to reach their potential as readers (Block, Rodgers & Johnson, 2004). In an effort to address concerns around literacy standards in the general population, schools were engaged in developing a structured teaching programme of early literacy instruction that was skills-oriented, with the underlying assumption that struggling readers need instruction that always proceeds from the simple to the complex. These programmes specifically outlined not only what elements of phonics should be taught but also prescribed methods on how to teach this content.

However, this prioritisation of cognitive skills over affective factors associated with the reading process has not proved to be a panacea for all the literacy ills in the United Kingdom. A *Research for the Skills for Life* survey, conducted in 2003 for the Department for Education and Skills, showed that 17.8 million adults (fifty-six percent of the adult working population) in England had literacy skills below GCSE grade C (DES, 2003). Of these, 5.2 million (one in six of the adult population) lacked functional literacy; that is, the level needed to get by in life at work. Since then, successive reports by Ofsted, including the Annual Reports of Her Majesty's Chief Inspector, have shown that there are particular groups of children and young people, including those from lower socio-economic backgrounds, whose reading achievement falls well below that of the rest of the population. A recent report on the teaching of reading in primary schools found that one in five children leaving primary school do not reach the standard expected for reading and writing (Ofsted, 2011). Significantly the focus of attention is not exclusively trained on the literacy achievement levels of the students. A report into teaching reading to young children with literacy difficulties (Department for Children Schools and Families, 2010) recommended that more teachers should be trained as specialists in selecting and delivering reading interventions for these children, and that all schools should have access to such expertise.

The foregoing outlines the international evidence on policy related to reading instruction particularly in the context of addressing levels of illiteracy in children leaving primary school. The next section examines policy related to reading instruction in the Irish context with particular focus on literacy achievement in

disadvantaged schools. This review of policy which includes a report on a national strategy to improve literacy in schools provides a backdrop to the rationale and the focus of the current study.

## **2.3 Policy in the Irish Context**

### **2.3.1 Reading standards in Ireland**

In Ireland, recent concerns about the standards in reading achievement (DES, 2010, 2011), the teaching of literacy (DES, 2005a; Eurydice, 2011) and the performance of Irish children on international tests of literacy have placed a renewed focus on literacy-related policy and in particular on how the teaching of reading is approached in our schools. In particular, the outcome of the Programme for International Student Assessment (PISA) 2009 drew close attention to standards of literacy in Irish schools (OECD, 2010; Perkins *et al.*, 2010). PISA is an international study that is administered to 15-year olds every three years and involves over sixty countries including all members of the OECD. In previous administrations of PISA, students in Ireland achieved mean scores on reading literacy that were significantly higher than the corresponding OECD average scores (Kennedy *et al.*, 2012). However, in 2009, the performance of Irish students was not significantly different from the OECD average. Ireland's ranking in reading literacy dropped from 5<sup>th</sup> to 17<sup>th</sup> among countries participating in both PISA 2000 and PISA 2003, while the proportion of low-achieving readers (those with scores at or below Proficiency level 1) increased from eleven per cent in 2000 to seventeen per cent in 2009 (Perkins *et al.*, 2010). National assessments of reading literacy in Ireland were also conducted in primary schools in 1998, 2004 and 2009. No changes in overall reading performance were observed across these assessments, even though a revised Primary School English Curriculum was implemented from 2000 (Eivers, Close, Shiel, Millar, Gilleece, & Kiniry, 2010). An evaluation of the implementation of this curriculum (Department of Education and Science Inspectorate, 2005) found that while significant progress was achieved in the implementation of the English Curriculum in approximately three quarters of schools, there remained considerable scope for improvement in many schools. This review identified that up to a quarter of teachers needed assistance with regard to their approaches to teaching reading. It also indicated that



schools serving lower socio-economic areas were particularly challenged in providing a cognitively demanding and stimulating language curriculum for students.

### **2.3.2 Literacy achievement in disadvantaged schools**

Low levels of achievement in literacy for children experiencing social and economic disadvantage have been a particular concern for educators and policy makers in Ireland over recent decades. Studies have shown that children attending schools in areas designated as disadvantaged have significantly lower average reading achievement scores than their counterparts in schools in non-designated areas (Archer and O’Flaherty, 1991; Cosgrave *et al.*, 2000; DES, 2005b; Eivers, Sheil and Shortt, 2004; Weir, 2003). Research conducted in disadvantaged schools in 2004 indicated that twenty-seven percent of first and sixth class children and thirty percent of third class children performed at or below the tenth percentile compared to ten percent of pupils at all levels from the representative sample (Eivers, Sheil and Shortt, 2004). These findings were confirmed in the smaller scale *Literacy and Numeracy in Disadvantaged Schools* study which found an average of forty-three percent of pupils in disadvantaged schools performed below the 20<sup>th</sup> percentile (DES, 2005b). This figure was as high as sixty percent in some cases and scores tended to decline as children progressed through the school system. An evaluation of the literacy achievement of children in 6<sup>th</sup> class who had participated in the Breaking the Cycle scheme (involving the schools designated as having the highest level of disadvantage) found that on average thirty-eight percent of these children were performing below the 10<sup>th</sup> percentile.

Successive programmes such as *Breaking the Cycle* (introduced in 1996), *Giving Children an Even Break* (introduced in 2000) and *Delivering Equality of Opportunity In Schools* (DES, 2005a) have been introduced and were aimed at addressing the educational needs of children from disadvantaged communities. Measures directly targeted at addressing low literacy achievement include the introduction of learning support (formerly remedial) and resource teachers, the provision of better teaching materials, increased funding and considerable curricular reform (DES, 2011). Despite the fact that raising literacy standards has been a particular priority for each of these initiatives, a study by Eivers *et al.* (2010)

indicated that there has been little improvement on standardised tests in English reading in designated disadvantaged schools since 2004.

### **2.3.3 National Strategy to Improve Literacy and Numeracy (2011-2020)**

Concerns about the standards in reading achievement in general in Ireland (Perkins *et al.*, 2010, DES, 2010, Eivers *et al.*, 2010) provided the impetus for the Department of Education and Skills to launch the National Strategy to Improve Literacy and Numeracy in Schools (DES, 2011). This strategy identified that one in ten children in Irish primary schools has serious difficulty with reading or writing with this ratio being as high as almost one in three students in some disadvantaged schools. The publication of this strategy has implications for a broad range of activities including teacher education, the teaching of literacy and assessment at both school and national level. In particular the strategy outlines the need to equip teachers with the competence to develop students' literacy skills with particular emphasis on teaching the basic building blocks of reading. Furthermore it calls for a revision of the English Language Curriculum as one action to address concerns about reading standards. The curriculum revision recommends explicit and systematic attention to the teaching of key reading skills and strategies, including phonological/phonemic awareness, phonics (letter-sound rules), word identification, oral reading fluency, vocabulary, and comprehension (DES, 2011). While the focus on phonemic awareness, word identification skills (including phonics), vocabulary and comprehension is predictable, the inclusion of oral reading fluency as a key literacy skill is to be particularly welcomed. Opportunities to promote children's oral reading fluency have long been considered an essential element of effective early literacy instructional programmes (Rasinski & Hoffman, 2003; Samuels, 2002; Stahl & McKenna, 2006). Oral reading fluency is recognised as an important component in effective reading instruction for elementary grade students (Report of the US National Reading Panel, 2000; Kuhn & Stahl, 2003; Rasinski & Hoffman, 2003) and has been identified as one of the defining characteristics of a good reader (Hudson, Lane, and Pullen, 2005). The inclusion of reading fluency has particular relevance to the current study as it examines the influence of fluency oriented reading instruction on the motivation for reading of struggling readers.

### 2.3.4 Oral Reading Fluency and the English Language Curriculum

The National Reading Panel identified oral reading fluency as an essential component of reading instruction for young children (NRP, 2000). However, reference to this reading skill is noteworthy by its absence from the content of English Language Curriculum (NCCA, 1999a) which underpins literacy instruction in Irish primary schools. While the broad objectives of this curriculum state that the child should be enabled to become fluent and explicit in communicating ideas and experiences, the content objectives do not explicitly refer to instruction in oral reading fluency. Furthermore the accompanying English Teacher Guidelines do not identify discrete strategies to develop fluent and automatic reading skills for primary school children (NCCA, 1999b). Details in Table 2.1 identify the references to fluency related activities in the content objectives across all class levels and across the strands of the English Language Curriculum (NCCA, 1999a).

Table 2.1 Reference to fluency in English Language Curriculum (NCCA, 1999)

	Jun. & Sen. Infants	1 <sup>st</sup> & 2 <sup>nd</sup> class	3 <sup>rd</sup> & 4 <sup>th</sup> class	5 <sup>th</sup> & 6 <sup>th</sup> class
<b>ORAL LANGUAGE</b>				
<b>READING</b>				
<b>WRITING</b>			- write in a legible joined script with confidence and <b>fluency</b>	- write <b>fluently</b> and relevantly in other areas of the Curriculum - develop a legible, <b>fluent</b> , personal style of handwriting

The omission of content objectives pertaining to oral reading fluency is atypical of content found generally in language arts curricula in other countries. Interestingly the omission also represents a departure from the focus of reading instruction advocated in the previous English Language Curriculum (Department of Education, 1971). This curriculum included specific reference to oral reading fluency and identified the ‘cultivation of good reading habits like correct enunciation; good eye-movements; suitable speed, pitch and volume; proper phrasing and expression, etc.’ (p.94) as desirable features of oral reading. Given that the ultimate goal of reading is the construction of meaning (Anderson, Hiebert, Wilkinson, & Scott,

1985), and the positive correlation between fluency and comprehension (Pikulski & Chard, 2005) the inclusion of oral reading fluency in the recommendations of the national strategy has particular relevance in the context of addressing standards in reading achievement.

#### **2.4 Statement of the Problem**

Children in disadvantaged schools often struggle with achieving even the basic skills of reading (DES, 2005b, Eurydice, 2011). In Ireland, a study in 2003 found that children in schools with designated disadvantaged status performed poorly on nationally standardised reading tests, with almost thirty per cent of students scoring below the 10<sup>th</sup> percentile (Eivers, *et al.*, 2004). This statistic has been confirmed more recently by the National Strategy to Improve Literacy and Numeracy in Schools (DES, 2011) which identified that almost one in three students have serious difficulty with reading or writing in some disadvantaged schools.

In order to support children who have specific needs in the area of literacy, primary schools in Ireland typically adopt a three tiered approach: classroom support, school support and school support plus (Department of Education and Science, 2003; DES, 2005c; DES, 2007). The most common approach to assist children who present with reading difficulties is to withdraw them from the regular classroom and provide learning support tuition either individually or in smaller groups (Eurydice, 2011). Research on the nature of reading instruction provided in these withdrawal settings indicates that students are more likely to have a fragmented experience of literacy instruction and receive tuition that is unrelated to the classroom literacy programme (Allington, Stuetzel, Shake, & Lamarche, 1986; Haynes & Jenkins, 1986; Santa & Hoiem, 1999). It also indicates that only one-third of the compensatory literacy work is devoted to direct reading activities, and little of this work focuses on oral reading fluency activities (Allington, 2012). These findings have been replicated by other researchers (e.g. Allington & McGill-Frazen, 1989; Knapp, 1995) with other studies revealing that struggling readers frequently receive qualitatively different instruction and less motivating instruction compared to their higher achieving peers (Duke, 2001; Ysseldyke, O'Sullivan, Thurlow, & Christenson, 1989). In many instances, these struggling readers are subjected to a slower pace of instruction with more emphasis placed on cognitive aspects (e.g.

word recognition and comprehension) than on higher order, meaning-oriented and motivational instruction. Yet because reading is an effortful activity that children often can choose to do or not to do, it also requires motivation. Collectively, these findings suggest that failure on the part of compensatory reading programmes to incorporate effective instructional reading practices may account, at least in part, for the prolonged reading problems experienced by low performing readers.

However, there is evidence to show that virtually all children can be reached by effective literacy practices (MacKay, 2007). The delivery of evidence-based interventions has been found to be particularly effective, even with groups who have traditionally struggled to attain literacy. For example, Nugent (2010) found that children from the Travelling Community made over a year's progress in reading skills over a three month intervention period, while Kennedy & Shiel (2010) found that students in schools with disadvantaged status made very significant progress when their teachers engaged in focused professional development.

Almost a half-century ago a major study into the teaching of reading in the USA sought to find out if any particular method of teaching reading was more effective than others (Bond & Dykstra, 1967). One of the important understandings that emerged from their study was that good teachers who provided quality instruction could be successful with almost any approach. It is not my intent in this study to argue that all reading methods are equally effective. On the contrary I see one approach, fluency oriented instruction, as a cohesive factor for many of the essential components of reading e.g. word identification, vocabulary, comprehension. This is in keeping with the definition of reading fluency as 'providing a bridge between word recognition and comprehension' (National Institute for Literacy, 2001, p. 22). Furthermore, research into successful reading achievement has also identified motivation for reading, engagement in reading and self-esteem and confidence, as critical elements of the reading process (Aunola *et al.*, 2002; Foertsch, 1997). I view fluency oriented reading instruction as a framework for not only developing literacy skills to a high level but also for enhancing the motivation and engagement of struggling readers while cultivating their sense of self-efficacy. It is timely, therefore, to investigate reading fluency instruction practices in our primary schools as an integral part of the complex reading process.

## **2.5 Rationale for the Study**

This study uniquely looks at the effect that fluency oriented reading instruction (FORI) has on the reading achievement and the motivation for reading of struggling readers in disadvantaged schools. A better understanding of the relationship between fluency oriented reading instruction and motivation to read has practical and theoretical implications. If this particular type of reading instruction is found to significantly impact on motivation to read, this would indicate a need to focus more on improving oral reading fluency skills. Conversely if motivation to read has a subsequent and sustainable effect on reading skill development, this would indicate a need to integrate more techniques into early reading instruction that are focused on improving student motivation to read as well as techniques that specific reading skills. Therefore this study is significant as it seeks to alert teachers' and policy makers' to the motivational, engagement and social aspects of compensatory literacy education and thus provide a structure for future teaching of struggling readers. The study is specifically focused on students in First Class as research has shown this to be a critical period of rapid skill development that can take readers from word-by-word reading to fluent speech-like reading by the end of that grade (Catts & Kamhi, 2005; Stahl, Heubach, & Cramond, 1997; Miller & Schwanenflugel, 2008).

### **2.5.1 Rationale for fluency oriented instruction**

Helping students become fluent readers is a central goal of early reading instruction (Early Reading Expert Panel, 2003; Rasinski, 2004a; Richards, 2000). Students who do not develop reading fluency by the middle grades of primary school normally struggle with reading throughout their lives (National Reading Panel, 2000; Osborn, Lehr, & Hiebert, 2003). While numerous reading theories and a wide range of research have focused on explaining how children learn to read (Kamil *et al.*, 2011; Kuhn & Stahl, 2003; National Reading Panel, 2000; Stanovich, 2000), there is still much debate amongst reading researchers, parents and teachers over which types of early reading instruction are most effective (Allington, 2012; Neuman & Dickinson, 2011; Paris, 2011). In addition to early reading instruction that focuses on phonics, word decoding skills, vocabulary development, and comprehension, reading instruction that builds a child's oral reading fluency is now considered by some reading researchers to be a vital but often neglected element of a balanced reading

programme (National Reading Panel, 2000; Osborn, Lehr, & Hiebert, 2003; Rasinski, 2004a; Samuels, 2002).

Oral reading fluency is seen as fundamental to the holistic development of reading skills as children move from word-by-word to fluent, expressive reading (Miller & Schwanenflugel, 2006; Schwanenflugel *et al.*, 2004; Kuhn & Stahl 2003). It has been identified as a particularly salient factor when considering the achievement, or lack of achievement, for struggling readers (Miller & Schwanenflugel, 2006). Kuhn and Stahl (2004) found that among struggling readers who were referred for compensatory instruction in literacy, there was a greater deficit in reading fluency than in word recognition or comprehension. Other research suggests that word recognition and reading fluency difficulties may be the key concern for upwards of 90% of children with significant problems in reading comprehension (Duke, Pressley, and Hilden, 2004).

The weight of this research confirms that reading fluency is indeed an important factor when considering a reading intervention for students experiencing difficulties with reading in the early years of primary school (Stahl & Heubach, 2005).

### **2.5.2 Fluency oriented instruction and struggling readers**

Fluency in any activity is achieved largely through practice and repetition – the musician rehearses, the athlete engages in training drills, the actor spends time rehearsing pieces that will eventually be performed on stage, and the child learning to ride a bike spends hours repeating the same basic skills in a quest for competence. The practice referred to in these contexts involves the repetition of a particular tune, skill, movement, or composition many times. Similarly, fluency is achieved in reading through repeated practice of selected texts. While skilled and competent readers who have mastered decoding (word recognition) are often able to achieve and maintain fluency in reading through wide and independent reading, for poor readers, repeated reading of the same text is an essential method for achieving fluency (Rasinski, 2004a; Samuels & Farstrup, 2011).

Research on repeated reading as an instructional strategy found that when students orally practiced a piece of text they improved on their rate, accuracy and reading comprehension of that text (Samuels, 1979). Such an accomplishment is to

be expected given the same text is revisited many times. However, he also found that when students moved to new passages, their initial readings of those new pieces were read with higher levels of fluency and comprehension than the initial readings of the previous passage, even though the new passage was as difficult as or more challenging than the previous piece. Since then, other studies have demonstrated the value of repeated readings as an instructional tool for developing oral reading fluency and, because reading fluency is related to text understanding, to enhancing reading comprehension (National Reading Panel, 2000; Rasinski & Hoffman, 2003).

## **2.6 Focus of the Study**

This study uniquely looks at the effect that fluency oriented reading instruction has on the reading achievement and the motivation for reading of struggling readers. The study focuses on children in First Class in DEIS primary schools (scheme for schools in areas of high socio-economic disadvantage) in the Dublin Northside Partnership Catchment Area who were receiving learning support for reading. This catchment area was selected as it has twenty-two DEIS Band 1&2 primary schools each with learning support programmes for children with reading difficulties.

The research was carried out in two phases over the course of consecutive school years. The initial phase of this study focuses on identifying current practice of learning support teachers in relation to teaching struggling readers and establishing the extent to which they employ oral reading fluency strategies in their instruction. The perceptions and beliefs of learning support teachers regarding the attitude to reading and motivation for reading of struggling readers in their programmes is also researched at this time. Results of this phase would provide a rationale for conducting an in-school intervention with struggling readers in the second phase of the study. The second phase investigated the effects of an on-site reading intervention on the reading achievement and motivation for reading of struggling readers. The intervention, which was based on fluency oriented reading instruction, took place in learning support classrooms in three DEIS primary schools selected from the participating schools in the first phase of the study. The target group for the intervention were children in First Class who were receiving learning support for reading and who were identified as having low motivation for reading.



Pre-testing of students was done during the third and fourth week of school in September, 2013 and the intervention began the following week. Post-testing took place in the second week of December after the conclusion of the intervention. All three participating schools are well established in their respective communities and are in close proximity to each other. The schools are referred to in the study as The Belle School, The Ben School and The Bon School for confidentiality purposes.

The Belle School is located in a newly developed area and is a vertical co-ed school (Junior Infants to Sixth Class). The school has two First Classes and children from both these classes were participants in this research study. This school is designated as DEIS Band 2 status and draws its students from a wide geographical area. The Ben School is located in an established urban community and is designated as DEIS Band 1 status. The school is also a vertical co-ed school. Most children enrolled are from the immediate surrounding area. The school has one First Class and one split Senior Infant and First Class and children from both these classes were participants in the study. The Bon school is also designated as DEIS Band 1 and is located close to the other schools. It is a vertical co-ed school with a single First Class. Children from this class participated in the research study.

The research carried out in the course of the intervention examined the effects of fluency oriented reading instruction (FORI) on three reading motivation constructs: reading self-efficacy, reading orientation, and perceived difficulty with reading. The research also looked at the impact of the instruction on children's reading achievement. In particular this phase of the study sought to investigate the following research questions:

- What is the impact of FORI on the word reading efficiency of struggling readers?
- What is the impact of FORI on the oral reading fluency of struggling readers?
- What are the effects of FORI on the reading self-efficacy of struggling readers?
- What are the effects of FORI on the reading orientation of struggling readers?
- What are the effects FORI on the perceived difficulty with reading of struggling readers?

## **2.7 The Professional Significance of the Study**

In an era of high-stakes testing and increased accountability, it is important for teachers, teacher educators and policy makers to thoroughly understand the components of the reading process and the indicators of reading achievement (Haetel & Lorie, 2004). This study is significant as it hopes to highlight the motivational, engagement and social aspects of literacy and their influence on reading achievement. While a review of the relevant literature indicates that much research has looked separately at both fluency oriented reading instruction and reading motivation, the effect the former has on the latter has not been investigated. The literature on fluency oriented reading instruction suggests that research carried out on this topic centres primarily on investigating its impact on the reading achievement of students rather than on its potential benefit for reading motivation. In this regard, establishing a correlational relationship between FORI and motivation for reading would be significant for all educators and could prove to be invaluable to teachers in providing opportunities to meet the literacy needs of struggling readers. It could be of particular assistance policy makers in providing appropriate resources in their quest to combat illiteracy in priority areas such as schools designated as disadvantaged.

The Irish education system is attempting to shape instruction in literacy for all children including struggling readers through governmental legislation such as the National Strategy to Improve Literacy and Numeracy in Schools (2011-2020) and the revision of the English Language Curriculum for primary school. A positive relationship between FORI and motivation for reading has the potential to influence such legislation and thus, could direct instruction in such a way that would assist the most vulnerable of students to succeed.

The findings of this study will assist in providing guidelines to schools that have a high population of children experiencing difficulties in learning to read. The research outcomes have the potential to influence student learning outcomes in reading in Ireland by ensuring that motivation for reading is included as an integral element of teacher professional development as they pertain to struggling readers. By gaining a deeper understanding of the research findings from this study, policy makers and practitioners alike will be afforded the opportunity to better reflect on

and improve school-based practices in relation to providing learning support to students who struggle to master the reading process.

A comprehensive review of research on the relationship between reading motivation and reading skill by Morgan and Fuchs (2007) described a number of correlational studies and theories that have suggested a bidirectional relationship between motivation to read and reading skill development. However, only a few studies have shed light on the directionality of these relationships (Aunola, Leskinen, Onatsu-Arviolommi, & Nurmi, 2002; Chapman & Tunmer, 1995; Lepola, Poskiparta, Laakkonen, & Niemi, 2005). Uniquely, this study looks at the effect that an effective but underused method of reading instruction (Allington, 2012) has on the development of reading skills and the motivation to read for children in First Class whose attitudes and skills regarding reading are being formed.

## **2.8 Organisation of the Thesis**

This thesis comprises seven chapters. A brief summary of the content of each chapter is described as follows:

- Chapter 1: Prologue  
This chapter outlines the personal motivation and journey leading to this research project.
  
- Chapter 2: Introduction and Context  
This chapter sets out the context of the study including literacy achievement and policy in relation to reading instruction in Ireland and internationally and features a statement of the status of oral reading fluency in the English Language Curriculum for primary schools. The chapter includes a statement of the problem underpinning the investigation and a rationale for the present study. It continues with a description of the focus of the study and an outline of the professional significance of the research. The chapter concludes with a description of the layout of the thesis.

- Chapter 3: Review of Literature  
A review the literature pertaining to reading theory and instruction is presented in this chapter. The focus of this review is on theoretical models of reading instruction, reading processes and oral reading fluency. The chapter continues with a review of research on struggling readers and reading interventions and concludes with an extensive exploration of the literature on motivation and constructs of reading motivation.
- Chapter 4: Research Methodology  
This chapter presents a detailed description of methodology employed in the study. It features a description of the research design and the conceptual framework for the study and presents the context of the study including the description and the rationale for the research methods employed. The chapter also describes the research instruments used for both phases of the study and the methods of data analysis. The chapter concludes with an outline of ethical issues in relation to the study and a statement on the credibility of the research findings.
- Chapter 5: Presentation and Analysis of Findings (Phase 1)  
This chapter presents the results of the investigation pertaining to the initial phase of the study which sought to identify the current knowledge and practice of learning support teachers in relation to reading instruction in primary school classrooms in areas designated as disadvantaged. Both quantitative and qualitative data are interwoven throughout the analysis to provide a holistic view of the current practice of learning support teachers in relation to reading instruction.
- Chapter 6 Presentation and Analysis of Findings (Phase 2)  
This chapter presents the results of the second stage of the study (Phase Two). The findings on the impact of the intervention on reading achievement and motivation for reading are presented with analysis and discussion of both quantitative and qualitative data.

- Chapter 7: Conclusion and Recommendations

This chapter draws together the research by reviewing the key findings of the study and identifying recommendations emanating from the attendant analysis and discussion. It continues with a statement on the limitations of the research, an outline of the contribution the study can make to current knowledge and implications for practice in the field. The chapter closes with suggestions for future research and concluding comments on the study.

### **3 REVIEW OF LITERATURE**

This study is concerned with how students in the early primary grades learn to read and are motivated to continue reading independently in later grades. It looks specifically at those students from designated areas of disadvantage who struggle to learn to read and are receiving learning support in this regard. The purpose of the study is to investigate the effects of fluency oriented reading instruction on the motivation for reading of struggling readers in First Class. Hence, the literature review in this chapter focuses on three broad areas; reading instruction, struggling readers and motivation for reading. The review of literature on reading instruction is organised around three areas which are central to the literacy framework of this study: (i) theoretical models of reading instruction (ii) research on reading processes and (iii) oral reading fluency. In the first section, a brief overview of literature reflecting the shifting perspectives on the theory of reading instruction is presented. The second section explores the key teaching practices that underpin effective literacy instruction and that are deemed essential during the early years of schooling. Given the central role of fluency oriented reading instruction in the present study an extensive review of the literature on oral reading fluency is presented in the third section. This includes examining the literature of assessing and teaching reading in the context of a theoretical framework for oral reading fluency instruction.

The review of the literature on struggling readers examines the nature of difficulties experienced by these students and explores the causes of low achievement in reading. This section goes on to examine the research on reading interventions for these readers with a particular focus on Fluency Oriented Reading Instruction (FORI).

The final section of the chapter reviews the literature on motivation and its role in teaching and learning. Instructional strategies for fostering motivation are presented in the context of the relationship between reading motivation and reading achievement. Drawing on the theoretical perspective of multiple goals in motivation the chapter closes with an examination of three constructs of motivation that have the potential for influencing the development of reading skill in the early primary school years.

### **3.1 Theories of reading instruction**

Just like teaching methodology, theories of reading instruction have had their shifts and transitions over the years. A characteristic feature of research on literacy for more than four decades has been the disagreements among educators about how beginning reading (as a central element of literacy) should be taught, and especially for students with reading difficulties (Chall, 1967). At one extreme of this disagreement are educators who advocate a whole-language approach, while others argue for a more systematic phonics approach. In brief, the discussions have focused on whether the teaching of reading should begin with: (a) *direct* or *explicit instruction* in sound-symbol correspondences and automatic whole word recognition; or (b) whether instruction on reading from the outset should be *meaning-centred* with orthographic sound-symbol relationships taught incidentally in context as needed. These two stances have been documented by research as the *bottom-up* (or sub skills) model, and the *top-down* (or whole-word) model. A third model that draws on both of these is referred to as the *interactive model* of teaching reading (Weaver, 1994). Furthermore, Donoghue (2009) in viewing reading as an active, constructive process identifies two further models of teaching reading. One is the *transactional model*, which elaborates on the interactive and the other is the *balanced approach* to teaching reading. Both of these will be elaborated on later in this chapter.

#### **3.1.1 The ‘bottom-up’ model**

The traditional bottom-up approach to reading was influenced by behaviorist psychology of the 1950s, which claimed learning was based on ‘habit formation, brought about by the repeated association of a stimulus with a response’ and language learning was characterised as a ‘response system that humans acquire through automatic conditioning processes’ (Omaggio 1993, p. 45-46). Reading instruction that focuses on the teaching of the alphabet principle (phonics) is known as the bottom-up approach to reading. This *bottom-up model* is supported by researchers who view reading as a set of subskills that must be mastered by students and integrated to the extent that children use them automatically. Reading in this perspective is simply a matter of decoding a series of written symbols into their aural equivalents in an effort to comprehend text (Nunan, 1991). In a step by step

approach, students must first learn to recognise letters, then words, and finally words in context. Emphasis is placed on letter-sound mapping and blending with the expected outcome that with practice, associating component letters to their sounds and blending them becomes automatic. In addition, frequently encountered letter combinations come to be perceived automatically as decodable chunks (Pressley, 2006).

Advocates of this model claim that the competent reader translates graphemes directly into phonemes and subsequently into meaning without recourse to guessing or predicting upcoming text (Gough, 1972). In this traditional view of reading, novice readers are passive recipients of information acquiring a set of hierarchically ordered sub-skills that sequentially build toward comprehension ability. Meaning resides in the text and the reader has to reproduce meaning (Dole, Duffy, Roehler, & Pearson, 1991). This part-to-whole model is frequently used in the basal reader approach, which has been a dominant method of reading instruction for many years (Fawson & Reutzel, 2000). However, because of its reliance on the formal features of the language (mainly words and structure) this model has almost always been under attack as being insufficient and defective (Fitzgerald, 1999; Goodman, 1970). The model has been widely criticised for its lack of emphasis on comprehension and meaning making with processing seen as proceeding only in one direction (Rumelhart, 1984; Weaver, 1994). Labelled as ‘mechanistic and reductionist’ by Pressley, 2006 (p.424), the skills–emphasis approach is viewed by many as an incomplete model of literacy development that fails to acknowledge the many defensible literacy practices as promulgated by whole-language proponents (Allington & McGill-Franzen, 2004; Pressley, 2006). Although it is possible to accept this criticism for the fact that there is over-reliance on structure, it must be acknowledged that knowledge of linguistic features is also necessary for comprehension to take place. To counteract over-reliance on form in the traditional view of reading, a cognitive view of teaching reading embracing a whole language approach was introduced as an alternative model.

### **3.1.2 The ‘top-down’ model**

In the 1960s a paradigm shift occurred in the cognitive sciences. Behaviourism became somewhat discredited as a new cognitive theory represented the mind’s



innate capacity for learning, which gave new explanatory power to how humans acquired language. The work of cognitive psychologists was prevalent in the literature on the process involved in learning to read. Their theories placed equal emphasis on the role of a reader's schema and the importance of the print on the page (Anderson & Pearson, 1984). The meaning derived from words, sentences, and text were seen to be conditioned, influenced, or shaped by the total set of experiences and prior knowledge the reader brought to reading. The theory rejected the notion that meaning was transmitted from the page into the reader's head based on a verbatim rendering of text.

This cognitive interpretation of the reading process revolutionised the concept of the way students learn to read (Smith, 1994). The model is characterised by whole-to-part teaching that encourages children to recognize words by sight, without any analysis of letters or sounds. It is commonly referred to as the top-down or whole language approach to teaching reading and represents 'a diametrically opposed perspective' to the bottom-up model (Murphy, 2002, p.202). The model is based on the belief that that language should not be broken down into letters and combinations of letters and then decoded and that good readers do not dwell on the letter sound correspondence when they read. Instead, they believe that language is a complete system of making meaning, with words functioning in relation to each other in a particular context (Weaver, 1998). Chomsky's theory on linguistic development, which argues that humans are built to communicate through words and have a natural capacity to learn language, supported this whole language approach to reading (Chomsky, 1972). His work inspired Goodman (1970) to present reading as a psycholinguistic guessing game, a process in which readers engage with the text, form hypotheses, confirm or reject them, make new hypotheses, and repeat this process as they read. In this instance, the reader, rather than the text, is central to the reading process. The approach emphasises the critical role that the reader's mind plays in comprehending the text. The child uses three cue systems - grapho-phonetic, semantic, and syntactic - and makes educated guesses about the meaning of the reading passage. The proponents of this approach view reading as a holistic experience and believe that what the reader anticipates, affects how she or he actually comprehends the message within the text.

The model is premised on the belief that children have powerful language learning capabilities. The proof presented for this is that children learn oral language

without explicit teaching, simply from immersion in a speaking world (Elley, 1989). By analogy, it was presumed that children should also be able to learn to read from immersion in print and print experiences. However, research into acquiring language and reading indicates that humans have not evolved to be able to discover how to read and write from immersion in print experiences (Pressley, 2006). Essentially, the whole-language approach to reading is consistent with a constructivist philosophy of learning where students are considered as naturally active, self-regulating learners who construct knowledge for themselves, with little or no direct instruction in decoding. Research, however, indicates that constructivist whole-language approaches are not ideal for children experiencing learning difficulties and in particular for those with reading difficulties (Moats, 2000). Similarly, for children from lower socio-economic backgrounds being taught under constructivist modes can have the effect of compounding their disadvantage once they begin school (Munro, 1998). These children often have poor phonological knowledge and phonemic awareness upon which to base new learning, (Munro, 2000).

### **3.1.3 The interactive model**

The interactive reading model describes a structure of the reading process that incorporates the way linguistic elements are processed and interpreted by the brain (Rumelhart, 1984). The model combines both surface structure systems (the bottom-up element of reading) with deep structure systems (the top-down aspects of reading) to facilitate comprehension for all learners. Readers use both background knowledge and an understanding of word formation to comprehend the texts they read. For example, a student who encounters a previously unseen word might use surface structure systems like letter-sound, knowledge to decode the word. Another student might employ deep structure systems such as meaning and vocabulary to decode the same word. Each student makes connections in different ways. This process validates and supports both methods of understanding, recognising that individual's process information in very different ways. The model works on the assumption that students are simultaneously processing information from the materials they are reading (i.e., the bottom-up model) and information from their background knowledge (i.e., top-down model). It is based on the schema theory (Rumelhart, 1984), which explains how readers receive, store, and use knowledge in the form of

schemata - structures for organising knowledge in the mind. Researchers have argued that recognition and comprehension of printed words and ideas result from using both types of information (Duke & Pearson, 2002; Gove, 1983). The objective of this approach is to teach strategies to students that will help enable them to monitor their own thinking while reading and link prior knowledge to the new material they encounter in their text. As a result, reading becomes a unique process for each individual reader as their schemata and the ability to use them are personal and individualised. The hypothesis for this model is that the greater the prior knowledge that a reader possesses, the more likely he or she is to comprehend the printed text. An elaboration of this approach is the transactional model which takes into consideration the students' intentions when they read and how those can affect understanding (Kirshner & Whitson, 1997).

### **3.1.4 The transactional model**

The transactional model, developed by Rosenblatt (1994), presents a theory that each student is engaging in a construction of meaning when he or she is reading. She considered theories that viewed reading merely as a decoding activity or that privilege the reader above the text as dualist (Rosenblatt 1998) and rejected them to emphasise the situated relationship between a reader and a text as being critical for the outcome of reading. Reading is treated as an event or a process in which social, environmental, and cultural factors affect the reader's personal interpretation of the printed page. When reading is viewed as a transaction or event, the stance adopted by the reader must be considered. In this model each transaction with the text is influenced by what Rosenblatt (1994) terms the readers 'linguistic-experiential reservoir' and the response the reader makes to the text takes place on the 'efferent-aesthetic continuum' (p. 1006). Every reader is unique, possessing different background knowledge, cognitive skills, motivation and purpose for reading. Hence the text is open to many interpretations dependent on the stance of the reader.

For example if the reader is eager to obtain information from the printed page they adopt an efferent stance, while the reader reading for entertainment or enjoyment adopts the aesthetic stance. Using the latter stance, students can concentrate on thoughts and feelings that a particular book evokes. However, almost

every reading experience evokes a balance between aesthetic and efferent reading (Rosenblatt, 1994), as students often move back and forth between the two stances.

### **3.1.5 The balanced approach to literacy**

While many of the models explored to date are influenced by the challenges of the beginning reader, research on the competent reader has also contributed handsomely to inform effective classroom instruction of reading. A competent reader is a fluent decoder, with a rich bank of vocabulary who uses a wide range of comprehension strategies while working from a motivated perspective (Paris, Wasik & Turner, 1991). Hence, reading instruction needs to include all these elements if students are to be successful (Cunningham *et al.*, 2000; Slavin & Madden, 1989). The balanced approach to reading instruction combines all these elements while embracing the best features of the models outlined above (Freppon & Dahl, 1998; Hoffman, Baumann & Afflerbach, 2000; Searfoss, Readence & Mallette, 2001). The idea of balance has drawn advocates from all sides of the reading debate, with some interpreting a whole-language perspective as the balanced approach (McIntyre & Pressley, 1996) and others viewing an emphasis on early decoding as the cornerstone of a balanced framework (Lyon, 1997). One large-scale survey revealed that almost ninety percent of primary school teachers believe in this approach because it combines both skills development and reading material with ‘language-rich experiences’ (Baumann, Hoffman, Moon, & Duffy-Hester, 1998, p. 642). In a balanced approach to teaching reading, literature is the core of the programme, and readers develop the ability to take both efferent and aesthetic stances in reading. The fundamental *raison d’être* of reading is seen as comprehending text. While word recognition skills are taught both directly and indirectly they are seen as a means to enable comprehension rather than a discrete learning outcome.

### **3.2 Research on reading instruction**

Research into effective teaching has a long history but the special focus on effective teachers of literacy has only been prevalent over the past two decades. During this time and notwithstanding the diversity in the theories of reading identified above, certain approaches to the teaching of reading have emerged in the empirical literature as effective for all students, whether or not they experience reading difficulties

(Adams, 1990; Bond and Dykstra, 1967; Chall, 1967; National Reading Panel, 2000; Johnston and Watson, 2005; Slavin, 2005; Snow, Burns and Griffin, 1998; Vaughn, Gersten and Chard, 2000). More recent reviews of the literature on reading instruction indicate that significant progress has been made in identifying key teaching practices that underlie effective reading and literacy instruction during the early years of schooling (Center, 2005; Louden *et al.*, 2005). Much of this research has focused on identifying how individual children learn to read (Kuhn & Stahl, 2003; National Reading Panel, 2000; Stanovich, 2000). The debate amongst parents, teachers, and reading researchers over which types of early reading instruction are most effective has resulted in some researchers now advocating reading programmes that incorporate various instructional strategies formerly considered to be at odds with one another (Cunningham & Allington, 1999; Dahl & Scharer, 2000; Shaw, 2008). However a consistent and important finding emerging from reading research is an understanding of how to teach the majority of students to acquire basic beginning reading skills such as identifying words and reading connected text.

The Report of the National Reading Panel (NRP, 2000) served to set the future direction for research on reading instruction research in the primary grades. Their meta-analysis identified five key areas deemed important in reading instruction: *Alphabetics* (phonics and phonemic awareness), *Comprehension*, *Fluency*, *Teacher Education and Reading Instruction*, and *Computer Technology and Reading Instruction*. Their conclusions from reviewing research relevant to these five priorities has helped form the direction of reading research worldwide for the past several years. While it has been criticised for its reliance exclusively on experimental and quasi-experimental studies in reaching its conclusions and its narrow focus (e.g. excluding topics such as writing) the report provides a framework for examining the research on the essential skills of reading (alphabetics, comprehension and fluency). Researchers recommend that instruction in these critical areas should be delivered in a systematic, methodical and explicit manner using research based instructional materials (Bursuck & Damer, 2010; Stormont, Reinke, & Herman, 2012). While the present study is primarily concerned with oral reading fluency this element of reading is intrinsically linked to the other essential parts of the reading process. Non-fluent readers are often students who struggle with the basic skills of decoding (Rasinski, 2003). These students spend a great amount of time decoding and trying to break apart words, which then leads to a loss of meaning

and an unclear understanding of the text. It is important to master decoding skills before becoming a fluent reader. The following section reviews the literature on alphabets, the first of these essential skills of reading.

### **3.2.1 Alphabets**

In order to learn to read in an alphabetic system like English, students need to develop some critical understandings about how the writing system works. First students must understand that the purpose of print is to communicate and also understand the basic conventions of print (e.g. reading proceeds from left to right and generally from top to bottom). They must also recognise that spoken words are made up of discrete sounds that are strung together. A student who can analyse and manipulate these sounds in spoken words is considered to have achieved phonemic awareness. Readers also need to understand that the letters of the alphabet in printed words represent the sounds in spoken words. This association is referred to as the alphabet principle and understanding this principle enables students to learn to use the alphabet code when reading. In the area of alphabets, the NRP (2000), made their conclusions in two parts: phonemic awareness instruction and phonics instruction. Drawing on research into beginning reading, they concluded that phonemic awareness training along with letter knowledge were the best predictors of how well children will learn to read (Bradley & Bryant, 1985; Cunningham & Cunningham, 2002; Ehri, 1994; Share *et al.*, 1984) and caused improvement in students' phonemic awareness, reading, and spelling. Phonemic awareness training was deemed as highly effective under a variety of teaching conditions and with a variety of learners across a range of grade and age levels. The report determined that it improved student reading more than reading instruction that did not include phonemic awareness. Phonemic awareness training benefited students' word reading, comprehension, and spelling long after the training had ended (Ehri & Nunes, 2002). The NRP also concluded that explicit, systematic phonics instruction was an essential part of a successful classroom reading programme. Systematic phonics instruction produced greater growth than non-phonics based instruction across a range of domains: student ability to decode, word-reading abilities of regularly spelled words, pseudo-words, and irregularly spelled words, as well as in reading comprehension ability. Across grade levels it was found to improve the spelling

ability of good readers and was strongest in this regard among children in the first year at school. However, a similar review of the experimental evidence by Torgerson, Brooks & Hall (2006) found that phonics had no effect on spelling. In a synthesis of research on literacy, Farstrup & Samuels (2002) summarised the findings of what twenty-two reading experts revealed about reading instruction. This synthesis further supported and expanded the endorsement of teaching phonemic awareness and phonics instruction by the NRP (2000). Research by Cunningham and Cunningham (2002) emphasised the importance of phonics instruction being taught through a series of activities to facilitate the transfer of transferring phonics skills to actual reading.

Research by Ehri and Nunes (2002) found evidence that phonemic awareness instruction helps children, from preschool age to older students, who experience reading difficulties and who face a variety of reading challenges. They noted that phonemic awareness instruction is one essential component of an effective overall literacy programme. This evidence appears to have ended the phonics versus whole language reading dichotomy as it is widely conceded that effective reading instruction ought to include both phonemic awareness and systemic phonics instruction (Cunningham & Cunningham, 2002; Ehri & Nunes, 2002; Ehri, Nunes, Stahl, & Willows, 2001). It must be noted however that word recognition should not be confined to phonics. The English language has a deep and opaque orthography and has been influenced by other languages such as Latin, Greek and French (Dombey, 2006). Stuart *et al.* (2008) remind us that there are two separate processes in reading, sight word and phonically based decoding. They argue that children will require explicit instruction in acquiring the many irregular words in English and will also require explicit training in using visual and morphemic strategies as they attempt to decode unfamiliar words. If children taught exclusively by phonics did not develop sight word reading, they would become stuck in the full alphabetic phase outlined by Ehri (2005) making a lot of regularisation errors when reading irregular words. While acknowledging the critical role of phonics in early reading, Hall (2006) posits that reducing the debate on beginning reading to which phonic method to use, denies the complexity of the reading process and may oversimplify matters by suggesting that a particular method can solve ‘the long tail of underachievement’ (p.9) that is apparent in schools today. She situates phonics within the wider literacy curriculum and reminds us of the plethora of other factors that impact on learning to

read. Some of these factors go beyond the range of pedagogical skills needed to become a successful reader and include how children view themselves as learners, how they view the reading process, the influence of teachers' views on the literacy process which in turn impact on the climate of the school and classroom and finally the influences of the home and wider community.

Pressley (2006) reminds us that programmes that focus too much on teaching letter-sound relations and not enough on their application are unlikely to be very effective. In implementing systematic phonics instruction, educators must keep the end in mind and ensure that children understand the purpose of learning letter-sounds and are able to apply their skills in their daily reading and writing activities (NRP, 2000). While reading research supports the teaching of constrained reading skills such as phonemic awareness and systematic phonics instruction, it also supports a strong whole-language approach that provides individualised strategy instruction Paris *et al.*, (1995). It is important therefore that teachers do not over-emphasise one aspect of the complex reading process over another. If the focus on teaching reading at the early stages is weighed too heavily on phonics instruction to the exclusion of other instructional approaches, both policy and practice are likely to be misdirected (Camilli, Vargas and Yurecko, 2003). Thus, the integration of phonics instruction with other reading instruction is central to creating a balanced reading programme.

Research conducted in the theoretical models and processes of reading by Paris *et al.*, (1995) would appear to support this stance. They suggest that even though phonics is a necessary reading skill it is also a constrained skill which is time bound and once mastered contributes little to reading achievement in the longer term. They also point out that vocabulary knowledge and comprehension are unconstrained skills and continue to develop and enhance reading achievement across the life span of the reader. This suggests that early reading programmes that focus primarily on word identification may limit children's reading development and that a dual emphasis on comprehension and vocabulary is desirable from the outset. The next section looks at the second essential reading skill identified by the NRP (2000); the role of comprehension (including vocabulary) in reading development.



### **3.2.2 Comprehension**

The ability to derive meaning from text is critically important in the development of children's reading skills and has come to be viewed as the essence of reading essential not only in academic learning but to life-long learning (Durkin, 1993). The International Reading Association dictionary defines comprehension as the intentional thinking during which meaning is constructed through interactions between text and reader (Harris & Hodges, 1995). Duke and Pearson (2002) added 'navigation' and 'critique' to the definition based on their belief that readers move through text, finding their way, evaluating the accuracy of their reading to see if it matches their background knowledge and personal agenda and arriving finally at a self-selected destination. Sweet and Snow (2002) contribute the notion of 'involvement with written language' (p.23-24) to the definition, highlighting the role of active engagement with text in comprehension. Most definitions take account of the complexity of reading comprehension and identify three different levels: literal, inferential and metacognitive (Lipson, Irwin & Poth, 1986). Literal comprehension is defined as 'extracting the details of the text and recognising the author's purpose' (Block, Rodgers & Johnson, 2004). Inferential comprehension requires the reader to read between the lines and interpret that text using their background knowledge and the explicit knowledge within the text. Metacognition is a step beyond inferential comprehension. It refers to the awareness of one's thinking and the self-regulation and self-monitoring of a learner's thoughts. In examining the research base on comprehension the NRP (2000) included a particular focus on vocabulary development.

#### ***3.2.2 (a) Vocabulary Development***

Research on teaching reading in general has been unequivocal in its support for robust vocabulary teaching as an element of effective literacy instruction (Baumann, Kame'enui, & Ash, 2003; Cowen, 2003). The NRP acknowledged the critical role that vocabulary plays in reading instruction and examined the research on its connection to the reading comprehension process. This research suggests that direct instruction in vocabulary strongly influences children's level of comprehension (Baker, Simmons & Kame'enui, 1998) and that vocabulary knowledge is a strong determinant of reading success in general (Biemiller, 2003). The NRP concluded that reading ability in general and vocabulary size were closely

related. For example, in a study conducted by Beck, Perfetti and McKeown (1982), fourth graders who received direct instruction in vocabulary were found to perform better on semantic tasks than those who did not receive the instruction. Research into reading performance by Baker, Simmons, & Kame'enui (1998), found that learning, as a language based activity, is fundamentally and profoundly dependent on vocabulary knowledge. In this context vocabulary knowledge refers to the words and word meanings. Unlike constrained literacy skills such as print awareness, phonemic awareness and phonics knowledge which are typically developed in the early years, vocabulary knowledge expands and deepens over the course of a lifetime enabling us to communicate effectively. The more words children know, the more they can understand what they read and, therefore increase their knowledge (Stanovich, 1986).

Researchers often refer to four types of vocabulary: *listening vocabulary* - the words we need to know to understand what we hear; *speaking vocabulary* - the words we use when we speak; *reading vocabulary* - the words we need to know to understand what we read; and *writing vocabulary* - the words we use in writing (Armbruster, Lehr, & Osborn, 2001). These categories are significant because the source of children's vocabulary knowledge changes as they become more familiar with the written word. Very young children learn their initial vocabulary in a verbal context and environment. Typically at this emergent stage of literacy acquisition, their oral vocabulary is far greater than their word recognition (Chall, 1987). As they progress beyond their early years, however, most of the words they encounter in oral language are words that they already know (Beck, McKeown, & Kucan, 2002). It is natural, therefore, to deduce that the source of learning new vocabulary shifts to the written context of what children read. As the student becomes more proficient in word identification strategies he or she is confronted with words that may be decoded but not necessarily understood. They are in fact required to learn the meaning of new words that are not part of their oral vocabulary.

Graves and Watts-Taffe's (2002) and Graves (2006) corroborated the National Reading Panel's findings regarding vocabulary instruction in suggesting that a systematic approach is needed in order to develop children's vocabulary. Their research findings advocated a four-part vocabulary programme. Firstly, they proposed that wide or extensive independent reading should be encouraged. The volume of reading greatly affects a student's vocabulary knowledge (Cunningham &

Stanovich, 2001). Students who have mastered the reading process and read with a degree of fluency are more likely to engage with more difficult reading material and so are exposed to a larger amount of new vocabulary. Research has shown that children who read even ten minutes a day outside of school, experience substantially higher rates of vocabulary growth between second and fifth grade than children who do little or no reading (Anderson & Nagy, 1992). This is particularly relevant for children with reading difficulties as they tend to read less than their more able peers and so are not exposed to the rich, complex and more sophisticated language and syntactical structures of text. Struggling readers who need assistance in vocabulary development do not typically engage in wide reading especially of those texts that contain unfamiliar vocabulary. This can trap children in a vicious circle, since children who cannot read more advanced texts miss out on opportunities to extend their vocabulary. They are also less effective in deploying strategies necessary for independent word learning (Fisher and Blachowicz, 2005). Furthermore, given the verbal nature of most classroom activities, any inability to comprehend language and knowledge of words will be detrimental to success in school and hinder access to the broader curriculum.

The second finding by Graves and Watts-Taffe (2002) advocated direct teaching of individual words. The scientific research on vocabulary instruction confirms that, although most vocabulary is learned indirectly through incidental exposure to words, some vocabulary must be taught directly. Although students will learn many words from the various classroom language experiences, explicit instruction of carefully selected words is needed for students to understand content-specific texts and to acquire the in-depth knowledge they need in order to understand the meaning of words they will encounter while reading. According to the NRP (2000) it is highly effective to explicitly teach individual words that are vital to the comprehension of the material being read. The counter-argument for this type of direct and active instruction of individual words this is that there are too many of them to be learned and that most words are learned anyway from context during reading. If we are to envisage teaching all the words in the English language, then of course it would not be feasible to teach them through direct instruction. Beck, McKeown & Kucan (2002) provide guidance in making this challenge more realistic by defining an individual's vocabulary as comprising three tiers. The first tier words (Tier 1 words) are common words that students are likely to know or that are easily

taught e.g. *friend, bed, run, orange*. Words in the third tier are rare words that students are less likely to encounter frequently. These are often content specific words whose meanings are often supported by surrounding text e.g. *harbour, clavicle, congruent*. These words are not frequently encountered or used by students and are best learned when in their specific context and when the need arises. This leaves us with the words in the middle or second tier (Tier 2 words) which are generally characterised by high frequency and are found across diverse domains e.g. *identical, soothing, opponent*. There is a responsibility on the teacher to identify these words, to engender in children a consciousness around them and to provide instruction on them beyond the basic level of simple definition.

A third element of Graves and Watts-Taffe (2002) programme is to teach word learning strategies. Teaching word learning strategies to students - strategies such as using context and word parts to unlock the meanings of words they don't know - is tremendously important. With tens of thousands of words to learn, anything we can do to help students become more proficient independent word learners is an absolute necessity. Word learning strategies are the tools students can use to figure out the meaning of unfamiliar words and increase their word knowledge. Direct teaching of word-learning strategies can help students become better independent words-learners (Baumann, Font, Edwards, & Boland, 2010; Blachowicz & Fisher, 2000; Graves, 2006; NRP, 2000).

Finally Graves and Watts-Taffe (2002) suggest fostering word consciousness as a way to teach vocabulary. A hallmark of direct instruction in vocabulary and indeed of good instruction generally is to ensure students become actively engaged and are made conscious of their learning (Wittrock, Marks, & Doctorow, 1975). Word consciousness can be thought of as “an awareness of, and interest in words, and their meanings” (Graves, 2006, p. 7). This also includes word play and expressively used words such as idioms and figurative language (Lehr, Osborn & Hiebert, 2004). Teachers can increase students' vocabulary by helping them develop word conscious behaviours such as showing strong interest in words, noticing words, and learning new words. Ways to foster word consciousness include playing word games, telling tongue twisters or jokes, and highlighting interesting words found in the texts (Lehr, *et al.*, 2004). If children are going to become conscious of vocabulary learning they need to be actively engaged with the process (Stahl & Nagy, 2006). This active engagement is vital for learning meanings of specific words

and in learning strategies to become independent word learners. Learning new words as we encounter new experiences is a durable and long-lasting way to develop a rich and comprehensive vocabulary. For example the words *batter*, *flip*, *pan*, *flour*, *fry*, and *lemon* may be learned naturally in the context of making pancakes, just as *pull*, *block*, *strike*, *double*, and *clash* take on special meaning for the child who plays hurling (Mehigan, 2009). Word-conscious children enjoy learning new words and engaging in word play. They know and use many words, and are aware of the subtleties of word meaning and of the powerful nature of words. Good vocabulary instruction excites students about words and contributes to their comprehension.

A wealth of research has documented the strength of the relationship between vocabulary and comprehension (Duke and Pearson, 2002; Graves, 2006; Samuels & Farstrup, 2006; Stahl & Nagy, 2006). Vocabulary knowledge and reading comprehension are closely connected skills. Each skill is imperative to reading achievement, yet one relies heavily on the other. The next section looks at the literature on reading comprehension.

### **3.2.2 (b) Reading comprehension**

Much of the research on the comprehension process has been acquired through the study of the behaviour of good readers. A review of research on comprehension processes above the level of individual words indicated that proficient readers engage in a skimming the text before reading and thus activating prior knowledge which can be associated with ideas in the text (Pressley, 2002a). In the process of reading a text, good readers scan forward over information, make conscious inferences while doing so and reread text deemed as particularly important. In addition, they also construct the main ideas of the text they are reading and interpret, evaluate, and monitor as they read (Pressley, 2002a). In summary, they are active readers. After readers with good comprehension skills have completed reading a text, they reflect on what they have read, constructing a summary and evaluating the credibility of the material (Pressley, 2002a).

Duke and Pearson (2002) reiterated and added to Pressley's reading strategies of readers with good comprehension skills by noting that they are active at all phases of reading. Thus, they have specific strategies that they engage in before, during and after reading. They monitor their reading, evaluating their understanding as they go, paying particular attention to new ideas and terms that need to be clarified. They

often make predictions about what is ahead and employ reading comprehension strategies such as summarising, revising, evaluating, and questioning to monitor their understanding as they read. For good readers then, reading is an evaluative act during and after reading as they decide if the text is stimulating or if the views presented within are credible (Pressley, 2002a). Pressley also articulates the importance of teaching comprehension strategies to students so that they can see *how* to comprehend text. If reading comprehension strategies are to become more than simple cognitive skills based on a single activity, they must be taught to the level of metacognition using quality literature and a range of genres (Pressley, 2002a).

The NRP (2000) identified comprehension strategies that have a scientific base including *comprehension monitoring*, *question answering* and *question generation* (Baumann, 1986), *summarisation* (Brown, Day & Jones, 1983), *story structure* and *the use of graphic and semantic organisers*. McEwan (2004) added the *activating of prior knowledge* and *making connections* between this knowledge and new information, *drawing inferences* from text and *visualisation* to the list of strategies used by highly effective readers. These comprehension strategies are widely accepted in research on reading as the essential cognitive strategies required for comprehension (McEwan, 2004; Pearson *et al.*; 1992 Pressley & Wharton McDonald, 2002). Comprehension strategy instruction is based on the assumption that students do not generally become fluent and efficient readers through practice alone. The National Reading Panel found evidence for the teaching of sixteen categories of text comprehension instruction. Seven of these categories had strong support in the research (Duke & Pearson, 2002). Combining these seven strategies into a multiple method strategy was seen as more desirable and effective. The seven strategies include those already outlined above (i) question generation (ii) question answering (iii) summarisation (iv) use of story structure (v) use of graphic and semantic organisers (vi) comprehension monitoring where students learn to be active and aware of their understanding and (vii) the use of co-operative learning strategies.

In addition to these strategies, a fundamental pre-requisite of reading comprehension is that the reader can recognise and decode text accurately and automatically. It is well established that difficulties in automatic word recognition significantly affect a reader's ability to effectively comprehend what they are reading (Lyon, 1995; Torgeson, Rashotte, and Alexander, 2001). Therefore, it is no surprise that decoding ability and word recognition skills are highly predictive of

comprehension ability. Even mild difficulties in word identification can pull attention away from the underlying meaning, reduce the speed of reading, and create the need to reread selections to grasp the meaning. Many struggling readers often spend much more time working skills from a bottom up approach while reading than their fluent peers. When they are struggling with these basic skills, they are not fluent readers, and therefore, they do not attain reading comprehension skills. They consequently have difficulty moving to a level of automaticity and fluency that allows them to easily comprehend what they are reading (Allington, 2012).

Research by Schwanenflugel *et al.* (2006) confirms the link between improved reading comprehension and instruction that focuses on oral reading fluency. In an earlier study of struggling elementary-grade readers, Rasinski and Padak (1998) found that students referred for supplementary instruction in reading were more likely to display significant difficulties in reading fluency than in word decoding or passage comprehension. Similarly, Fuchs, Fuchs & Maxwell (1988) found a strong correlation between measures of reading fluency and students' performance on a standardised test of silent reading comprehension. A large-scale analysis from the National Assessment of Educational Progress in Reading (Pinnell *et al.*, 1995) clearly established the link between fluency and comprehension. These studies and others have demonstrated a powerful and compelling relationship between reading fluency and more general measures of reading achievement and proficiency, including comprehension (Samuels & Farstrup, 2006).

The following section looks at reading fluency, the third essential reading skill identified by the NRP (2000). As the present study focuses on an oral reading fluency intervention, what follows is a comparatively more comprehensive and in-depth the review of the literature on this element of reading instruction.

### **3.3 Reading Fluency**

Over the past decade, the field of literacy education has seen a major shift in the role of oral reading fluency in the literacy curriculum, moving from a rarely encountered instructional component to one that is often responsible for driving major instructional decisions (e.g., Rasinski & Hoffman, 2003; Samuels & Farstrup, 2006; Schilling, Carlisle, Scott, & Zeng, 2007). This shift is due, in part, to the determination by the survey of research by the National Reading Panel's (NRP,

2000) that reading fluency was one of the pillars of effective reading instruction. It also results from a broader reconsideration of the role of oral reading in the development of skilled reading (e.g., Osborn, Lehr, & Hiebert, 2003; Rasinski, 2006; Reutzel, Fawson, & Smith, 2008). Subsequent summaries of reading research have also determined that there is a solid body of evidence that supports reading fluency instruction (Rasinski, 2010; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011). While a balanced reading programme has traditionally included phonemic awareness, phonics, word decoding skills, vocabulary development, and comprehension, it is now accepted by many reading researchers that instruction in reading fluency should also be included as an important but neglected element (Rasinski, 2004a; Samuels, 2002).

Taking into account the aforementioned elements, the process of learning to read thus can be conceptualised as a series of developmental stages through which readers progress as they become increasingly proficient with print (Chall, 1996; Harris & Sipay, 1990). The theory of stages in reading development has existed for many years (Chall, 1996; Ehri, 1995, 1998). Chall (1996) proposed six stages through which readers proceed, each of which emphasises a particular aspect of reading development. The first is an early reading or emergent literacy stage. This period encompasses the literacy behaviours that are developed prior to formal instruction. In this stage the learner develops a foundation for the reading process that includes concepts about print, phoneme awareness, and book-handling knowledge. The learner in this period develops knowledge that will allow for later instruction to proceed in a meaningful manner. The next stage involves the beginning of *formal* reading instruction. At this stage, the emphasis is on developing learners' recognition of basic sound-symbol correspondences while providing them with sufficient opportunity to establish their decoding ability. Resonance for this stage can be found earlier in this chapter in the sections on alphabets and on the bottom-up approach to reading.

Following this stage there is a focus on confirmation and fluency or "ungluing from print" (Chall, 1996, p.18) whereby readers confirm what is already known to develop their fluency. Having established their accuracy in decoding during the previous stage, readers now develop their automaticity with print. During this period readers make use of prosodic features such as appropriate phrasing, stress, and intonation in their reading. This stage is the focus of this part of the



present literature review. Chall (1996) calls the next stage of development “reading for learning the new.” In this stage the focus of the instruction shifts to the understanding of content-area material, and students are expected to gain proficiency with increasingly complex texts. Readers begin to deal with a variety of viewpoints regarding a given topic, and are expected to critically evaluate these sources. The final stage in Chall’s (1996) model is that of construction and reconstruction. It is during this stage that readers begin to put together the many viewpoints presented in texts to determine their own perspective on a given subject. Stahl and Heubach (2006) describe how the six stages of Chall’s theory are helpful for understanding the way fluency develops over time, and they explore the implications of that theory for understanding fluency, thus supporting the notion of fluency as a developmental process. One of the primary advances in this process involves the shift from reading words on a word-by-word basis to a rapid accurate and expressive rendering of text. In this regard reading fluency is considered critical to skilled reading, given (a) its correlational if not causal connection to comprehension (Bourassa, Levy, Dowin, & Casey, 1998; Fuchs, Fuchs, Hosp, & Jenkins, 2001; NRP, 2000), and (b) evidence that struggling and typically developing readers as early as first grade demonstrate large differences in reading fluency skill (Deno, Fuchs, Marston, & Shin, 2001).

However, notwithstanding the unquestionable recognition of fluency in the development of skilled reading, there is little empirical evidence on how it develops (Kame’enui & Simmons, 2001; Rasinski *et al.*, 2011). A great deal is known about the processes and instructional conditions that promote early decoding skills (e.g., Cunningham & Cunningham, 2002; Ehri & Nunes, 2002), but much less is known about factors that affect fluency, especially in children as young as six years of age (Kuhn & Stahl, 2003; NRP, 2000; Schwanenflugel *et al.*, 2006). One reason for the lack of a knowledge base on reading fluency development is that very few early interventions or descriptive studies target fluency as an important outcome. Fluency, it appears, is not seen as relevant to the early years with measures of word reading accuracy often prevailing (Allington, 2012; Torgerson, Brooks, & Hall, 2006). It is suggested that this emphasis might reflect an implicit assumption on the part of researchers that fluency is a later-developing skill. Reviews of fluency intervention research indicates that that the bulk of the work in this area includes children in third grade or higher (Chard, Vaughn, & Tyler, 2002; Kuhn & Stahl, 2003).

### **3.3.1 Reading Fluency: Historical Context**

For years reading fluency was the forgotten element of reading instruction. Teachers and reading scholars were more interested in readers' ability to decode words accurately, than their ability to read words automatically and with a level of expressiveness that is typical of competent readers. Reading fluency was not aimed at reflecting the control of other important aspects of the reading process (Hyatt, 1943). Research in the middle of the last century sought to determine which skills were central to the reading process and which areas required more research. Oral reading was identified at this stage as an important area to be researched (Smith, Grany, Bray, Wood & Anderson, 1952). In reviewing the historical role of fluency in reading Rasinski (2006) looked at the goals for reading instruction in nineteenth century schools. He found that the focus then, which included oral recitation skills and elocution, was in stark contrast with the modern reading instruction goal of silent comprehension of text-based information. He identified that the development of LaBerge and Samuels' Theory of Automaticity in 1974 had a profound effect on the direction and development of how fluency was taught and underpinned the majority theoretical frameworks of reading fluency. LaBerge and Samuels proposed that the more effort that students spent decoding words the less cognitive resources remained available to make sense of what they read, leading in turn to poor reading comprehension (Rasinski, 2006; LaBerge & Samuels, 1974). In 1980, Stanovich, refined this theory into what he termed the 'interactive compensatory explanation' of reading fluency (Rasinski, 2006, p. 12). Stanovich (1980) suggested that efficient readers and poor readers engaged in processing text in significantly different ways while reading. Proficient readers read with automaticity, necessitating little attention to internal structure of words while reading, whereas poor readers spent much of their mental energies decoding individual words. As a result, good readers have more capacity to focus energy on comprehension tasks, while poor readers employ their mental energies in decoding tasks which results in fewer cognitive resources able for the task of comprehension (Stanovich, 1980). He concluded that general comprehension strategies and rapid context-free word recognition appeared to be the process that most clearly distinguished good from poor readers (Stanovich, 1980). He later helped to emphasise the importance of reading fluency when he identified a reciprocal relationship between oral reading fluency and the amount of reading in

which a reader engages (Stanovich, 1986). He argued that readers who have achieved some fluency are more likely to engage in more extensive amounts of reading than readers who lack fluency. The latter would find reading difficult and laborious. These non-fluent readers were likely to avoid reading and fall further behind.

However, despite these insights into the central role of fluency in proficient reading, interest in oral reading fluency as an instructional tool waned as the phonics/whole language debate took centre stage in the 1980's and 1990's. A survey of instructional materials for primary classes from the early 1990s still found little evidence that reading fluency was more than a minor focus of instruction (Rasinski and Zutell, 1996). Research indicates that practitioners and scholars viewed comprehension in *silent* reading as the ultimate goal for reading instruction (Farsrtup & Samuels, 2002). At this time fluency was most often associated with oral reading and reading rate. Oral reading competence or speed in reading was not viewed as a priority (Rasinski *et al.*, 2011). More recently, significant advances in the understanding of reading prompted reading researchers to look more closely at reading fluency. Research in the field of literacy education saw a change in the role fluency had to play in the broader literacy curriculum, moving from an instructional component that was rarely encountered to one that is now central to much discourse on literacy. Scholarly publications and reviews have highlighted this position of reading fluency (and oral reading) in the reading curriculum (e.g. Kuhn, Schwanenflugel, & Meisinger, 2010; Rasinski, 2006; Rasinski, Blachowicz & Lems, 2006; Samuels & Farstrup, 2006). One important finding from these reviews was the indication that fluency-oriented approaches to literacy instruction are effective at increasing students' accurate and automatic word recognition, and therefore assisting with their comprehension of text (Kuhn *et al.*, 2006).

### **3.3.2 What is reading fluency?**

Reading fluency is an integral part of the complex reading process. The ability to read in a fluid and unrestricted manner requires the simultaneous coordination of various cognitive, linguistic and affective competencies. These competencies are typically developed in the early years of primary schooling when readers gradually learn to decode words rapidly and accurately. When reading aloud, fluent readers

sound like they are talking. Their reading is accurate, quick, and has proper expression. However, despite its recognised position as part of the reading process, there remains no single, agreed-upon definition for reading fluency. Although fluency is important to both silent and oral reading, research suggests that oral reading practice and instruction is most effective for developing this ability (NRP, 2000). In order to read out loud with fluency it is vital that the reader is accurate and automatic in recognising individual words. Some definitions of reading fluency recognise these constructs and stress the role of accuracy and automaticity in word recognition (LaBerge & Samuels, 1974; Samuels, 2002). According to Logan (1997), processes are considered to be automatic when they possess three properties: speed, effortlessness, and lack of conscious awareness. Speed, the first of these properties, is thought to emerge concurrently with accuracy as learners engage in practice (Samuels, 2006). As automaticity develops the learner's performance not only becomes accurate, it gets faster. Effortlessness, the second attribute of automaticity, refers to the sense of ease with which a task is performed and to the ability to carry out a second task while carrying out the first, automatic one (Logan, 1997). If a person is able to accomplish two tasks at once, then at least one of those tasks is, by necessity, automatic. In terms of fluency, effortlessness can be seen in two ways. First, fluent readers lack a sense of struggle in recognising most of the words they encounter in text. Second, most fluent readers not only decode text, but also simultaneously comprehend what they are reading. Inefficient word recognition hampers comprehension and takes up precious cognitive resources that should be used for understanding. Once lower level word recognition skills become automatic, the conscious awareness of the subskills that comprise them disappears. This lack of conscious awareness in word recognition differentiates fluent from disfluent readers. Disfluent readers tend to be keenly aware of the steps they need to undertake to determine the words in a text and find the process to be slow and deliberate (Chall, 1996). However, because word recognition has become automatic for fluent readers, they are able to identify nearly every word they encounter without conscious effort.

In the *Literacy Dictionary*, reading fluency is defined as 'freedom from word recognition problems that might hinder comprehension' (Harris & Hodges, 1995, p. 85). This definition includes comprehension (Fuchs, Fuchs, Hosp, & Jenkins, 2001) as fluency is seen as a central factor in readers' ability to understand text (Rasinski & Hoffman, 2003). Meyer and Felton (1999) define fluency as the ability to read text

‘rapidly, smoothly, effortlessly, and automatically with little conscious attention to the mechanics of reading, such as decoding’ (p. 284). Others stress the importance within fluency of the appropriate use of prosody, or spoken language features that make oral reading expressive (Kuhn, 2005; Rasinski, 2006). Having reviewed multiple ways of conceptualizing reading fluency, Kuhn, Schwanenflugel, & Meisinger, (2010) proposed the following definition to synthesise the information:

Fluency combines accuracy, automaticity, and oral reading prosody, which, taken together, facilitate the reader's construction of meaning. It is demonstrated during oral reading through ease of word recognition, appropriate pacing, phrasing, and intonation. It is a factor in both oral and silent reading that can limit or support comprehension. (p.240)

Although this definition is clearly influenced by those presented elsewhere (e.g., Harris & Hodges, 1995; Pikulski & Chard, 2005; Reutzel, 1996), it attempts to incorporate several critical points. First, it highlights the relationship between fluency and comprehension. Secondly, it emphasises prosody along with accurate and automatic word recognition without prioritising any of these components. Next, it addresses the understanding that fluency plays a role in *silent* as well as oral reading. Finally, it attempts to reconceptualise two aspects of the construct that have the potential to be problematic when taken in isolation from the rest of the components: rate and expression. Despite the range of definitions of reading fluency, there seems to be a consensus that the construct of fluency has at three central components - accurate word reading, an efficient reading rate, and prosody (Hudson, Pullen, Lane, & Torgesen, 2009; Kuhn, Schwanenflugel, & Meisinger, 2010; NRP, 2000). The accuracy element of this construct is multi-faceted, encompassing the reader’s ability to decode text, to recognise words by sight or from context and to use orthographic knowledge (e.g. using analogy to letter patterns in known words). In order to accurately identify words the reader must have a strong ability to blend phonemes, recognize letter strings, and understand sound-symbol correspondence (Hudson, Lane, & Pullen, 2005). This definition of accuracy in fluent reading and its location as an integral part of the reading process is depicted in Figure 3.1 (Mehigan, 2012). Accuracy is necessary in the reading process because, while fluent reading does not preclude hesitating or pausing to decode unfamiliar words, it is unlikely that

readers will have high-level and uninterrupted comprehension of text when many words need to be decoded. There is a rich literature about the contribution of accurate word recognition to reading comprehension (Johns, 1993) and overall enjoyment of reading (Nell, 1988).

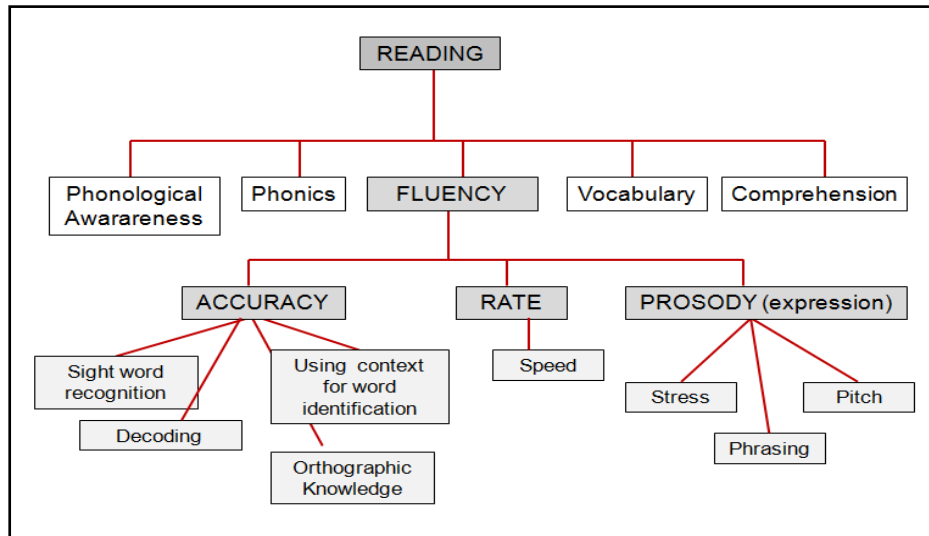


Figure 3.1: Fluency as an integral part of the reading process (Mehigan, 2012 p.103)

However, research has also indicated that very accurate decoding of text in itself does not necessarily guarantee highly fluent reading (Pinnell *et al.*, 1995, Kamhi *et al.*, 2001). Proficient word recognition may be sufficient to read accurately but is not sufficient to read at an appropriate rate and with proper expression (prosody). The rate that readers engage with text comprises both fluent identification of individual words and the speed and fluidity with which a reader moves effortlessly through connected text (Rasinski, 2003). Fluent readers move swiftly across the page leaving cognition free for comprehension (Hudson, Lane & Pullen, 2005). The major implication of ‘slow reading’ is that it necessarily results in *less* reading. It is also difficult for a student who is reading at a slow pace to comprehend because the rate at which they progress through a text makes it difficult to hold on to the meaning. For instance, if your reading rate was reduced dramatically (e.g. if words were presented to you individually and at a slow and disconnected manner), it is likely that comprehension of the text would be much more challenging. Notwithstanding the need to read at a sufficiently fast rate to facilitate comprehension, it is important that the improvement of reading rate does not become the predominate goal of fluency instruction. Engaging students with regular reading exercises that emphasise

speed over meaning is a corruption of the concept of fluency. There is a danger if speed is emphasised at the expense of meaningful and prosodic reading that we will end up with *fast* readers who understand little of what they have read.

In some definitions of reading fluency, *reading with expression* is forefronted as a hallmark of fluent reading (Kuhn & Stahl, 2003; Rasinski & Zutell, 1996). This is referred to as prosody. Prosody is the ability to read with expression and with reading that sounds like speaking (Evanchan, 2010, p. 12). Prosody is *how* words are read and interpreted and so can have a direct impact on whether students understand what they are reading or have read. Kuhn & Rasinski (2011) suggest that it is an adept use of prosody that provides the nuances and interpretations when reading. Aspects of prosody include intonation, punctuation, phrasing and stress. Intonation is when readers vary the pitch (rise and fall) of their voices. Students' correct use of intonation confirms that they understand the expressions and feelings associated with the words. Punctuation supports readers to understand the views and information conveyed in sentences. The author indicates when to read naturally, to pause, and to stop so their thoughts are clearly conveyed. Punctuation helps readers to comprehend what authors want them to understand. Phrasing refers to a reader's ability to read a cluster of words together before pausing which helps to convey an author's meaning. Stress in prosody refers to the emphasis that is placed on syllables or words within sentences. It directs pronunciation and helps to distinguish parts of speech. The debate around this prosodic skill is not so much a question of whether fluent readers read with expression, because most fluent readers do. Instead, the issue is the role that expressiveness or reading prosody plays in fluency. Torgesen and Hudson (2006) define prosody as the rhythmic and tonal features of speech, including pitch or intonation, stress patterns (emphasis), duration, and phrasing that contribute to expressive reading of text. They suggest that prosodic reading communicates important meanings from written text such as surprise, question, and exclamation beyond the semantics of individual words (Torgesen & Hudson, 2006). Prosodic readers demonstrate an understanding of morphemic, syntactic and semantic, and pragmatic systems to read with expression (Hudson, *et al.*, 2005). When readers are able to apply these elements to text, it indicates that they can transfer elements that are present in oral language (speech) to print (Dowhower, 1991). This expression and intonation is also closely linked to comprehension (Goodman, 1970). Read and Scheiber (1982) determined that children are not only

highly attuned to prosodic elements in oral language but are also more reliant on them for determining meaning than adults. Given children's sensitivity to prosody in oral language, it seems reasonable that they are equally dependent on these features in determining the meaning of text (Allington, 2012; Dowhower, 1991). In fact, intonation, stress and appropriate phrasing are all considered to be indicators that a child has become a fluent reader (Chomsky, 1978; Rasinski, 1990).

### **3.3.3. Reading Fluency and Automaticity Theory**

Considered as one of the more important milestones in contemporary conceptions of reading fluency, LaBerge and Samuels' (1974) publication of a theoretical article on automatic information processing in reading provided the scientific rationale for understanding how fluency occurs through automatic word recognition (Rasinski *et al.*, 2011). According to their model, reading becomes increasingly fluent as the result of the development of automaticity of the subskills: 'When one describes a skill at the macro level as being automatic, it follows that the subskills at the micro level and their interrelations must also be automatic' (LaBerge & Samuels, 1974, p. 295). Automaticity theory is based on the concept that any individual has limited amount of attention available for any given cognitive task (LaBerge & Samuels, 1974; Perfetti, 1985). This theory attempts to explain how people become highly skilled at complex tasks such as playing a musical instrument, learning a sporting skill or reading a book. Good teachers usually break complex skills into subskills during the developmental stages in learning a difficult skill and the learner is given instruction in how to perform the various subskills. In the early stages of reading, while learning to perform to the level of accuracy, the student has to invest so much effort and attention into the task that only one task can be completed at a time. Anyone who has had experience in learning to drive a car will recognise this feeling. Beginning drivers typically dislike taking on another task like talking to someone else or listening to the radio when driving in traffic.

In the case of reading, an individual is required to perform at least two interdependent tasks: the reader must decode the words that compose the text and simultaneously construct meaning. As such, the greater the amount of attention expended on decoding the less that is available for comprehension. To ensure that readers have enough attention to understand texts adequately, it is necessary for them



to develop their decoding skills to the point where each word is recognised instantaneously and without effort. Once this occurs, readers will have the necessary attention to focus on gleaning meaning from the text. Given that the ultimate goal of reading is the understanding of a text (Adams, 1990; Duke and Pearson, 2002; Farstrup & Samuels, 2002; NRP, 2000; Pressley, 2002a), researchers were particularly interested in how automaticity could contribute to comprehension. LaBerge and Samuels (1974) argued in their theory of automatic information processing that the surface-level processing of words in reading (e.g. decoding syllable and word units and phrasing words together) should be achieved automatically with minimal attention to cognitive ability. Findings in recent research has reaffirmed that automatic word reading is crucial for reading fluency and comprehension (Kame'enui & Simmons, 2001; Rasinski, 2003; Samuels, 2006; Stahl & Heubach, 2006). It is accepted that word recognition that is sufficiently automatic and accurate allows the mind to have more capacity for thinking and facilitates the reader's attention to be focused on the meaning of the text (LaBerge & Samuels, 1974; Samuels, 2002, 2006). Harris and Hodges (1995) emphasised fluency's relationship to comprehension by defining it as 'freedom from word identification problems that might hinder comprehension' (p.85).

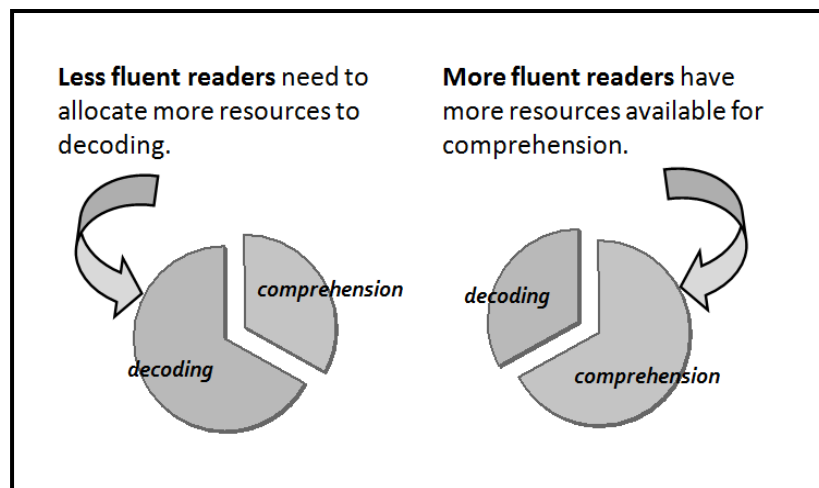


Figure 3.2: Automaticity Theory (Interpreted from LaBerge & Samuels, 1974)

Poor comprehension for many readers can be explained by their having to invest too much of their cognitive resources in the surface-level aspects of reading –

slow, laborious, conscious-filled decoding of words. This diversion of resources depleted those that could be invested in comprehension (as depicted in Figure 3.2). Conversely, as letters and then words become increasingly familiar to the reader, less and less attention needs to be directed towards processing text at the decoding level. However, some students can read accurately and sound fluent yet when asked to retell what has been read may not have understood an author’s message at all or perhaps only partially. In these cases their journey towards comprehending the text is frequently impeded by their inability to apply prosodic features to their reading (Kuhn & Rasinski, 2011). If we accept prosody as an element of fluent reading, then it can be argued that it also forms part of a link between word study and comprehension. A more comprehensive view of this link is presented in Figure 3.3. Here we can view accuracy in decoding and vocabulary as *surface level* knowledge in the reading process and comprehension as *deep level* knowledge. Then instruction in fluency through attention to automaticity and prosody becomes the link between the two levels.

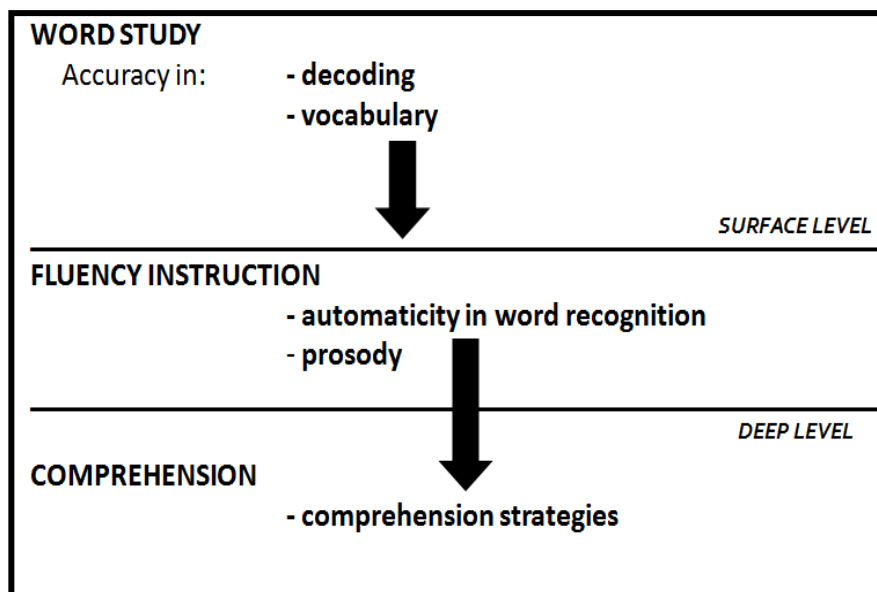


Figure 3.3: Fluency instruction, word study and comprehension (Mehigan, 2012 p.107)

The clearest message from automaticity research is that consistent practice is necessary to develop any skill and that repetition is crucial element of this practice. The question then is: if fluency is so important to reading success, what can be done to help students become fluent readers?

### 3.3.4 Theoretical base for oral reading fluency instruction

Various interventions to enhance fluency often appear to take a simplistic approach that is summed up by the mantra: ‘Read, read, read’. The assumption and expectation is that if students read more, they will achieve fluency. However, this answer may not completely or adequately address the fluency needs of some students especially those who are struggling and lack the necessary foundations for developing decoding skills. These students will need expert instruction and teacher guidance to progress efficiently through the stages of reading development (Allington, 2005). They will also benefit from a fluency oriented approach to reading (Rasinski *et al.*, 2011). Two reviews of research on fluent reading (Kuhn & Stahl, 2003; NRP, 2000) indicated that fluency-oriented approaches to literacy instruction can greatly assist children's reading development. Several research studies since then have focused on the details of instruction that seem most promising for improving reading fluency (Hudson, Lane, & Pullen, 2005; Rasinski, 2003; Kuhn & Stahl, 2003; Samuels, 2006). This literature is predominantly centred on readers who are making the transition from non-fluent to fluent reading, at a developmentally appropriate point (generally first and second class), and on struggling readers who are unable to make this transition smoothly. Kuhn and Stahl (2003) reviewed six studies relating to fluency instruction and reading development. They found the studies of fluency instruction were in two overarching categories. The first included those that build on independent learning or what Dowhower (1989) labelled *unassisted strategies*, and the other featured *assisted reading strategies*. Assisted reading allows each student to read a passage with the aid of a model, such as a fluent reader, a tape-recording, or computer narration (Dowhower, 1989). The use of repeated reading was also a feature in these reviews. Repeated reading allows frequent chances to read connected text in conjunction with a model of fluent reading (Rasinski, 2010). The novice reader is provided with support through scaffolding, either with feedback or modelling that centres on decoding, stress, and pitch. The researchers found that these methods helped students increase the accuracy of their word recognition along with the number of words they recognise automatically, improve their comprehension, and develop the ability to read with prosody, such as using changes in tone and greater expression. It is important to note that the majority of fluency

strategies in these reviews were designed for individual learners or small groups of students (Kuhn and Stahl, 2003).

The common thread running through these approaches is that reading fluency is developed through practice. With practice the reader moves from being a hesitant, word-by-word reader who reads in a halting, staccato manner to a fluent, expressive, automatic reader who understands what he or she is reading. As with any skill, it does not make sense to practice something for which you are not ready. Instead, you need to find a level that allows you to improve. Naturally, it also makes sense to carry out this practice with feedback from a teacher who understands the construct of fluency. One of the most important things that teachers can do for learners who are experiencing difficulty with the transition to fluent reading is to provide them with opportunities to read (with assistance) significant amounts of connected text (Kuhn & Stahl, 2003). The level of support that the teacher can provide was concisely identified in 1983 when Pearson and Gallagher wrote about the Gradual Release of Responsibility Model (GRR). This model has served as a framework for many literacy instructional programmes and approaches to developing comprehension and fluency. The GRR model is based on the transfer of responsibility for a particular learning task (e.g. reading a text) from the teacher or more proficient reader to the novice reader or student. The focus of this model is the level of responsibility the teacher must maintain to ensure a successful learning outcome or completion of a particular task, or the amount of responsibility the teacher releases to the student. It assumes that responsibility initially resides with the teacher and is given over to the students or learners (Pearson & Gallagher, 1983). By focusing on the amount of responsibility released by a teacher, this becomes a model for teaching. In this approach, whatever is to be learned is first modelled for the learner by the teacher. In this context the teacher takes full responsibility for the task to be learned, and while demonstrating the task to the learner, the teacher engages the learner in a focused discussion in which critical elements of the task are highlighted (Rasinski, Blachowicz, & Lems, 2006). As the learner begins to develop understanding of the learning task, the teacher gradually shifts responsibility for the task to the learner. Initially, responsibility for the task is shared by both the teacher and learner. Little by little the learner is given more responsibility until eventually the learning task is performed solely by the learner under the supervision of the teacher. Eventually, the learner will perform the task alone, without the assistance of the teacher.

The application of the Gradual Release of Responsibility model to the development of oral reading fluency is depicted in Figure 3.4. In this model, the support for the reader ranges from a high level, through modelling fluent reading to a low level of support where the child is reading independently and often repeating the same text. In between these two extremities of support lies the scope for fluency oriented reading instruction where, with a moderate level of assistance, the child is provided with a scaffold for his or her learning.

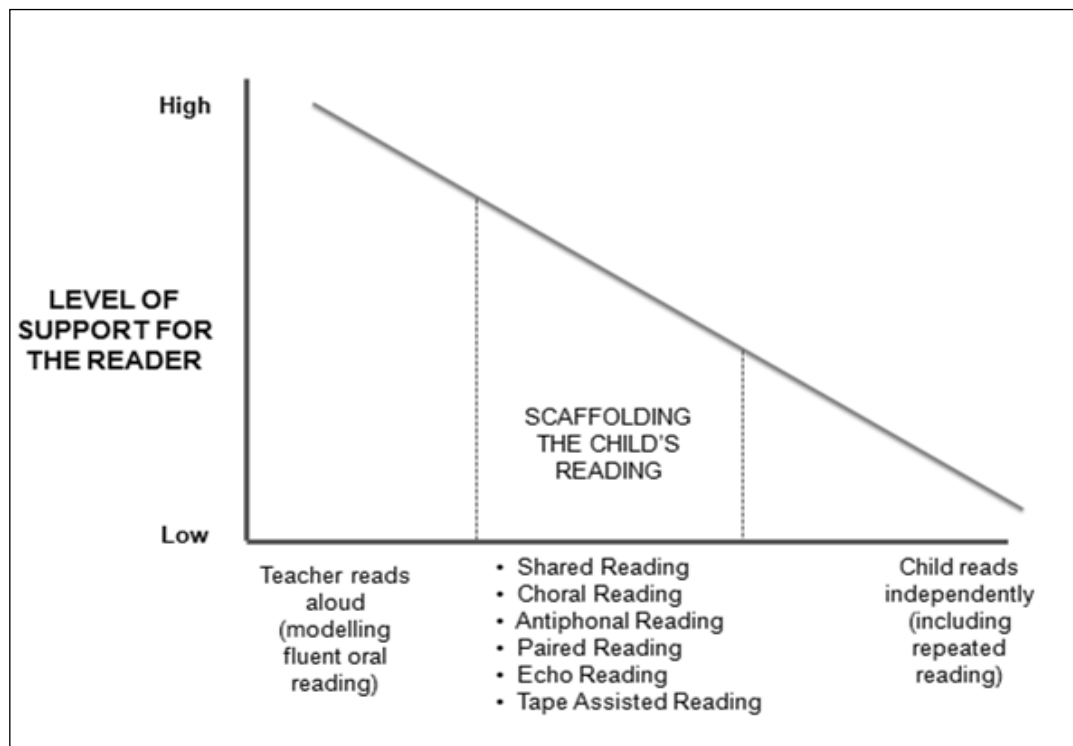


Figure 3.4: Support for the reader in developing reading fluency (Mehigan, 2012 p.109)

### 3.3.5 Ways to build reading fluency

Rasinski (2003) outlined four basic principles that underpin effective fluency instruction: (a) the modelling of fluent reading for students by the teacher or some other fluent reader, (b) provision of oral support for students while they are reading, (c) practiced repeated readings of a given text, and (d) focused reading of syntactically appropriate and meaningful phrases. These fundamental principles can be used for oral reading fluency instruction and can be combined to create

synergistic instructional routines. In the following sections a review of the literature on approaches to fluency instruction based on these principles is presented.

### **3.3.5 (a) *Modelling Fluent Reading***

Modelling is an instructional technique that teachers use to demonstrate to students how to perform an unfamiliar reading skill or strategy. Modelling fluent oral reading for less able students has been shown to facilitate fluency development (Rasinski, 2003). Reading aloud to students in an expressive, effortless, and natural manner provides a model of what reading orally should sound like ‘teachers are expert readers and through modelling we show students how to perform a strategy so that students can build their own understanding of the activity’ (Tompkins, 1997, p. 148). As teachers, we informally model reading strategies for students whenever we participate in literacy activities. Less fluent readers may not know what it means to read fluently. These readers need to develop an internalised model of fluent reading. In order to read fluently, they must first hear and understand what fluent reading sounds like. From there, they will be more likely to transfer those experiences into their own reading. Students are able to hear how the reader’s voice brings alive the written text. By drawing students’ attention to the fluent, oral rendering of text, the message is conveyed that meaning is communicated through the expression, intonation, and phrasing of the words. Rasinski (2000) suggests asking students to remember how the teacher read the passage and how the teacher’s expressiveness affected their understanding. This enables teachers to send the message that fluent, oral reading is more than just reading accurately (Rasinski, 2003); it is also how the words are interpreted.

Modelling of fluent reading is a modification of a typical reading lesson that is particularly important for struggling readers, especially if they have had few opportunities to hear fluent reading (Allington, 2009). Trelease (2006) identifies many benefits to reading aloud and modelling fluent reading. Among these are familiarising students with the pace of reading, fostering growth in listening vocabulary, and introducing children to the prosodic features in text. While modelling fluent reading is an ideal opportunity to indicate the appropriate pace of reading, Rasinski, Homan & Biggs (2009) caution against creating a reading environment where speed becomes a proxy for fluency. The danger is that students may interpret fluent reading as nothing more than reading fast. Reading speed is

most definitely an indicator of the automaticity component of fluency, but reading is not automaticity, and it is not fluency. In modelling fluent reading it is particularly important that the teacher brings attention to expressive elements of reading. These elements include increasing awareness of where the stress should be placed, reading with proper intonation and determining the boundaries of phrases. This will also include children listening to recordings of fluent reading and in some cases listening to negative examples of reading (e.g. reading in a disfluent manner). Research has shown that teacher modelling of fluent reading to students resulted in earlier success rates with beginning readers than when students did the initial reading themselves (Smith, 1979). This research also indicated that the use of modelling reading was particularly useful for those readers who were 'stuck' on word-by-word reading.

### ***3.3.5 (b) Supported Oral Reading***

Supported oral reading, also called coached reading or assisted reading, refers to a more proficient reader supporting the disfluent reader. The more proficient reader gradually reduces the assistance offered as the less fluent reader becomes more independent (Rasinski, 2003). Oral reading can be used as a scaffolding tool to ease the transition from modelling reading to independent reading. Supported or assisted oral reading may be used as a scaffolding device to ease the transition from total teacher modelling to student independence (Rasinski, 2003). In assisted reading, an individual student reads a passage while simultaneously listening to a fluent rendition of the same text. The fluent rendering of the text can be by a more fluent partner or can be a pre-recorded version of the reading. It is important for the teacher to take on the specific role of fluent reading partner for students with particular needs in fluency. During the assisted reading period the teacher may link up with an individual, pairs or small groups of students and read orally with the students as they read orally on their own. Alderson (2000) points out that the integration of seeing a text while simultaneously listening to it can have a positive impact on learners' ability to recognise the words accurately and fluently. Research into fluency has shown that this assisted (also called paired, neurological impress, or audio-assisted) reading can have a significantly positive effect on students' fluency (Rasinski & Hoffman, 2003). Being integrally involved in such lessons allows the teacher to personally monitor each and every student in his or her classroom and to act as a personal model or trainer for students.

Once of the most common forms of supported or assisted reading in the research on fluency is choral reading. Trousdale and Harris (1993), Tompkins (2011) and Gangel (1995) identify the following methods for choral reading: echo reading, antiphonal reading, cumulative choral reading and partner reading. Essentially, choral reading is the act of multiple voices reading aloud together as a group. This strategy requires repeated reading of text aloud. Washington (1983) compares a choral reading group to a choir or an orchestra as both groups vary between performing in unison, in duets, in trios and in solos to make up the arrangement. This approach to reading instruction has proven to be an effective strategy for improving oral reading fluency skills in students. In a six week study of the effects of choral reading, Paige (2011) found that students who read aloud chorally for 16 minutes per week had significant phonological, decoding and fluency gains. With continual practice in choral reading, students' reading rate, intonation and reading comprehension was found to improve (Gangel, 1995). In choral reading, the teacher and students read aloud from one text in unison, following the teacher's pace, so students get the benefit of a model while they practice reading aloud. If choral reading is used with heterogeneously grouped students, it is possible that the lowest performing students may have difficulty keeping up with even a moderate pace. However, they can follow along, participating when they can, and still hear the text being read accurately and with good pacing and phrasing. Choral reading works best if the teacher directs all students—regardless of age or ability level—to use a marker or finger to follow along in the text as they read (Vacca, Vacca, & Gove, 2000).

Echo reading is a teacher-assisted oral reading strategy which involves the students echoing, or repeating, the lines of print that the teacher reads aloud (Morris & Slavin, 2002). The students silently follow along in their own copy of the text while the teacher reads a section of text aloud. The teacher reads with the appropriate prosodic features and upon completing a section the children read the same section aloud in unison. This strategy provides a considerable amount of support to children as accurate word reading, pacing and intonation is modelled. The material chosen should be no harder than the students' instructional reading level. Echo reading has been included in several studies of effective oral reading interventions (Hoffman, 1987; Morris & Nelson 1992; Stahl *et al.*, 1997). For example, in a study comparing echo and choral reading to repeated reading, echo and choral reading were found to be as effective as repeated reading for promoting oral reading fluency and



comprehension (Homan, Klesius, & Hite, 1993). In an intervention to support struggling second-grade readers, Hoffman (1987) included echo reading as a central component. He found that these previously unsuccessful readers made progress in their reading and their focus shifted from accurate word identification to fluency and comprehension.

Another variation of choral reading is antiphonal reading (Rasinski, 2010). For this version of choral reading, groups of students are each assigned a section of the focal text. One of the groups reads its section while the other group(s) follows along silently. They then take over the reading when it comes to their section. A variation of this is to have an individual read some sections and the rest of the group read other sections. In cumulative choral reading the number of students reading gradually builds as the text is read. An individual or small group reads the first line or section of a passage, and they are then joined by another group. By the end of the passage, the whole group is reading. This can also be done in reverse, starting with the whole group. With each succeeding line, one or more readers drop out. By the end of the text only one or two students are reading (Stahl, & Heubach, 2006).

A further example of choral reading is partner or paired reading involving two readers. These pairs usually comprise one reader who is more proficient than the other. Topping (1987) also recommends pairing adults (parents, teacher, aides, tutors) with a student, as well as pairing two students. The material should be at the instructional reading level of the less proficient reader. The paired reading session may start out with both readers reading the same text aloud in unison. The more proficient reader should read with expression and intonation and should begin reading at a pace slightly faster than that of the less proficient student. When the more proficient reader notices the student gaining confidence, the more proficient reader should either stop or lower her voice to a whisper so that the student is supporting himself more. There should be an established signal that the less-proficient student initiates which indicates his desire to read the text independently. Koskinen and Blum (1986) found that students in a partner reading intervention significantly outperformed a comparison study strategy group on fluency measures. In a more recent study Fuchs *et al.* (2001) researched a peer assisted learning strategy (PALS) where pairs of students completed phonics activities along with repeated readings of a shared text. Results indicated that PALS increased these first

graders' reading fluency and comprehension. Rasinski (1990) replicated these findings with third grade students.

Carbo (1978) presented an adaptation of paired reading called 'talking books.' In this method books are recorded on audiotapes or CD's and played for students as they follow the text during the initial reading. During the second reading of the book, the student reads along with the tape. This reading along with the tape continues until the student is able to read the text independently. Carbo reported that struggling readers frequently have a global/tactile/kinaesthetic reading style, best addressed through holistic reading methods. For these learners, listening to stories recorded at a slower-than-usual pace (the recorded book method) reduces much of the stress involved in reading and has been found to increase fluency and comprehension (Carbo, 1990). Small groups of struggling readers in Carbo's (1978) study made better than average gains in word recognition.

### ***3.3.5 (c) Repeated Reading***

An important element of supported and independent reading (as depicted in Figure 3.4) is repeated practice. Repeated reading of a given text can be done for a number of reasons – to increase reading rate, to improve accuracy, or to enable students to read text with expression. When reviewing the effectiveness of fluency-oriented approaches to reading, Kuhn and Stahl (2003) found that repetition, alone or in combination with modelling, was the major, if not the primary, instructional component in the vast majority of interventions designed to increase learners' fluency (e.g., Repeated Readings; Readers Theatre; Oral Recitation Lesson; Fluency Development Lesson). In order to gain fluency in any activity, one must repeat or practice that activity until mastery is reached. Samuels (2006) reasoned that like athletes and musicians who become proficient through constant repetition and practice of component skills, readers become proficient through repeated reading of an individual text.

The basic method of repeated reading was developed by Samuels (1979) in an attempt to apply LaBerge and Samuels's (1974) automaticity theory to practice. Samuels noted that classroom practice often consisted of students reading new text on a daily basis in the hope that they would improve their word recognition skills. He posited that by increasing the amount of practice on a given passage students might be able to improve not only their accuracy but their fluency as well. This

proposed growth in fluency was to be measured through the establishment of a speed criterion that, if effective, should lead to an increase in reading rate. Samuels developed a process in which students were required to read a 100-word passage repeatedly until they reached the criterion rate of 100 words per minute (wpm). An initial reading rate of between 35 and 50 wpm was deemed as appropriate for the first reading of the passage. If the learner read outside these initial wpm guidelines, the passage difficulty would be adjusted, and the student would be placed with material at a higher or lower reading level. Students were expected to read the passage orally to an adult, then reread the passage silently, keeping track of the number of re-readings. On completion of a given number of practices, they were asked to reread the passage orally. Students' accuracy and reading rates were expected to improve until they achieved a predetermined criterion. Samuels' work contained an important finding. The data in his study demonstrated that as the student continued to use this method, the student speed with each new passage increased from the previous one. Given that Samuels' (1979) original goal was to develop a procedure that would allow for increases in reading rate as well as in the improvement of learners' accuracy, this method of repeated reading proved successful.

In fact, the success of the above method led to the recommendation of its use as a remedial reading strategy with struggling readers. The technique was found to improve their automaticity in decoding texts and proved effective in developing prosodic elements of their oral reading performance (Kuhn & Stahl, 2003; O'Connor, White & Swanson, 2007). The method was later modified so that passages of 50 to 200 words could be used and a more flexible word per minute criterion rate was established, dependent on the learner's grade level and reading level placement (Samuels, 1979). The method was also presented as a valuable strategy not only for improving fluency, but also for increasing comprehension (Samuels, Schermer, & Reinking, 1992). Numerous other researchers also demonstrated the positive results of this practice as a powerful method of freeing up the readers mind from decoding while reading (Dowhower, 1989; Kuhn & Stahl, 2003; O'Connor, White & Swanson, 2007; Samuels, 1979). Chall (1996, p.18) refers to this as 'the ungluing from print'. Not only does repetition progressively free the mind from attention to detail, but continued repeated practice of reading skills seemed to result in the progressive automatisisation or unitisation of larger chunks

from individual letters to spelling patterns, to words, to word phrases (LaBerge & Samuels, 1974; Samuels, 2006). LaBerge & Samuels (1974) also noted that this sort of higher-order chunking progresses as the child gains more experience with reading. A question remained if this improvement in fluency was restricted to performance on the individual text or the text that the student was repeatedly practising. Samuels (1979) found that when students moved to new passages, their initial readings of those new pieces were read with higher levels of fluency and comprehension than the initial readings of the previous passage. He found this occurred even if the new passage was as difficult as, or more challenging than, the previous piece (Rasinski, Homan & Biggs, 2009). This was corroborated by Rasinski (1990) when he observed that as critical to the method of repeated readings was the fact that ‘gains in fluency made through the repeated readings of one text are transferred to new, previously unread texts’ (p.147). A similar method of repeated reading was developed by Chomsky (1978) to help struggling readers. Chomsky tape-recorded a children’s story and had students listen to the tape several times while they simultaneously looked at the words in their story. She found that this method of repeated reading increased students’ fluency both on the practiced text and on new passages.

However, while Samuels (1979) claimed that the improvement students see in their reading fluency scores makes repeated reading exciting and motivating, other researchers argue that reading the same passage repeatedly is not interesting or motivating for many students, especially struggling readers (Koskinen & Blum, 1986; Rasinski, Homan, & Biggs, 2009). Research has suggested that one way to increase interest and motivation while incorporating the strategy of repeated reading is to engage students in rereading in order to prepare for a performance (Rasinski, 2003; Tyler & Chard, 2000; Worthy & Prater, 2002). Two such strategies for motivating students to reread individual passages are Readers Theatre and Radio Reading. Both these strategies are designed so that students read and reread the given text with a view to performing for an audience when suitably proficient.

Readers Theatre is an interpretive reading activity in which readers use their voices to bring the characters of a story to life through a theatre setting (Martinez, Roser, & Strecker, 1999). It involves a rehearsed presentation of text that is read aloud expressively and dramatically. It requires students to express meaning through fluent and prosodic readings of scripted stories, poems, chants and rhymes. One of

the ways in which Readers Theatre differs from conventional theatre is that the major focus remains on the text. So even though Readers Theatre is presented in the form of dramatic script, it does not involve the use of props, costumes or scenery. Students simply practice roles within scripts that are at their reading level. The students repeatedly read short, meaningful passages until reaching a high level of fluency. They receive explicit guidance and feedback from a fluent reader, and after reasonable success, the activity culminates in a performance, where even the most reluctant readers succeed (Corcoran and Davis, 2005; Martinez, Roser, & Strecker, 1999; Rasinski, 2003).

Readers Theatre thus incorporates repeated reading in an engaging manner. By giving students opportunities to reread scripts in anticipation of a performance, teachers provide practice in a meaningful and purposeful context and student confidence levels increase as they experience success (Tierney and Readence, 2000). The fun and excitement of preparing for and participating in a live performance make Readers Theatre a highly motivating form of repeated reading (Rasinski, 2003). One reason for this may be that Readers Theatre is a group activity, and for many children, this is more enjoyable than reading alone (Tyler & Chard, 2000). The experience of performing in front of an audience can also be very rewarding, and may increase students' motivation to practice the next passage (Worthy & Prater, 2002). Corcoran and Davis (2005) found that, after participating in a Readers Theatre programme, ninety percent of their students reported they would like to do Readers Theatre every week. In addition to the studies cited earlier which showed the connection between repeated reading and fluency, there is research pointing to Readers Theatre in particular as a strategy for fluency improvement (Martinez *et al.*, 1999; Rasinski & Hoffman, 2003). According to their findings, Readers Theatre allows students to improve oral reading skills, interpretative skills, and comprehension. Martinez *et al.* (1999) found that the repeated readings associated with Readers Theatre were viewed by students as practices and rehearsals which, in turn, made the process of repeated readings 'both purposeful and fun' (p.326). In a study researching the effects of the implementation of Readers Theatre as an approach to fluency instruction, Young and Rasinski (2009) observed positive gains in word recognition, accuracy, reading rate, and prosody. They eloquently described that Readers Theatre 'gave an opportunity for struggling readers to read fearlessly in

the limelight' (p. 12). Rinehart (1999) also found Readers Theatre to be an effective and motivating approach for students experiencing difficulties in reading.

Radio Reading is a variation of Readers Theatre for students that involves adding sound effects to make the performance appear like a radio show. It is analogous to a radio presenter talking to a listening audience for the purpose of oral reading (Greene, 1979). Radio Reading provides teachers with an alternative to common round-robin practices of reading and moves away from word-attack reading sessions, instead focusing instruction on the goal of comprehending and effectively communicating the message of the author. During this instructional approach to developing fluency and comprehension, the reader transforms into a radio news announcer complete with a script while the listeners serve as the audience listening to the radio. The reader's job is to communicate accurately and with a smooth fluid reading style while the listener's job is to discuss, respond, and evaluate the reader's message and performance (Tierney & Readence, 2000).

The National Reading Panel (NRP, 2000) endorsed repeated reading procedures in a variety of forms as having a positive impact on word recognition, fluency, and comprehension. The Panel concluded that repeated reading had a significant positive impact on fluency and other reading outcomes in elementary school for both struggling and non-struggling readers. For struggling readers, repeated reading had a significant positive impact into later grades (NRP, 2000).

Four years after the publication of the NRP study, Therrien (2004) conducted a meta-analysis that identified important instructional components within repeated reading interventions. He determined repeated reading interventions were most effective when students read passages aloud to an adult. Fluency and comprehension effect sizes for students in interventions conducted by adults were more than three times larger than those conducted by peers. He also found that, students should be provided with a cue, either prior to or during reading, to focus on fluency, comprehension, or both. An important finding by Therrien identified the optimal number of repetitions for any given passage. He found that passages should be repeated three to four times. Increases in mean fluency effect size were more than thirty per cent larger than when the passage was read twice. Reading the passage more than four times did not appear to be necessary as gains in comprehension ceased to be significant after the third reading. A final finding of Therrien's was that

corrective feedback should be provided and passages should be read until a performance criterion is reached.

Samuels work from the 1970's continues to have a huge influence in the field of reading strategies that focus on practice and repetition. This practice has been successful as a widely adaptable technique used in intervention settings, whole group instruction, and skill-based reading lessons. The chart of oral-reading methods for developing fluency presented in Table 3.1 gives a summary of the variety of repeated reading procedures that stem from the original method by Samuels (Samuels, 2006).

Table 3.1: Reading methods for developing fluency (adapted from Samuels, 2006)

<b>ORAL REPEATED READINGS</b>		
<b>Context</b>	<b>Method</b>	<b>Description</b>
<b>Individually based: Classic version</b>	<i>Repeated Readings</i>	Students reread a short, meaningful passage of text typically four times. Alternatively, a criterion is set for speed, accuracy, comprehension and perhaps expression. After four readings or when the criterion is met, they may proceed to the next section or to a new short passage.
<b>Individually based: Technology centred</b>	<i>Audiotapes: Commercially made, teacher-made or student made</i>	As described above, except that while rereading aloud, the student is following along with an audio-recorded version. Teachers may need to make certain the student is actually reading. Older students in need of fluency development may have their needs met by recording their best oral reading of a text to be used by younger students.
<b>Computer</b>	<i>Stories on CD-ROM</i>	As above, except stories are computer based. CD-ROMs can be programmed to read aloud word by word, sentence by sentence, or other combinations.
<b>Reading in pairs</b>	<i>Partner Reading Guided Pairs</i>	Each child must read the passage aloud to his or her partner a number of times.  The more skilled reader (teacher, parent, older peer) reads the passage once and then the pair reads it aloud in unison a number of times. In some variations, the more skilled reader instructs the less skilled reader to signal when the learner wishes to continue reading alone.
<b>Group contexts</b>	<i>Readers Theatre  Radio Reading  Choral Reading</i>	Involves repeated reading alone or in groups to reach acceptable reading for an ensemble performance; gives the student a “real-life” reason to do repeated readings. Performance criteria are similar to those given in classic Repeating Readings (above). Readers Theatre typically consists of plays or poems but may be material directly from textbooks.  Radio Reading may be news or material directly from textbooks, read as a news announcer would read it.  Teachers and class read material aloud in unison.

### **3.3.5 (d) Phrasing**

Researchers have found considerable differences between good and poor readers in their reading styles and ability to use syntactic cues to aid reading (Dowhower, 1991; Kuhn, Schwanenflugel, & Meisinger, 2010; Schreiber & Read, 1980). It is argued that many poor readers read in a word-by-word fashion and do not chunk words into meaningful phrases. Word-by-word reading denies readers the opportunity of gaining meaning carried by combinations of words (Frazier, Carlson, & Clifton, 2006). Poor readers who focus on decoding individual words read in a word-by-word fashion and are unable to attend to the syntactic relationship of words and phrases. Based on the automaticity model of LaBerge and Samuels (1974), segmenting as a cue can work as long as the reader is sufficiently fluent to direct attention to the meaning of a passage as well as to individual word identification. Therefore, in examining the effects of segmentation, the rate of fluency should be taken into account. Fluent readers do not read word-by-word, nor do they read in random two or three word clusters of words. Fluent readers read in phrases, and when they get the phrasing wrong, listeners can hear it. A typical characteristic of fluent readers' performance is their ability to read text orally with appropriate expression or prosody. Features of prosodic oral reading include intonation, stress, phrasing, appropriate pausing, and phrase lengthening (Dowhower, 1989, 1991; Schrauben, 2010; Schwanenflugel, Hamilton, Kuhn, Wisenbaker, & Stahl, 2004). Researchers argue that expression or prosody in reading helps readers break up a text into syntactically appropriate units (e.g., noun phrases, verb phrases, prepositional phrases) that assist them in constructing meaning (Dowhower, 1991; Schreiber & Read, 1980). When readers combine appropriate phrasing with prosody it helps them to comprehend what is being read (Kuhn, Schwanenflugel, & Meisinger, 2010). On the other hand, a typical characteristic of disfluent reading is word by word reading that is lacking in expression and meaningful phrasing. This can also be present in reading that is excessively fast in an effort to be fluent. In either case, the lack of expression or appropriate use of syntactical phrasing results in poor comprehension (Rasinski, Yildirim & Nageldinger, 2011).

One of the difficulties with phrasing in reading is that phrase boundaries are often invisible to readers. Notwithstanding the presence and role of punctuation in establishing phrase boundaries, the parameters of many phrases are not explicitly



marked. Hence the reader must infer the appropriate places to phrase text within sentences. For struggling readers, this additional task of inferring meaningful phrase boundaries simply adds to an already complex and laborious process (Kuhn & Rasinski, 2011). Helping struggling readers learn to read in phrases has been suggested as a way to improve fluency and overall reading proficiency (Rasinski, 2010). Indeed, a historical review of research into helping readers learn to phrase text has reported very promising results, not only in improving reading fluency, but also other aspects of reading, including comprehension (Rasinski, 1990, 2003). More recent research continues to demonstrate both the importance of phrasing in reading and language comprehension (Frazier, Carlson, & Clifton, 2006) and the fact that many students lack syntactic awareness and sensitivity to appropriate phrasing when reading (Benjamin & Schwanenflugel, 2010; Leikin & Assayag-Bouskila, 2004). This results in poor comprehension and poor overall reading achievement. It follows, then, that instruction in phrasing may offer significant benefits across an array of reading competencies, especially for struggling readers. Henk (1986) suggests that instruction in phrase reading is an excellent strategy for promoting students' ability to read in syntactically appropriate and meaningful idea units or phrases, in order to understand what they read.

One method for teaching phrasing to improve reading fluency is the Phrased Text Lesson. This lesson takes place over the course of several instructional days and teaches students to use explicit and implicit cues to chunk the text into meaningful groups of words. It is based on the recommendations of reading researchers who have recognised the efficacy of such instruction (e.g., Dowhower, 1991; O'Shea & Sindelar, 1983; Rasinski, 1990). The Phrased Text Lesson is designed to help many struggling readers move from the choppy word-by-word reading that characterises disfluent reading to reading that is appropriately phrased and meaningful. The text used in this instruction is marked with slash marks at the appropriate phrase boundaries where the reader would pause. This essentially makes visible those normally invisible phrase boundaries for students (Rasinski, Yildirim & Nageldinger, 2011). In addition to focusing on phrase boundaries, the lesson incorporates other elements of effective fluency instruction, including modelling fluent reading for students, assisted reading (choral reading), and repeated reading of one text (Rasinski, 2010). It should be noted that the Phrased Text Lesson is only one of many ways that teachers can help develop syntactic sensitivity with students.

Simply reading syntactically complex texts to and with students, followed by a discussion of how readers have to use their syntactic knowledge to make meaning, is a common way of developing this syntactic awareness in students (Frazier, Carlson, & Clifton, 2006).

### **3.3.6 Reading Fluency Assessment Measures**

The ability to measure students' level of achievement in fluency and monitor their progress is a key element to successful reading instruction (Rasinski, 2004b). Teachers need to be able to gauge the effectiveness of their instruction in fluency. In order to do this, they need ways to assess students' reading fluency efficiently and with validity. Not surprisingly, to make judgments about their progress in reading fluency, teachers need to listen to students read aloud (Zutell & Rasinski, 1991). Systematic observation helps assess student progress and determine instructional needs. Teachers observing students' oral reading fluency should consider each critical aspect of fluent reading: word-reading accuracy, rate, and prosody. A summary of assessments for oral reading fluency, including standardised assessments and assessments for monitoring student progress is included in Appendix 30. In this literature review reading fluency is defined in terms of three key components: accuracy in reading, automaticity in reading, and prosody (or expression) in reading. These components can be assessed in a variety of ways. Historically, reading fluency has been measured by how quickly and accurately a student reads a given text. Since much research data regarding the simple speed and accuracy measurements of oral reading rates are so closely correlated to reading comprehension, Torgesen and Hudson (2006) suggested that speed and accuracy factors may be the best indicators of fluency. Assessment of accuracy is reflected in a reader's level of accuracy in decoding words and his or her automaticity is measured by the reading rate.

#### **3.3.6 (a) Assessing accuracy**

The importance of accuracy in reading has a rich history. Informal reading inventories (IRIs) have used decoding word accuracy as one of their key benchmarks for measuring reading achievement (Pikulski, 1990). Accuracy is determined by the percentage of words a reader can read correctly. It has been shown to be a valid

measure of reading proficiency (Fuchs, Fuchs, & Deno, 1982). Although various indices for word recognition accuracy on informal reading inventories exist, generally an accuracy level of over 97% is indicative of independent reading. The levels of accuracy in reading, adapted from an examination of several IRIs, reflect various levels of word decoding accuracy (see Table 3.2).

Listening to oral reading and counting the number of errors per 100 words can provide invaluable information for the selection of appropriate text for various instructional purposes for an individual or group of students. Through careful examination of error patterns, a teacher can determine which strategies the student is using and which strategies the student is failing to use. For example, observation of a student’s attempts to figure out an unknown word might yield evidence of phonemic blending, guessing based on context, or a combination of decoding and contextual analysis. These observations can provide information about areas in need of further instruction in order to improve word-reading accuracy.

Table 3.2: Levels of performance for word decoding accuracy (Rasinski, 2004b)

Independent Level:	97-100%
Instructional Level:	90 – 96%
Frustration Level:	< 90%

### **3.3.6 (b) Assessing rate**

In addition to levels of accuracy in reading a text, the rate of reading is another essential indicator of fluency. One research programme conducted by Deno and colleagues (Deno, 1985) examined the psychometric and edumetric features of counting the number of correct words while a student reads aloud from a text. This method is known as curriculum-based measurement (CBM). This measurement of oral reading growth essentially involves having students read an age appropriate text and counting the number of words they read correctly in one minute (Deno & Marston, 2006). Research shows how this method for collecting oral reading fluency data produces a range of scores across individuals of the same age (Fuchs & Deno, 1991; Marston, 1989). Teachers can use these scores to identify discrepancies in

performance levels between an individual and their peer group to help inform decisions about the need for intervention in reading. In addition to generating quantitative scores, CBM can be used to gather qualitative, diagnostically useful descriptions of performance. As teachers count the number of words read correctly in one minute, they can also record the nature of the errors students make. This includes the types of decoding strategies students use to decipher unknown words, the degree to which students rely on graphic, semantic, or syntactic language features, their ability or propensity to self-correct, and the prosodic features of the performance. One of the advantages of curriculum-based measurement is that it can be administered on a regular basis (weekly or monthly) to monitor each student's oral reading rates. The chief benefit here is that it provides a sampling of student achievement over time, giving a more reliable indicator of reading growth.

Research on fluency found that the best measures of reading rate were obtained in contextual reading rather than reading words in a list and in oral rather than silent reading (Fuchs *et al.*, 2001). It is also recognised that assessing reading rate should encompass consideration of both word reading automaticity and reading speed in connected text (Rasinski, 2004b). The measurement of reading speed is most typically accomplished through timed readings. Deno & Marston (2006) noted that the number of words read aloud from a text in one minute is among the most reliable measures of oral reading fluency. Timings of a student's reading of connected text allows a teacher to observe the number of words read correctly and the number of errors made in a given time period. Data from timed readings are usually recorded on a timing chart to monitor progress between repeated readings of the same text over a period of time. These readings are typically conducted using passages or books that are at an independent reading level (i.e., books the student can read with 97 percent accuracy or above). Timed readings have been recognised as a valuable, informal method to measure and increase word-reading accuracy and passage-reading rate (Samuels, 1979). However, despite the efficiency of curriculum based measurements and timed readings in assessing oral reading fluency, there are limits to these measures. Deno & Marston (2006) remind us that while these measures have been proven to 'improve student achievement and measure reading growth' (p.183), they are not effective instruments for measuring prosody or comprehension.

### 3.3.6 (c) *Assessing prosody*

The third component of reading fluency is prosodic or expressive reading. Some researchers consider this to be an important element in fluency assessment because of its direct relation to comprehension (Hudson, Lane & Pullen, 2005; Rasinski, 2004b). Others suggest that measurement of prosody may not be necessary, since prosody is often something which naturally occurs once a beginning reader has achieved a certain level or degree of automaticity (Torgesen & Hudson, 2006). Notwithstanding both these stances, reading with expression is a well-acknowledged aspect of reading fluency (Dowhower, 1991). What is agreed is that these rhythmic and tonal features of speech can be difficult to assess (Dowhower, 1991). Allington (2009) argued that reading in phrases with appropriate intonation and prosody (reading with expression) ought to be part of the measure of reading fluency.

Since expression or interpretation of text is difficult to quantify, researchers have used descriptive rubrics or rating scales to guide the assessment process and assign a level to oral reading. This is a holistic way of assessing fluency which requires the examiner to describe the pitch, stress, and duration with which children read text. Some examples of these rating scales include the National Assessment of Educational Progress's (NAEP) Oral Reading Fluency Scale (National Centre for Education Statistics [NCES], 2005) and Zutell and Rasinski's Multidimensional Fluency Scale (Zutell & Rasinski, 1991). The NAEP Fluency Scale ranges from a rating of 1 to 4 with Levels 1 and 2 considered *non-fluent* and Levels 3 and 4 deemed *fluent* (see Table 3.3). This scale combines the performance attributes of phrasing (based on syntax) and expression (based on features of prosody). Level 4 indicates meaningful phrasing, expression, and appropriate interpretation of an author's syntax. In contrast, Level 1 indicates word-by-word reading and inappropriate interpretation of syntax.

The Multidimensional Fluency Scale (MFS) is an adapted version of the NAEP Fluency Scale and is also used in evaluating prosodic elements of fluent reading. It is a qualitative, non-proprietary measurement of students' oral reading fluency that provides information about expression and volume, phrasing, smoothness and pace. In order to assess expression, teachers listen to a one-minute sample of reading from connected text and then rate the reader's volume, phrasing, smoothness and pacing under five different four-point rating scales.

Table 3.3: NAEP Oral Reading Fluency Scale

<b>Fluent</b>	<b>Level 4</b>	Reads primarily in larger, meaningful phrase groups. Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author’s syntax is consistent. Some or most of the story is read with expressive interpretation.
	<b>Level 3</b>	Reads primarily in three- or four-word phrase groups. Some small groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present.
<b>Non-fluent</b>	<b>Level 2</b>	Reads primarily in two-word phrases with some three- or four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to larger context of sentence or passage.
	<b>Level 1</b>	Reads primarily word-by-word. Occasional two-word or three-word phrases may occur—but these are infrequent and/or they do not preserve meaningful syntax.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Centre for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 Oral Reading Study

### 3.3.6 (d) *Standardised measure of oral reading fluency*

Reviews of reading fluency studies (Hiebert, & Fisher, 2005; Torgesen & Hudson, 2006) have found that The Gray Oral Reading Tests (GORT) which focus on measuring the reading fluency components of speed, accuracy, and comprehension, gave a reliable indication of student reading fluency. The GORT, now in its fifth edition, is a standardised measure of oral reading fluency and is one of the most widely used measures of oral reading fluency and comprehension (Torgesen & Hudson, 2006). The GORT-5 has two equivalent forms, Form A and Form B. Each form contains sixteen developmentally sequenced reading passages with five comprehension questions each. An optional miscue analysis system allows reading specialists to analyse reading errors and tailor interventions to specific students’ needs. The reading rate is derived from the amount of time in seconds taken by a student to read a story aloud, while the accuracy is calculated by counting the number of words the student pronounces correctly when reading the passage. The Fluency Score is a combination of the student’s rate and accuracy scores. A fluency comprehension score is derived from the number of questions about the stories that the student answers correctly and an overall oral reading index, compiled by combining the student’s fluency and comprehension scaled scores.

### 3.4 Research on Struggling Readers

Perhaps the most important responsibility of educators in the primary grades is to ensure that all students become competent readers. The successful acquisition of reading skills during childhood is fundamental for young people to allow them to pursue their personal goals when embarking on adult life. The degree of success in becoming a competent reader is typically established in the early grades (Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996; Juel, 1988; Torgesen & Burgess, 1998). Unless effective reading instructional practices are used in this critical period, the inequities that commonly divide our students are likely to continue (Duffy-Hester, 1999; Snow, Burns, & Griffin, 1998) and thus we will continue to have students who struggle with reading (Hiebert & Taylor, 1994).

Struggling readers require a great amount of support in order to avoid a large discrepancy in their learning. When students are falling behind in their reading and do not understand basic skills and concepts, their overall reading achievement is affected. In recent years, the instructional methods and approaches used with struggling readers have been closely examined in a plethora of studies conducted by researchers in the field of literacy (Allington, 2012; James-Burdumy *et al.*, 2010; Lenski, 2001; Slavin, Lake, Davis, & Madden, 2011). Research on many current code-based interventions designed to treat significant word-reading deficits indicates that there is an over-reliance on routines designed to foster decoding rules ‘that inadvertently starve the evolving lexicon of fully specified orthographic representations’ (Compton, Miller, Elleman, & Steacy, 2014, p.56). A consistent finding is that struggling readers often spend much more time focusing on learning skills from a bottom up approach, with the emphasis on phonics skills and decoding rather than contextual reading of continuous text (Allington, 2005). When students who have reading difficulties focus exclusively on decoding skills, they do not develop as fluent readers, and therefore, they do not attain reading comprehension skills (Rasinski, 2006, 2010).

On the other hand, the implementation of fluency strategies for struggling readers allows them to focus on reading with ease and automaticity, which ultimately leads to an understanding of what was read (Allington, 2012). Given the continuing levels of difficulties experienced by children in primary grades (DES, 2011; National

Centre for Education Statistics, 2009) it is likely that, without more research, struggling readers will continue to be marginalised in the classroom.

### **3.4.1 Definition of a ‘struggling’ reader**

Over the years, researchers have used a wide range of labels to describe those students who experience difficulty in learning to read. Labels include *retarded readers* (Neville & Hoffman, 1981), *disabled readers* (Ford & Ohlhausen, 1988), *poor readers* (Zabrocky & Ratner, 1992), and *remedial readers* (Allington & Shake, 1986; Duffy-Hester, 1999). More recently, the terms *at-risk readers* or *struggling readers* (e.g., Ruddell & Shearer, 2002) are commonly used in education. For the purposes of this study the students, who were the focus of the intervention, are referred to as *struggling readers*. There are wide-spread definitions of what the term ‘struggling reader’ means and what characteristics qualify a student as a struggling reader. Lenski (2008) defines struggling readers as learners who have experienced difficulty with school-based reading, while Caskey (2008) posits that struggling readers are learners who grapple unsuccessfully with written text. Allington (2012) very simply suggested that a struggling reader is a student who experiences difficulties in learning to read. Lapp and Flood (2003) brought a degree of specificity to the term when they defined struggling readers ‘as students who are not reading grade-level material with fluency and comprehension’ (p.14). Expanding on the fluency theme, Stahl and Kuhn (2002) noted ‘if children fail to make the transition to fluent reading, they will encounter significant difficulties in constructing meaning from the text’ (p.1) and so struggle with the reading process. Struggling readers can have instructional needs that are much different from their higher achieving peers. For example, some struggling readers find it difficult to read words smoothly and easily and so are impeded in developing oral reading fluency abilities. Others sound as though they are reading with great ease but don’t always comprehend what they are reading (Rasinski & Padak, 2005). Others may focus on pronouncing words correctly without realising that they should be creating meaning as they read (Pressley, 2006). An important clarification in defining struggling readers in the context of this study concerns general learning disability. In this regard students who were considered to be struggling readers typically read one or more years below their



current grade level but did not have an identified learning disability of any kind (Hall, 2005; Spear-Swerling, 2004).

### **3.4.2 Nature of difficulties experienced by struggling readers**

The term ‘struggling reader’ could imply that all struggling readers belong to a single category. However, no two struggling readers read the same way. The ability to learn to read fluently is dependent on acquiring foundational skills like phonological processing, print awareness, understanding the alphabetic code and reading vocabulary (Shanahan, Callison, Carriere, Pearson, Schatschneider, & Torgesen, 2010). Failure to master any of these early reading skills is likely to result in a struggle with the reading process. Struggling readers are often perceived as lacking the skills that other students possess and use with ease, such as analysing information, defining vocabulary words, or applying reading comprehension strategies (O’Brien, Beach & Scharber, 2007). The difficulties they have with reading are typically attributed to their own failure to engage with and learn from texts or indeed inadequate classroom instruction.

The literature suggests that some struggling readers have cognitive difficulties that can influence the extent to which they can decode individual words in order to interact with a given text (Worthy & Invernizzi, 1995). Other readers may perceive reading solely as a word-calling activity and look at and read a word or groups of words without thinking about what they are reading. These students may be able to decode individual words, but are not aware that they must extract meaning from them in order to understand a text (Kim & Goetz, 1994). They often expend much of their energy sounding out words without internalising the words they are enunciating. They may not have put together a reading system that helps them construct meaning and are destined to struggle with the reading process (McLaughlin & Rasinski, 2015). Others may be trying to read books that are too difficult for them and, as a result, struggle even more with reading. Struggling readers may also experience difficulty setting explicit goals for reading, identifying central ideas, or applying strategies to understand text when comprehension fails (Williams, 2001).

Townend and Turner (2000) indicate that those learners who are struggling readers often develop a poor self-image and later on find excuses not to read and are poorly motivated to read. Researchers have theorised that this lack of motivation

plays a central role in struggling readers' inability to read at grade level and to comprehend text (Gambrell & Gillis, 2007; Guthrie *et al.*, 2007; Guthrie & Wigfield, 2000). One explanation of poor readers' lack of motivation suggests a bidirectional causal relationship between reading skills and motivation. Struggling readers lose motivation to read because of their repeated failure to acquire basic skills (Aunola, Leskinen, Onatsu-Arvilommi, & Nurmi, 2002). Stanovich (1986) hypothesises that these reading difficulties have behavioural and motivational implications or 'negative Matthew effects' (p. 360). Because these negative Matthew effects interact to discourage children from reading frequently, they lead to a situation wherein the 'poor get poorer'. Low motivation thus acts both as a consequence of limited skill acquisition and as a cause of later reading failure (Guthrie & Wigfield, 2000; Oldfather & Wigfield, 1996). The unfortunate vista for the struggling reader is that poor reading skills and low reading motivation may begin to influence each other (Stanovich, 1986). Such a negative cycle could help explain why many children with reading difficulties continue experiencing long-term reading failure despite receiving intensive skills-focused remediation.

Students who struggle to master the reading process have, like all other students, preferred ways of learning. Since they are likely to engage in numerous behaviours when expected to read texts in school, no one set of behaviours can define them. These readers appear to benefit from instruction which taps into multiple modalities. For example, the learning style of some students may be more auditory than visual, others more visual than kinaesthetic, and for others more tactile than auditory. Integrating multiple modalities into our teaching methods can accommodate these students' strengths. Based on such assumptions, common solutions for helping struggling readers include providing them with more intensive skills-based instruction, structuring lessons more effectively, and finding better ways to motivate them (Guthrie & Davis, 2003).

### **3.4.3 What do we know about the causes of low achievement in reading?**

Research has shown that causes for the difference in the achievement level in reading are disparate and usually very complex. Reading ability is determined by several factors such as social background, linguistic ability, and quality of instruction (Gregory & Chapman, 2013; Neuman & Dickinson, 2003). Children need to have

early childhood experiences that provide many opportunities for exposure to a print rich environment to lay the foundations for literacy acquisition (Richardson, Morgan, & Fleener, 2012; Jennings, Caldwell, & Lerner, 2010). Being exposed to reading early establishes the importance of knowing how to read and also develops an interest and a love for reading. In this regard, research by Denton and West (2002) underlined the importance of parents reading aloud to their children at home in fostering a positive attitude to literacy learning at school. Often, factors which lie beyond school influence such as family income level and education correlate with the academic achievements of students in school (Goodwin, 2000). Socio-economic conditions have been proven to be particularly significant for early achievements in reading (Addy & Wight, 2012; Lee & Burkam, 2002; Ready, 2010). There is a wide consensus that socio-economic background and home environment have a very significant impact on school achievement, including in reading (Breen & Jonsson, 2005; Mullis *et al.*, 2007; OECD, 2004). Neuman (2006) argues that many children, especially those from economically stressed households, experience reading difficulties not because they have difficulty mastering the alphabetic code but because their knowledge of word meanings and their word knowledge are limited. The ability to understand written material is only partly dependent on a student's ability to read the words on the page. The reader also needs to understand what the individual words mean and to have some understanding of the general topic that the text is addressing.

Dobbins & Martens (2012), investigating patterns in national policies for support of low achievers in reading across Europe, found that the majority of students with reading difficulties come from socio-economically disadvantaged families who tend to lack educational resources, including books. According to Farstrup & Samuels (2002), students from diverse backgrounds are at a disadvantage in acquiring reading skills when the traditional approaches to education such as ability grouping and placing a significant emphasis on skill instruction is practiced. Farstrup & Samuels' research identified four issues common among teachers of struggling readers: motivating students, assisting struggling readers, teaching in a culturally responsive manner, and assessing students' progress. Because of its link to reading practice, poor readers' lack of motivation is increasingly suggested as an underlying cause of long-term reading difficulties (Baker, 2000; Gambrell & Morrow, 1996; Pressley, 2002a; Quirk & Schwanenflugel, 2004; Stanovich, 1986;

Wigfield, 2000). Indeed, teachers indicate that one of their most pressing concerns is to find ways to boost reading motivation (Allen, Shockley, & Baumann, 1995). Understanding why many weak readers are poorly motivated to read also has important implications for early intervention. If young children are under-motivated due to repeated failure in acquiring reading skills, this suggests that we should focus primarily on remediating their skill deficits. Conversely, if poor motivation arises from altogether different factors (e.g., a parent's views towards reading), this would suggest a need to employ early interventions that demonstrably remediate both skill and motivation-specific deficits. The potential interaction between weak reading skills and low motivation to read is viewed as one reason why children with reading difficulties underperform academically so consistently (e.g., Stanovich, 1986; Torgesen, 1982; Torgesen, Wagner, Rashotte, Rose, Lindamood, Conway, & Garvin, 1999). An extensive review of the literature on motivation for reading is presented later in this chapter.

#### **3.4.4 Low achievement and frequency of reading**

It is evident that children who read frequently will grow to become skilful readers (Guthrie, Schafer, & Huang, 2001; Juel, 1988; Senechal & LeFevre, 2002; Stanovich, 1986). Frequent reading contributes to growth in sight word recognition, vocabulary, oral reading fluency, reading comprehension, and general knowledge (Griffiths & Snowling, 2002; Guthrie *et al.*, 2001; Guthrie, Wigfield, Metsala, & Cox, 1999; Leppanen, Aunola, & Nurmi, 2005). Given sufficient print resources, how often a child reads is explained by two factors (Cox & Guthrie, 2001; Paris & Turner, 1994). The first is initial success in acquiring reading skills (Stanovich, 1986). Children are unlikely to read on a regular basis if they struggle to decode text. The second factor is motivation (e.g., Pressley, 2002; Wang & Guthrie, 2004). Wigfield and Guthrie (1997a) reported that highly motivated children read three times as much outside of school as their less motivated peers. Guthrie *et al.* (1999) found that motivation significantly predicted the amount of reading practice after statistically controlling for prior reading achievement. These and other results led Guthrie *et al.* to conclude that motivation is the 'pre-eminent predictor' (p. 250) of frequent reading. Unfortunately, poor readers - the children most likely to benefit from frequent practice - are often unmotivated to read and so read less (Chapman,

1988a; Lepola, Vauras, & Maki, 2000). This attitude towards reading can be seen within a year or so of school entry (Chapman, Tunmer, & Prochnow, 2000; Lepola, Poskiparta, Laakkonen, & Niemi, 2005; McKenna, Kear, & Ellsworth, 1995) and in some cases has been found to be a function of pre-school motivational orientation (Salonen, Lepola, & Niemi, 1998).

### **3.5 Reading Interventions**

In the previous sections of this chapter, literature on theoretical models of reading instruction along with reading processes was reviewed. This section of the literature review looks at research on reading interventions for struggling readers. Despite the focus over the past decade on improving literacy standards through effective classroom instruction, many children still need additional supports or interventions in reading (DES, 2011; Gamse, Bloom, Kemple & Jacob, 2008; Ofsted, 2011; Perkins, Moran, Cosgrave & Shiel, 2010). When it comes to readers who have struggled and failed to master the reading process, ordinary class teaching is insufficient in addressing their individual needs (OECD, 2010). Specialised tuition for failing readers in the form of a structured intervention is required and is often more effective than eclectic reading approaches (Brooks, 2007; Singleton, 2009; Swanson and Hoskyn, 1998). Effective intervention in this regard requires that teachers recognise those children who are experiencing reading difficulties, tailor instruction to address their needs, and provide for supplementary instruction where necessary (Fletcher, Denton, Fuchs, & Vaughn, 2005).

A growing body of evidence suggests that reading problems are preventable for the vast majority of students who encounter difficulty in learning to read, particularly if they receive extra support in the form of an early intervention programme (Duffy-Hester, 1999; Goldenberg, 1994; Hasbrouck, & Denton, 2005; Hiebert & Taylor, 1994). The emphasis on intervening early with these students is reinforced by the National Research Council (NRC), who concluded in their landmark report *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998) that most reading problems can be averted by providing effective instruction and intervention in preschool and in the early primary grades. Since the publication of this report instructional models with struggling readers have shifted from remedial approaches, to preventative and early intervention approaches, to whole school

preventative approaches (Denton, & Mathes, 2003; Pullen, Lane, Lloyd, Nowak, & Ryals, 2005). It is now accepted that in order for struggling readers in the primary grades to make accelerated progress in their reading development, they need quality instruction in their regular classroom reading programmes along with focused supplementary reading support (Allington & Walmsley, 1995; Duffy-Hester, 1999; Hiebert & Taylor, 1994; Walmsley & Allington, 1995). In researching the essential components of instruction for these readers, Hasbrouck, & Denton, (2005) identified the following programme elements:

- The teaching of essential skills and strategies
- Differentiated instruction based on assessment results and adapted instruction to meet students' needs
- Explicit and systematic instruction including practice over time with and without teacher support and feedback
- Opportunities to apply skills and strategies in reading meaningful text with teacher support
- Monitoring student progress regularly and re-teaching of content as necessary

In terms of the content of reading instruction with such programmes, research (Eurydice, 2011; Kennedy *et al.*, 2012; National Reading Panel, 2000; Scammacca, Vaughn, Roberts, Wanzek, & Torgesen, 2007; Singleton, 2009) indicates that the following elements should all form part of an effective programme:

- Phonemic awareness and the teaching of phonics
- Decoding and word studies, including the learning of a sight vocabulary
- Language development, to include vocabulary development
- The explicit teaching of comprehension strategies
- Meaningful writing experiences
- The development of fluent reading by reading and rereading familiar texts
- A wide range of reading materials
- Opportunities for both guided and independent reading

Feldman (2004), in considering the needs of struggling readers, suggests selecting 'a research-based, validated curriculum as the programme anchor' (p.1). He also

suggests that instructional programmes suitable for very young children may not be appropriate for readers in the senior classes of primary school.

Research also indicates that the traditional approach of teaching struggling readers by focusing on isolated skills is not a panacea for all ills and has proven, particularly ineffective in increasing motivation for reading (Allington, 2005; Shaw, 2008). The need to re-imagine the more traditional approaches employed to teach struggling readers (e.g. focusing predominantly on skills and drills) has also been identified by many other researchers including Primeaux (2000) and Allington (2005). Gaskins (1998) notes that it is important to provide authentic instruction that explicitly teaches skills and strategies that enable children to become fluent readers and she proposes a comprehensive approach that targets aspects of reading that have been identified as pertinent to the individual reader. In this context, encouraging data from research on struggling readers indicates that many students who initially present as extremely poor readers can develop into more competent readers, even if they continue to read at a slow rate (Walker, 2000). This has been found to be particularly effective when intervention identifies and addresses the needs of the individual student (Ikeda, Grimes, Tilly, Allison, & Stumme, 2002; Rasinski, 2003; Reynolds, 1991). For example, one student may need an intervention focused on the alphabet principle to overcome fundamental challenges in decoding, while another may need a training programme on building inference or prediction skills to help with reading comprehension difficulties. Therefore, teachers need to seek out interventions relevant to the particular context and the individual needs of the student.

Another consistent finding is that, for struggling readers, small group settings and individual tuition is more effective than larger groups (Swanson and Hoskyn, 1998; Vaughn, Gerten and Chard, 2000; Scammacca *et al.*, 2007). In reviewing European practices in compensatory methods for teaching reading, Eurydice concluded that ‘individual or small-group intensive instruction by reading specialists is essential when tackling reading difficulties’ (Eurydice, 2011, p14). In addition, research indicates that the frequency of instruction is important for educational success. Lingard (2005) contends that instruction should take place each day while Scammacca *et al.* (2007) propose that continuous and regular intervention is required for those students who endure the most severe reading difficulties. Solity and his colleagues argue that practice of new skills in particular should be distributed over

time rather than massed into a particular time (Solity, Deavers, Kerfoot, Crane, & Cannon, 2000). Rose (2009) also supports the concept of 'little and often' (p.14) and proposes that daily practice of ten to fifteen minutes distributed throughout the week is more effective than one hour of practice delivered in a single block.

No matter which method is adopted, reaching and teaching all struggling readers in a reading intervention programme is challenging. It requires a comprehensive multi-faceted approach using enriched and integrated instruction (Shaw, 2008). In many cases there is more to teaching at-risk and delayed readers than direct reading instruction in one element of the reading process. Researchers have identified that a more comprehensive approach that identifies and prioritises what is most essential for individual students to learn is preferable. This resulted in a reconceptualisation of reading interventions (Allington, 2005; Gaskins, 1998; Pressley, 2006; Primeaux, 2000).

Wanzek & Vaughn (2007) conceptualise interventions in two primary ways: standardised or individualised. Standardised interventions specify, from theoretical deduction, the elements of reading instruction that will be implemented. These elements, typically associated with improved outcomes in previous studies, are well defined in a curriculum and implemented by personnel who are trained specifically in the implementation of the curricula. A fundamental premise in employing a standardised approach is using a research-based standard curriculum and assuring fidelity of implementation. The second type of intervention is a more individualised approach also referred to as a problem-solving approach (Bergen & Kratochwill, 1990). Typically, this approach is directed at defining the student's problem in behavioural terms, measuring performance in the natural setting, determining the specific goals to address the problem and then designing an intervention to meet those goals. The student's progress in achieving those goals is monitored with a view to assessing the effectiveness of the intervention with the necessary adjustments made if required (Ikeda *et al.*, 2002).

### **3.5.1 Early Reading Interventions**

Early reading interventions focus on the attainment of a particular goal or set of goals by a particular group of children over a particular period of time. This section looks at a synthesis of research on three early reading interventions that focus on the



attainment of a particular goal or set of goals by a group of children at second-grade level (equivalent to First Class). A review of the interventions looked at (i) how well children learned to read and what they learned and (ii) what were the primary features of curriculum instruction and professional development that characterised the intervention in which this growth occurred. The information on characteristics across all interventions is summarised in Table 3.4. The components of curriculum, instruction, and professional development outlined in the second question above reflect the typical emphases within pedagogical and research literatures (Good & Brophy, 1990).

The interventions allow for comparisons and contrasts across a variety of instructional contexts. One of the interventions featured tutoring students with volunteers (Morris, Shaw & Perney, 1990) and the other two involved restructuring the existing classroom reading programme (Eldredge, Reutzel & Hollingsworth, 1996; Stahl, Heubach & Cramond, 1997). In the Morris *et al.* intervention, volunteer tutors from the community who were supervised by a reading specialist worked with the children in two one-hour sessions each week where they read familiar and unfamiliar texts, completed word recognition activities, and engaged in writing activity. The second set of interventions was aimed at entire classes. Stahl *et al.* (1997) worked with teachers in reorganising their reading programmes to emphasise three components: a reading lesson that stressed repeated reading and partner reading, an independent daily reading period where children chose books to read, and a home reading programme. In the third intervention Eldredge *et al.* (1996) compared children's fluency, vocabulary acquisition, and reading comprehension as a function of participating in shared book reading relative to a conventional round-robin method of reading. Both contexts involved opportunities to discuss text and participate in rereading text in independent or partner settings. The shared book reading treatment provided opportunities for children to read together and for the teacher to lead and model oral reading of particular parts of the text. Children read texts independently, with a peer, or with audiotaped versions of the book. As is evident from Table 3.4 there is commonality in the content of the three interventions. An interrogation of the intervention goals, instructional elements and professional context across these three interventions revealed components that were consistent with the fluency oriented reading instruction selected for the present research (see

highlighted and underlined elements in Table 3.4). These components were subsequently incorporated into the reading intervention used in the present study.

Table 3.4: Summary of Early Reading Interventions

		<b>Eldredge et al. (1996)</b> [Schools had 50% low-income students]	<b>Morris et al. (1990)</b> [2 <sup>nd</sup> grade students reading at 1 <sup>st</sup> grade level]	<b>Stahl et al. (1997)</b> [Schools with high % of low-income students]
<b>Intervention Goals</b>	<b>Word recognition</b>	Word features were discussed as part of follow-up readings of text	Automaticity with one-syllable spelling patterns in English	<u>Aim was to move from accuracy-driven decoding to fluency and automaticity</u>
	<b>Fluency (rate &amp; accuracy) and automaticity</b>	<u>Rereading for fluency a primary goal of the intervention</u>	Portion of each lesson devoted to easy contextual reading to strengthen fluency	<u>Strong emphasis on developing oral reading fluency</u>
	<b>Comprehension</b>	Discussion and retelling of story was critical to lessons	<u>Priority on reading and comprehending stories</u>	Lessons described as ‘comprehension-oriented’
<b>Instructional Elements</b>	<b>Time Allocation</b>	30 mins. daily for four months	Two one-hour sessions weekly	<u>30 mins. daily for 8 weeks + 25 mins biweekly tutoring</u>
	<b>Teacher: student ratio</b>	Whole class plus independent and buddy settings	1:1	<u>Small group led by teacher</u>
	<b>Materials</b>	Trade books	‘Natural’ stories	<u>Classroom texts including trade books</u>
	<b>Assessment</b>	<u>No assessment by teachers</u>	Pretest and posttests of informal reading and spelling	Running records by teachers + <u>assessments by research team</u>
	<b>Writing</b> (to promote phonemic awareness and word recognition)	Not a focus of the intervention	25% of sessions spent on writing	<u>Journal writing (used for story discussions)</u>
	<b>Comprehension</b>	Strong emphasis	<u>Emphasis on stories that interest students</u>	Strongly emphasised in all contexts
	<b>Word Study</b>	Carried out as part of follow-up story activities	<u>Word categorisation activities and games with word families</u>	No new components of word study initiated as part of intervention
<b>Professional Context</b>		<u>Teachers individually given in-service sessions; teachers were provided with daily lessons for entire project;</u> teachers observed three times weekly with suggestions offered post observation	Various adults from community; supervised by reading specialist who prepared lessons; on the job training given to tutors	<u>Teachers designed activities with research team prior to intervention with weekly meetings subsequently</u>

### **3.5.2 Fluency Oriented Reading Instruction (FORI)**

In an effort to combine reading research theory (including LaBerge & Samuels' automaticity theory) with effective practice which included the practice of repeated reading, Stahl and Heubach (2005) developed and researched the effectiveness of what they called Fluency Oriented Reading Instruction (FORI). Fluency-oriented reading instruction is an approach to teaching reading in classrooms where the majority of children read below their grade level. The FORI programme was initially designed for whole-class instruction for students in second grade, using basal reading stories that are part of the students' regular reading curriculum and appropriate to the students' grade level. This feature makes the identification and employment of texts for fluency practice simple for teachers. The instruction included daily reading sessions created to maximise the amount of connected texts children read. It also included repeated reading and partner reading with teachers assisting students through reading comprehension activities. The overall goal of FORI was to help children move from the accuracy driven decoding stage of reading development to the automaticity and fluency stage of reading development. Stahl and Heubach (2006) summarised their goals of FORI in the following manner: (i) children should read material at their instructional level (ii) children should be supported in their reading through repeated reading (iii) children should engage in partner reading (iv) lessons should be comprehension oriented, even when fluent oral reading is the prime focus of instruction, and (v) children should increase the amount of reading they do at home as well as in school. In essence FORI was designed and researched by Stahl to work with basal readers and whole class reading programmes.

In FORI, the selected text is read to students by the teacher modelling the appropriate pace and expression while the students followed along in their own copy. This provided students with the opportunity to see the words as they are pronounced, without having to decode them independently and to listen simultaneously to a good, prosodic modelling of the text. The initial reading is then followed by a brief discussion of the story using a variety of procedures including story maps, questioning, student generated questions, and other graphic organisers. Students then read the story several times in various modes (e.g., choral reading, antiphonal reading, echo reading with the teacher, alternating pages while reading with a partner, reading alone, Readers Theatre). Following this phase students engage in

worksheet activities and journal work related to the selected story. These activities are introduced and practised in school under the direction of the teacher and reinforced at home. At the beginning of the period of instruction for a selected text, usually one week, the teacher carried out full responsibility for the fluent rendering of the passage. By the end of the week, the children are expected to be able to read the same text on their own.

Research by Stahl and Heubach (2006) investigated the effects of fluency oriented reading instruction on students entering second grade who were already reading significantly below grade level. The intervention was conducted in fourteen second-grade classrooms over a two-year period with all students reading grade level material. This was challenging for many of the learners. The aforesaid Matthew effect in reading suggests that many struggling readers, as they progress through school, tend to fall increasingly further behind their normal achieving classmates (Stanovich, 1986). However, the students in this study, through fluency oriented instruction (manifested in various forms of repeated reading and using normal curriculum materials), were able to catch up and were, except for two students, reading at grade level by the end of the intervention. The results found a greater than expected growth in reading achievement, with the average growth in reading achievement approximately 1.8 years for each year of the study. Students were also found to be better engaged with the reading material, felt successful, and enjoyed the predictable nature of the programme. Despite the repetitive reading of basal texts, students and teachers also reported positive attitudes toward the lesson format. In reviewing research on reading fluency Kuhn *et al.* (2010) concluded from this intervention that there is a case for including a dedicated fluency component in the regular reading curriculum for accelerating reading progress. Influenced by the research on FORI by Stahl and Heubach (2005) and predicated on a review of current research, fluency oriented reading instruction was selected to underpin the design of the intervention for the present investigation on the motivation for reading of struggling readers in First Class.

### **3.6 Motivation**

Research in the area of motivation has an extensive history and has long been regarded as having a key role in teaching and learning (Edmunds & Bauserman,

2006). Levels of motivation and engagement have frequently been identified as reliable predictors of achievement and therefore are also regarded as key factors in determining academic success in young children (Baker & Wigfield, 1999). Studies conducted on achievement motivation have indicated that motivation, in conjunction with prior achievement, is also a contributing factor to the prediction of future achievement (Guay, Marsh, & Boivin, 2003; Stevenson & Newman, 1986). Fundamental questions about how and why some students appear to learn effortlessly in school contexts while others seem to struggle have led researchers and educators to consider the role motivation plays in academic success (Broussard & Garrison, 2004; Ryan & Deci, 2000b). This area of study has particular significance, given the difference motivation makes between learning that is temporary and superficial and learning that is permanent and internalised (Oldfather, 1993).

In documenting the history of motivational research in education, Weiner (1990) regards motivation as the force that energises and directs one's drive to accomplish goals. This force is particularly relevant in school as much of academic achievement requires persistent, hard work over prolonged periods of time (McGrady, Lerner, & Boscardin, 2001). Geen (1995) concurs with this hypothesis of perseverance when he relates motivation to the initiation, direction, intensity and persistence of behaviour. The Latin root of the word 'motivation' means 'to move' and hence, in this basic interpretation of the discipline, the study of motivation is the study of action. In this regard Broussard and Garrison (2004) define motivation as 'the attribute that moves us to do or not to do something' (p. 106). From a psychological perspective, motivation has been defined as the process that determines the effort and persistence of an individual's behaviour when participating in an activity and the course of action that one takes (Ford, 1992; Ryan & Deci, 2000b). Researchers in the field also stress that motivation is not a one-size-fits-all concept as individuals possess various types of motivation to differing degrees (Bandura, 1997; Guay, Marsh, & Boivin, 2003; Geen, 1995; Ryan & Deci, 2000b).

One of the most commonly cited conceptualisations of motivation differentiates between intrinsic and extrinsic motivation. In this conceptualisation, which focuses on the reasons why individuals engage or do not engage in specific activities, intrinsic motivation is defined as motivation that is triggered by personal enjoyment, interest, or pleasure (Eccles & Wigfield, 2002). As Deci *et al.* (1999) observe, 'intrinsic motivation energises and sustains activities through the

spontaneous satisfactions inherent in effective volitional action' (p. 658). It refers to motivation that comes from inside an individual because an activity is inherently enjoyable rather than from any external or outside rewards or reinforcements (Deci & Ryan, 1985; Henderlong & Lepper, 2002; Milyavskaya, McClure, Ma, Koestner & Lydon, 2012). Thus, individuals are intrinsically motivated when they engage in an activity for its own sake and out of interest in the activity at hand. In the realm of education, intrinsic motivation is characterised by a desire to perform challenging tasks in order to satisfy curiosity and to enable task mastery and competence (Meece, Blumenfeld & Hoyle, 1988).

Conversely, extrinsic motivation occurs when our behaviour is influenced by external factors and we engage in an activity for instrumental or other reasons, such as receiving a reward or to avoid a negative consequence. This type of motivation is governed by reinforcement contingencies and can be particularly valuable for underachieving students who tend to lack intrinsic motivation and require external encouragement, even if only as an interim measure (Lepper, Corpus & Iyengar, 2005). It is acknowledged that extrinsic motivations are powerful forces, but it is cautioned that an over-reliance on these factors can interfere with a student's intrinsic motivation (Ryan & Deci, 2000a). Early research, specific to motivation within the classroom, implied that intrinsic and extrinsic motivations represent polar opposites on a single scale and are therefore dichotomous (Harter, 1981). In this respect, it was proposed that a student could only be considered to be either intrinsically or extrinsically motivated for any particular activity. More recently, however, it has been suggested that students should not be classified in this polar manner as being high or low in motivation, but instead may possess varying degrees of different types of motivation. Based on this hypothesis, both extrinsic and intrinsic motivational influences can have positive reinforcing benefits (Hidi & Harackiewicz, 2000). Notwithstanding this stance, research suggests that educators consider intrinsic motivation to be more desirable and to result in better learning outcomes than extrinsic motivation (Deci, Koestner, & Ryan, 1999; Eccles & Wigfield, 2002).

Researchers have developed a number of different theories to explain motivation. Early theories explained motivation in terms of motives or needs that drive a given behaviour. These theories were associated with behaviour involving reward contingencies and sought to explain why we act in particular ways (Pintrich

& Schunk 2002). More contemporary theories acknowledge other important factors related to motivation such as self-concept (Dweck, 2000), competence belief (Eccles & Wigfield, 2002; Wigfield, 1997), goals and values (Schunk, 2003), and self-efficacy (Bandura, 1997). This list indicates that motivation is multidimensional in nature and can comprise several factors (Guthrie & Wigfield, 2000; Schiefele, Schaffner, Moller & Wigfield, 2012; Wigfield & Guthrie, 1997a). However, measuring these factors and understanding the research that employs such measures can be problematic because of differences in how the various components have been operationalised (Schiefele *et al.*, 2012). One long-standing perspective on motivation that has been associated with academic achievement and draws on many of the foregoing elements is the expectancy-value theory of motivation (Eccles *et al.*, 1983).

Expectancy-value theory is concerned with motivational influences on the choices individuals make in pursuing activities and their performance on various achievement activities (Katzir, Lesaux, & Kim, 2009). According to expectancy-value theory, students' motivation is strongly influenced by their perceived competence, i.e., expectations of success or failure performing the task and their value of the task (McGeown, Duncan, Griffiths, & Stothard, 2015). The expectancy element of the theory refers to individuals' beliefs about how competent they will be in a particular task (Eccles *et al.*, 1983). Research in this area has shown that students' self-perception of their ability contributes to their academic achievement across different subject domains, including Mathematics and English (Spinath, Spinath, Harlaar & Plomin, 2006). In the context of reading this refers to whether or not individuals believe they can be successful at reading. The expectancy-value framework of motivation aligns with other theories of motivation. For example, constructs similar to expectancy can be identified within attribution (Weiner, 1985), self-worth (Covington, 1992) and self-determination theories (Deci, & Ryan, 1985). Expectancy-value theory has been used to study student motivation across a number of different academic domains, e.g. mathematics, sport, music (Wigfield *et al.*, 1997), and has been found to be more closely related to reading achievement than to many other areas (Conradi, Jang, & McKenna, 2014). Expectancy in this context refers to both ability beliefs (perceptions of current competence) and expectations of success (expectations of future performance). When applied to reading, the theory refers to current estimates of how good one is at reading and expectations of future

success or failure in reading. The perspective espoused in expectancy-value theory guides the theoretical framework on motivation development for the current study.

### **3.6.1 Fostering Motivation**

This section reviews the empirical evidence from studies conducted in primary schools on whether motivation as a concept is teachable. The research presented provides rich empirical evidence on how motivation can be manipulated and fostered, albeit studies demonstrate both positive and negative effects. An intervention by Guthrie, Wigfield, & VonSecker (2000) set out to enhance the intrinsic motivation for reading of children in third and fifth grade whereby teachers emphasised learning goals and provided evaluative feedback on children's work. While children received regular feedback throughout the intervention, performance was not emphasised as a goal of learning. Participants in this intervention scored significantly higher with respect to employing reading strategies and curiosity than students receiving traditional reading instruction. However, they did not significantly differ in terms of extrinsic motivation indicators.

Stipek *et al.* (1995) conducted a study on students' motivation and achievement with children at preschool and school entry stage. Their research compared the impact of didactic reading instruction featuring a highly structured bottom-up approach (see section 3.1.1 above for details) with a more child-centred approach on students' motivation and achievement. Results indicated that children in the child-centred classrooms rated their own abilities significantly higher and had higher expectations for success on a particular task than children in didactic programmes. Deci *et al.* (1999) analysed 128 studies that documented the effects of extrinsic rewards on intrinsic motivation. The intrinsic motivation in these studies was represented by free-choice behaviour and interest in the activity or task as self-reported by the children. The findings indicated that the use of extrinsic rewards had a significant impact (effect size of -0.24) on free-choice behaviour. However, there was no significant effect on students' self-reported interest. Thus, when participants were offered extrinsic rewards as a motivating factor for task participation, they were less likely to persist in the task once the reward was withdrawn. The effect of these rewards varied depending on whether the reward was tangible or intangible and also on the context in which it was given.



Miller and Meece (1997) reported on a study where 187 students in third grade were given highly structured instruction which encouraged them to monitor their own progress, provided them with more opportunities to write, and allowed them to work closely with their peers. Throughout the study the teachers involved in the tuition were observed by the researchers and were categorised depending on the fidelity with which they were deemed to deliver the intervention. Those who embraced fully the tenet of the intervention were categorised as ‘high’ implementers and those who did not were considered ‘low’ implementers. Results indicated that there was no significant difference between the performance of students in both high- and low-implementing classrooms on task mastery goals and work avoidance. Similarly, students in high- and low-implementation classrooms did not vary in terms of their use of general cognitive strategies. However, students in high-implementation classrooms indicated a decrease in their need to depend on social or egocentric goals in comparison to students in the low-implementation group. Therefore, the intervention was found to have decreased students’ dependency on extrinsic motivation.

The foregoing evidence suggests that motivation as a concept is teachable and has prompted researchers to make recommendations for educators interested in supporting students’ motivation. These recommendations include the conditions around the use of rewards and the level of autonomy and choice afforded to students (Deci *et al.*, 1999; Hidi & Harackiewicz, 2000). The use of collaborative or cooperative learning methods and the creation of a supportive classroom environment were also highly recommended (Pintrich, 2003; Stipek, 1996; Turner, 1995). The next section outlines instructional strategies emanating from these recommendations which had particular significance in designing the intervention for the second phase of the current study.

### **3.6.2 Instructional Strategies for Fostering Motivation**

Research literature on the effects of extrinsic rewards on student motivation suggests that teachers should use these types of rewards frugally and with care (Deci *et al.*, 1999). In relation to both free-choice behaviour and self-reported interest it was found that tangible rewards (e.g. stars, sweets, privileges) have significant long-term negative effects compared to intangible rewards like verbal feedback and

encouragement. Interestingly, positive verbal feedback if delivered in an authoritarian tone was found to have a negative impact on intrinsic motivation. While it would appear from this evidence that extrinsic rewards are not to be recommended in fostering motivation, other researchers argue that such motivation may have a place in the classroom, particularly for certain types of students. Hidi and Harackiewicz (2000) proposed that the value of intrinsic versus extrinsic motivation may depend on the length of involvement and complexity of the task. For example, with long and complex tasks, a combination of intrinsic motivation and extrinsic rewards may be most effective particularly for underachieving students. In addition, although research indicates that intrinsic motivation is preferable, not all students will find school and its varied activities to be intrinsically motivating at all times. In such cases, a combination of extrinsic rewards and environmental factors spurring situational interest may be most successful in engaging academically challenged students who tend to have low academic motivation (Stipek, 1996). Deci *et al.* (1999) contend that unanticipated rewards used by teachers occasionally can have positive effects on motivation, although they should not be given so frequently that students come to depend on them or expect them.

Another strategy for fostering student motivation in the classroom is to give students more control over their own learning (Hidi & Harackiewicz, 2000; Pintrich, 2003; Stipek *et al.*, 1995). Research on the influence of classroom contexts on young students' motivation indicates that when students are allowed to make decisions about their own work, they are more likely to be interested in the activity (Stipek, 1996; Turner, 1995). When allowed to make choices, students were reported as showing more persistence in completing an activity and displayed an ability to set goals for other self-regulated learning behaviour. In the study reported in the previous section by Stipek *et al.* (1995), children in the child-centred programmes rated their own abilities higher and had higher expectations for success than children in the more traditional didactic programmes. In addition, children who were allowed to self-direct their learning selected more challenging tasks, took more pride in their attainment at school, were less dependent on teachers or other authority figures, and demonstrated less anxiety in school than their peers in didactic programmes. These results suggest that if students are allowed choice in the learning process it may have a positive impact in increasing motivation. Examples of the type of autonomy envisaged in the context of reading instruction includes allowing students to decide

which books to read, to mark their own work, to select their own partners during group work as well as allowing them to select the particular tasks they will perform (Guthrie *et al.*, 2000; Stipek, 1996; Turner 1995).

Research also indicates student motivation is fostered by allowing collaboration among students and using cooperative teaching and learning methods (Pintrich, 2003; Stipek, 1996; Turner, 1995). Hidi and Harackiewicz (2000) claim that working with others is a way of enhancing interest that is spontaneous and environmentally activated, which in turn can be an impetus for personal or individual interest. Turner (1995) argues that working together provides opportunities for students to experience a reduction in stability in their environment, which can awaken curiosity and interest. Furthermore, working collaboratively provides opportunities for peer modelling, and models of successful student performance can be more motivating to students than examples provided by a teacher (Pintrich, 2003). Broussard & Garrison (2004) posited that peer encouragement improves task engagement and that partaking in collaborative learning tasks has a positive influence on attention paid to engaging in tasks. In examining the implications of motivation theory on designing instructional programmes, Stipek (1996) found that when students worked with others their engagement was enhanced due to the added responsibility of performing as part of a group. This in turn has a positive influence on perseverance, with individuals likely to persist at difficult tasks longer than they normally would.

Another method for improving students' motivation is through creating a positive classroom environment, which includes identifying goal orientations and attributions (Ames, 1992; Dweck, 2000). Goal orientation theory is a social-cognitive theory of achievement motivation which examines the reasons why students engage in their academic work, while attribution theory focuses on students' beliefs about their successes and failures. Pintrich (2000) categorises goals in two major classes which he refers to as mastery goals (also referred to as mastery-oriented or learning goals) and performance goals (also referred to as achievement goals). Researchers have argued that when teachers embrace mastery or learning goals as opposed to performance or achievement goals for their students, students may internalise these goals. The research on goal orientations was summarised by Ames (1992), who concluded that mastery goals are associated with willingness to engage in difficult tasks, desirable attributions, more effort, effective problem-

solving strategies, and increased enjoyment of learning activities. Performance goals, on the other hand, can result in students avoiding tasks that are challenging and have negative effects on individuals with low self-efficacy. In collating the results of a wide range of studies on goal orientation and motivation, Stipek (1996) found that classroom environments that stimulate students to have mastery goals are likely to define success in terms of improvement and progress. She also observed that such classroom environments emphasise effort, learning, and working hard on challenging tasks, and focus on how students are learning rather than on how they perform.

### **3.6.3 Motivation and Reading**

Traditionally, research carried out on motivation as it pertained to education focused mainly on the concept of achievement or academic motivation as a broad construct generalised across all domains in a child's academic experience. However, more recent research in the area of academic motivation indicates that there is more specificity to motivation than previously understood (Becker, McElvany & Kortenbruck, 2010; Gambrell, 2011). As a result of these findings, research in the area of academic motivation has focused more on students' motivation in specific domains (e.g. reading, maths, science) rather than the overall motivation to learn. Once the affective aspects of reading were recognised as important elements of skill development (Guthrie & Wigfield, 2000), a variety of constructs were posited by theorists to explain reading motivation and how it influences students' reading engagement (Wigfield, Eccles, & Rodriguez, 1998). Educators, acknowledging that reading was a developmental process that potentially spans a lifetime, recognised the value in learning how to motivate children to read (Palmer, Codling, & Gambrell, 1994).

Motivation in the particular context of reading has been referred to as the likelihood of choosing a reading activity over another, as well as the persistence and effort exerted when participating in the chosen activity (Malloy, Marinak & Gambrell, 2010). Because reading is an activity that demands conscious effort and is largely dependent on whether children elect to invest their time and energy in such a task (Deci & Ryan, 1985), developing an interest and love of reading is frequently reported as an important literacy goal for students by teachers of young children (Nolen, 2001). Reading development requires various processes on the part of the

reader, including choosing texts, finding a suitable place to read, enacting reading processes and using new information to comprehend text. As these processes involve an element of proactive choice on the part of the reader, they also require motivation (Guthrie and Wigfield, 2000). Students who fully engage in reading tasks do so because they ‘choose to participate’ and are willing to extend the effort required even when the task is perceived as difficult (Malloy, Marinak & Gambrell, 2010, p.2). Scott (1996) supports the hypothesis of choice in relation to reading achievement when he defined aliteracy as a ‘lack of reading habit especially in capable readers who choose not to read’ (p. 195). Since the ultimate goal of literacy instruction is ‘the development of readers who can read and who choose to read’ (Gambrell, Malloy & Mazzoni, 2007, p.19), it is now generally accepted by teachers of young children that reading motivation plays a critical role in reading development (Morgan & Fuchs, 2007; Sweet, Guthrie & Ng, 1998). Research on motivation has thus provided compelling evidence that success in reading demands the integration of cognitive, language and motivational engagement (Guthrie & Wigfield, 2000). This has contributed to our understanding of reading and adds to existing research on young children’s reading achievement which had previously weighed heavily on the cognitive aspects such as word recognition and comprehension skills (Guthrie & Wigfield, 2000).

Morgan and Fuchs (2007) in reviewing the research on reading motivation presented a number of studies that point towards a bidirectional relationship between motivation to read and reading skill development. For students who do not succeed in mastering the skills of reading in the early years of school, reading can become a painful experience (Wigfield & Guthrie, 1997b). This negative relationship with reading in the formative years can result in their avoiding opportunities to practice, which widens the gap between them and successful readers who are motivated and likely to be independently reading as much as three times the amount of text (Wigfield & Guthrie, 1997b). Research shows that because motivated readers read more, they have larger vocabularies, use more complex cognitive strategies and so become better readers (Krashen & McQuillan, 2007). Students tend to read competently and more frequently and without fear of failure when they are motivated to engage in the process (Guthrie, & Wigfield, 2000). Conversely, children who struggle with reading frequently become de-motivated, read less and become even weaker readers as they progress through the grades (Nelson & Manset-Williamson,

2006). For this reason, motivation can be a compensatory factor, potentially mediating other discrepancies of struggling readers by creating a cycle of increased competence, increased motivation, and increased reading amount (Guthrie, Wigfield, Metsala & Cox, 1999).

### **3.6.4 Importance of motivation for struggling readers**

In the context of motivation and the struggling reader, research identifies a lack of student engagement with literacy as a fundamental obstacle to achievement in our schools (Guthrie & Humenick 2004). Young children who enjoy reading and are motivated to engage in reading by choice, do it more often and tend to become skilled at it. One possible explanation of this is that reading skill and reading motivation influence each other (Morgan and Fuchs, 2007). Struggling readers, by contrast, often display low motivation to read or possess only situational and highly variable forms of motivation based on personally relevant information in a text rather than the most critical information (Alexander, Jetton & Kulikowich, 1995). Research has indicated that if struggling readers repeatedly experience failure in acquiring even the basic reading skills, they become poorly motivated to read (Aunola, Leskinen, Onatsu-Arvilommi, & Nurmi, 2002; Chapman, Tunmer, & Prochnow, 2000). Young students, who have difficulties in learning to read need to be particularly motivated in order to engage in a process where they have already experienced failure (Taylor & McAtee, 2003). The extent to which they are motivated by their early reading instruction, therefore, has a significant impact on the likelihood of them succeeding in reading, which in turn can impact on their school experiences in later years (Poskiparta, Niemi, Lepola, Ahtola, & Laine, 2003). Consequently, finding ways to motivate young children to read is identified as a priority in reading research (Cabral-Marquez, 2015). If individuals believe they can be successful at an activity they strive to master that task. In the context of reading this dimension of self-efficacy relates to how successful a reader believes he or she can be in the reading process (Ferrara, 2005).

As students become more motivated to engage in the reading process, they are subsequently more likely to be successful (Wigfield & Guthrie, 1997a). This makes addressing motivation to read of students at an early stage important for several reasons. Firstly, motivation is important because of its link to the amount of

time children spend reading. Research has shown that children who are motivated to read are likely to spend more time reading, which in turn has been directly linked to improved reading achievement (Guthrie *et al.*, 1999; Taylor, Frye, & Maruyama, 1990). Research also supports the positive effect of increased reading on the likelihood of readers maintaining the reading habit for life (Taylor, Frye, & Maruyama, 1990). Children who have struggled to develop reading skills usually have negative connotations with regard to reading and lack motivation to engage in reading activities. These children who avoid frequent reading practice rarely become skilled readers (Guthrie, Schafer & Huang, 2001; Juel, 1988). Hence, for a child to read frequently, he or she must be motivated to do so (Pressley, 2002b; Wang & Guthrie, 2004). Frequent reading practice is considered critical in increasing a child's vocabulary, verbal fluency, reading comprehension, and sight word recognition (Griffiths & Snowling, 2002; Guthrie, Wigfield, Metsala, & Cox, 1999; Senechal, LeFevre, Hudson, & Lawson, 1996). In addition to this, research has indicated that up to ten percent of the variance in reading performance measures of students in the higher primary class levels is attributed to reading motivation (Wigfield, Wilde, Baker, Fernandez-Fein, & Scher, 1996). Therefore, students who experience instruction that increases their motivation for reading at an early stage in their schooling are more likely to have a positive academic self-concept.

Some researchers have recently proposed that poor motivation may be a defining feature of reading failure (Lepola, Poskiparta, Laakkonen, & Niemi, 2005; Sideridis, Morgan, Botsas, Padelia, & Fuchs, 2006). Children at risk for reading failure are likely to hold more negative self-concepts (Chapman, 1988b; Chapman, Tunmer & Prochnow, 2000; Stanovich, Jordan & Perot, 1998), display less emotional self-regulation (Fulk, Brigham & Lohman, 1998), and avoid reading activities (Malloy, Marinak & Gambrell, 2010; Salonen, Lepola & Niemi, 1998). Conversely, children experiencing early success in reading are more likely to find reading enjoyable and be motivated to engage in reading activities. These children create environments that are conducive to continued improvement in reading by associating with peers who also enjoy reading, gaining access to reading materials, and finding opportunities to read (Stanovich, 1986).

### **3.6.5 The Relationship between Reading Motivation and Reading Skill**

Although motivation is a topic that has been addressed by many educational researchers (Ames, 1992; Chapman & Tunmer, 1995; Deci, Vallerand, Pelletier, & Ryan, 1991; Nicholls, 1979a), only in the relatively recent past has research focused on the intersection of reading instruction and motivation. Research on children's motivation in relation to school achievement has had a both a broad and a narrow focus over the past couple of decades. Researchers with a broad lens have focused on students' intrinsic and extrinsic motivation for learning, their perceptions of competence or efficacy, and their values and goals for achievement in general (Guthrie, Hoa *et al.*, 2007; Linnenbrink & Pintrich, 2003). Other researchers have developed a narrower conceptualisation, particularly in the context of reading motivation (Baker & Scher, 2002; Chapman & Tunmer, 1995; Gambrell, Palmer, Codling, & Mazzoni, 1996). These researchers and educators who have conducted investigations specifically in the field of motivation for reading have found the concept to be multifaceted (Baker & Wigfield, 1999; Guthrie & Wigfield, 2000; Park, 2011). Furthermore, this research indicates positive reading motivation is associated with a range of desirable reading habits, including higher reading achievement, deeper cognitive processing, greater conceptual understanding, and willingness to persevere when reading is difficult (Guthrie, Hoa *et al.*, 2007; Mazzoni, Gambrell, & Korkeamaki, 1999; Taboada, Tonks, Wigfield & Guthrie, 2009).

It could be argued that assessment of motivation to read has not kept pace with motivation theory in general, particularly with regard to measuring emergent reading motivation in young readers. One possible explanation for this is that, traditionally, the majority of research conducted on student motivation has focused on samples of students from the middle and senior grades of primary school (Chen, Wang & Lou, 2014). Recently, there has been a growing interest in the impact of motivation in the early years, leading researchers to focus specifically on the motivation of readers in the lower grades (Chapman, Tunmer, & Prochnow, 2000; Coddington & Guthrie, 2009; Lepola, Poskiparta, Laakkonen, & Niemi, 2005). Researchers in this area argue that it is still unclear how broad the construct of reading motivation needs to be to capture the early development of reading skills (Quirk, Schwanenflugel & Webb, 2009). What is clear is that there are a variety of



possible reading motivations that can influence children's engagement in reading and their reading performance (Guthrie & Wigfield, 2000; Oldfather & Wigfield, 1996; Wigfield & Guthrie, 1995).

The current study draws on the theoretical perspective of multiple goals in motivation (Pintrich, 2000). This is consistent with the views of Barron & Harackiewicz (2001), who posit that motivation theories should account for the varied motivational goals that students may hold. They suggest that multiple goals are relevant to achievement and should be simultaneously utilised to characterise motivation in explaining achievement. This view is applied to addressing the roles of motivation in reading achievement for the current investigation. In particular, the present study is grounded in the work of Eccles on expectancy-value theory of motivation (Eccles *et al.*, 1983). Consistent with expectancy-value perspectives, the study focuses on the research of Guthrie, Coddington and Wigfield (2009), who suggest reading orientation and perceived reading difficulty as fundamental constructs in examining reading motivation and on the work of Wigfield *et al.* (1996), who emphasised the role of self-efficacy in reading as a critical construct of motivation. Accordingly, these three constructs of motivation (self-efficacy, reading orientation, and perceived reading difficulty) were selected for this study based on their potential for influencing the development of reading skill in the early primary school years.

### **3.6.6 Motivational Constructs and Reading**

#### ***3.6.6.1 Self-efficacy***

Self-efficacy is a motivational construct developed by Bandura (1986, 1997) and it refers to one's belief in an ability to perform a particular task. Motivation to engage with academic tasks is influenced by beliefs about self-efficacy, defined by Bandura (1995) as follows:

Perceived self-efficacy refers to beliefs in one's capabilities to organise and execute the courses of action required to manage prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves and act. (p.2)

Efficacious students participate more readily, work harder, persevere longer in the face of difficulties, and achieve at higher levels (Henk and Melnick, 1995). Self-

efficacy is concerned with what people believe they can do regardless of the skills they actually possess. Bandura (1986) uses the concrete example of measuring self-efficacy in relation to driving ability to help clarify the concept. He explains that we would not ask a driver procedural questions such as whether they could start, accelerate or steer a car to gauge self-efficacy. Rather, we would enquire if they as drivers felt they would be able to find their way around busy streets or navigate on narrow winding mountain roads. In essence, self-efficacy does not refer to what a person can actually achieve, but instead what they think they can achieve. In other words, students with positive self-efficacies feel in control of their learning situation and believe they have the capabilities necessary to succeed. These self-perceptions of efficacy are important because they influence the tasks in which students engage, the amount of effort they invest, their likelihood to persevere with a task and the confidence with which they approach it (Bandura, 1986). This is important for teachers who need to be aware of the implications of students' motivation on their performance in the classroom. Studies of self-efficacy are generally situated within a specific domain because of the way that Bandura (1986) defines and explains self-efficacy as a motivation. Baker and Wigfield (1999) forge the link between self-efficacy in general and reading when they describe reading efficacy as the belief or expectations that one can be successful at reading.

A large body of research has explored the relationship between students' self-efficacy and their achievement in reading (e.g., Baker and Wigfield 1999; Bandura 1997; Eccles and Wigfield 2002; Guthrie & Wigfield, 2000; Schunk 2003). In general, researchers have found that high levels of self-efficacy for reading specific texts lead to higher levels reading achievement performance (Baker & Wigfield, 1999; Schunk, 2003; Wigfield & Guthrie, 1997a). A consistent feature in this research indicates that students who have high self-efficacy in reading, find the task of reading a difficult text more manageable than those with low self-efficacy (Guthrie & Wigfield, 2000). In addition, students with high levels of self-efficacy for reading persist longer at the task and put forth more effort to accomplish the reading task (Schunk, 2003). This is compatible with the research of Pintrich & De Groot (1990), who found that self-efficacy in students is related to cognitive engagement and persistence at challenging tasks.

Other studies focusing particularly on primary school children have examined the relationship between self-efficacy and academic achievement. Using a

sample of children in fourth and fifth grades, Wigfield and Guthrie (1997b) found positive effects of self-efficacy on the amount and breadth of reading, both of which are associated with positive reading achievement. One study by Liew and his colleagues examined chronological effects between self-efficacy and achievement in younger children. Based on a sample from 733 children in first, second and third grades, they found that self-efficacy in second grade was related to reading achievement in the following year (Liew, McTigue, Barrois, & Hughes, 2008). Another study conducted with 198 children students in first grade found that students with higher self-efficacy for reading, writing, and spelling had higher levels of academic achievement (Wilson and Trainin, 2007). For the purposes of the current study, reading self-efficacy is empirically defined as beliefs regarding ability and proficiency in reading tasks (Chapman & Tunmer, 1995).

#### ***3.6.6.2 Reading orientation***

The construct of reading orientation has emerged consistently in research on reading and academic motivation in primary students (Baker & Scher, 2002; Chapman & Tunmer, 1995; Coddington & Guthrie, 2009; Wigfield *et al.*, 1997). In this study reading orientation relates predominantly to students' interest in reading and their attitude toward reading. Attitudes toward reading are generally defined as individuals' feelings about reading and the extent that these feelings influence how much students involve themselves in reading (Wigfield, 1997). Several studies have shown that students' attitudes toward reading play a pivotal role in motivating them to read and in enhancing their reading levels (Fink, 2006; Hidi & Renninger, 2006; Lipstein & Renninger, 2006). Wigfield and Guthrie (1997a) emphasise interest as a central element of their conceptualisation of reading motivation, acknowledging that it is an important factor that influences reading performance. If a student sees reading as an important or a useful activity he or she is more likely to engage in the process (Eccles *et al.*, 1983). Research by Lipstein & Renninger (2006) extended the role of interest in reading achievement when they explicitly categorised it as both a cognitive and affective motivational variable.

In the domain of motivation, reading interest has become a popular topic for analysis as it correlates strongly with intrinsic motivation. Students who are intrinsically motivated to read are considered to be oriented towards reading activities, and hence tend to seek opportunities to read both in leisure time and in

school (Sweet, Guthrie & Ng, 1998). These students are also inclined to engage in reading activities independently without external influence. Therefore, the extent to which students are oriented to read based on intrinsic motivation is important because their reading is likely to be done by choice rather than to achieve another outcome and as a consequence they are likely to perform more successfully on reading tasks.

Hidi and Harackiewicz, (2000) identify interest levels as one of the primary factors that determines how long a student will persist with reading or indeed whether or not a student will read at all. They distinguish two main ways in which interest can define a student's reading orientation: personal interest or situational interest. Personal interest is characterised by enduring and stable interest in a topic whereas situational interest in reading is characterised by intermittent interest elicited in a specific context, and brought about by factors such as the text, the environment or the particular task (Kang, Scharmann, Kang & Noh, 2010; Schiefele, 1999; Wade, Buxton, & Kelly, 1999). Interest is also linked to motivation, in that interest is related to engaging in a task or frequent re-engagement in a task (Hidi & Renninger, 2006). In the context of reading this is exemplified by individuals who continue to be oriented to reading activities once their interest is triggered and who are also motivated to re-engage in reading independently in the future.

Reading orientation has also been defined as the ability of students to concentrate on a task and their willingness to think and experiment in play and problem-solving situations (Lepola, Salonen, & Vauras, 2000). Baker and Wigfield (1999) identify avoidance as an aspect of reading orientation which contrasts with intrinsic motivation. The behavioural attributes of avoidance in the context of reading include students frequently dodging reading tasks and needing to be instructed to get a book to read. Students who avoid reading are easily distracted when reading, dislike books, find texts boring, and often report negatively on reading processes (Dahlen, Martin, Ragan, & Kuhlman, 2004). This lack of orientation towards reading is correlated with poor reading achievement for primary school students (Wigfield & Guthrie, 1997a; Meece & Miller, 2001) and is associated with a disengagement from classwork. Students who lack an orientation towards reading tend to pay little attention to text, and experience anxiety if they are asked to read (Assor, Kaplan, & Roth, 2002).

### **3.6.6.3 Perceived reading difficulty**

One of the factors that may influence a student's decision to avoid a task is the perceived difficulty of the task. Hence, if a student perceives that the task may be too difficult, he or she will be less likely to perform well on the task. Of course, encountering difficulty can be helpful, as people expend more effort on a task they perceive as challenging (Schunk, 2003). However, there is a difference between a difficult task, one on which people are willing to expend a great deal of time and effort to achieve, and a task that is perceived to be impossible to accomplish.

In the field of motivation, the construct of perceived reading difficulty has been identified by researchers as a component of self-concept which also includes perceptions of competence and reading attitudes (Chapman & Tunmer, 1995; Coddington & Guthrie, 2009; Eccles *et al.*, 1993; Valeski & Stipek, 2001). The attitude component of self-concept refers to a child's feelings about reading (Chapman & Tunmer, 1995), including both positive and negative reactions to the activity. This component is analysed in this study in the context of reading orientation as described above. The competence element refers to the perception students have of their difficulty with reading, specifically the extent to which they believe reading activities to be difficult or problematic. Perceived reading difficulty, as a representative component of self-concept, was thus selected as one of the constructs to assess motivation for reading in this study.

The perceived difficulty of certain reading tasks by students is considered an undermining aspect of motivation, contrasted with the more positive motivational aspects of self-efficacy (Coddington & Guthrie, 2009). In several studies, Chapman and Tunmer (1995) illustrated that when students believe that reading is difficult, they tend to have a negative outlook toward reading, which in turn, often leads to their avoiding reading tasks. Using the perceived reading difficulty construct along with self-efficacy is particularly important as research suggests that children who are emergent readers may indeed perceive reading as difficult while at the same time holding self-efficacy beliefs about their ability as readers (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Wigfield *et al.*, 1997). Thus, efficacious readers believe they are capable of performing reading activities and are willing to attempt more challenging texts. However, students with high degree of self-efficacy may not

perform well on tasks if their actual abilities do not match their perceptions and beliefs (Guthrie, Coddington & Wigfield, 2009).

While some early studies suggested that a negative attitude toward reading did not appear to be a significant impediment for struggling readers (e.g., Chapman & Boersma, 1980; Wilson, Chapman, & Tunmer, 1995), more recent research by Chapman, Tunmer, and Prochnow (2000) indicated that perceptions of ability are important for children's reading performance. They found that children who were identified as having a negative academic self-concept, performed much more poorly on reading assessments than children who were identified as having a positive self-concept. This has particular significance for emergent readers who are struggling. Chapman and Tunmer (2003) discussed the long term implications of early reading difficulty for children:

Beginning readers who experience initial success in learning to read can engage in reading for information as well as for pleasure, whereas those who experience difficulty are usually encumbered by the less rewarding process of developing basic word-level competence. (p. 6)

In a study of first to fifth graders in New Zealand, Chapman and Tunmer (1995) found differentiated evidence of reading motivation in relation to students' perceived competence in reading and their perceptions of difficulty with reading. Building on these findings, Coddington and Guthrie (2009) also assessed components of motivation and their association with reading skill. They found significant associations between first graders' word reading skills and their perceptions of competence in and difficulty with reading. Other research in this area found that students' reading self-concept as defined by their perceptions of reading difficulty in grades two and three, impacted their achievement in reading at grades two and three respectively (Bouffard, Marcoux, Vezeau and Bordeleau, 2003). Importantly, perceived difficulty correlated with poor reading achievement for these students.

In a complementary finding, Seifert and O'Keefe (2001) reported that students who perceived tasks to be difficult were more likely to minimise their effort to engage and avoid the necessary activities to maintain standards. Therefore, when students associate reading tasks with difficulty and perceive them as troublesome, they are less likely to adopt a positive approach to them. Thus, perceived task difficulty likely relates negatively to students' reading achievement. Conversely,

perceived competence in a task relates positively to reading achievement (Chapman and Tunmer, 1995).

### **3.7 Chapter Summary**

Learning to read is a complex undertaking which requires learners to orchestrate a wide range of knowledge, highly automated skills and contextual constraints all wrapped up in a high level of engagement in order to be successful. There is now general agreement, after decades of controversy and conflicting studies, about the processes that skilled readers engage in while reading. Despite this consensus on the processes, there remains significant controversy on what constitutes best practices in literacy instruction with specific disagreement as to how beginning reading, as a central element of literacy, should be taught, especially for students with reading difficulties. However, there is an acknowledgement in the research literature that no single method or single combination of methods can successfully teach all children to read (Morrow & Tracey, 2007). There is also agreement that many students particularly those from lower socio-economic backgrounds, continue to have difficulty achieving success in learning to read. This chapter, having outlined the theories underpinning reading instruction and the various models that are embraced to teach reading, identifies five key areas deemed important in reading instruction. These areas have particular importance for young students who are at a critical early juncture in the learning-to-read process. While the literature on all these key areas is reviewed, the role of oral reading fluency in the literacy curriculum is highlighted in particular with an acknowledgement of its arrival as an essential pillar of effective reading instruction from once being a rarely encountered instructional component.

The chapter identifies the particular challenges experienced by teachers of young students who are struggling to master the reading process. The literature on struggling readers reviewed here suggests that teachers addressing their students' reading challenges and deficits are most likely to spend more time focusing on learning skills from a bottom up approach, with the emphasis on phonics skills and decoding rather than contextual reading of continuous text in an automatic and expressive manner. While it is accepted that the ability to learn to read is dependent on acquiring foundational skills such as understanding phonological processes, grasping the alphabet code and developing reading vocabulary, the research suggests

the need to rethink the skills/drill approach traditionally used to teach readers who struggle and to provide these students with access to early literacy interventions that go beyond the constrained skills of reading. The research reviewed here supports the view that these foundational skills need to be complemented by fluency oriented reading instruction (Rasinski *et al.*, 2011). This fluency-oriented approach to literacy instruction along with the implementation of fluency strategies has been shown to greatly assist the reading development of struggling readers and to facilitate a greater level of comprehension than strategies that focus on learning skills from a bottom up approach.

Having described the characteristics of the struggling reader and outlined the nature of the challenges many young students experience in learning to read, the literature reviewed here identifies lack of motivation as an underlying cause of long-term reading difficulties. The potential interaction between weak reading skills and low motivation to read is viewed as one reason why children with reading difficulties underperform academically so consistently. Given the relationship between reading motivation and reading skill identified in this review and the importance of motivation for struggling readers, it is imperative that we seek to identify early literacy interventions that demonstrably remediate both skill and motivation-specific deficits.

The present study investigates the effect that an intervention focused on fluency-oriented reading instruction has on the motivation for reading of struggling readers in First Class. Emanating from a review of the research presented here on motivation and reading, the motivational constructs of self-efficacy, reading orientation, and perceived reading difficulty are selected for this investigation. The study also seeks to measure the effect such instruction may have on the oral reading fluency and word reading efficiency of these readers.



## 4 RESEARCH DESIGN OF THE STUDY

The first phase of this study sought to identify the current practice and knowledge of learning support literacy teachers and in particular their understandings of oral reading fluency, their perceptions of children's motivation for reading, and their understanding of children's motivation for reading. For this phase of the study a mixed methods approach was employed, firstly to generate quantitative data using questionnaires and secondly to glean qualitative data using interviews to gain a more complete understanding of emergent themes. This data informed the second phase of the study, which investigated the effects of fluency oriented reading intervention on the motivation for reading of struggling readers in three separate schools. The data in the second phase of the study was collected using questionnaires, standardised tests, reflective journals, field notes, semi-structured interviews and discussion groups.

The research methodology employed for the study is outlined in this chapter, and issues surrounding the methods of research are discussed under a number of headings as indicated. As the research was conducted in two stages, the research methodology will thus be discussed under two discrete phases. The chapter begins, however, with a consideration of the conceptual framework underpinning the research and offers a rationale for employing mixed methods research informed by a pragmatic perspective. Subsequently the chapter is divided into two distinct parts to correspond with both phases of the study.

### 4.1 Conceptual Framework Leading to Research Questions

In Ireland, the magnitude of the achievement gap between children in disadvantaged schools and their peers attending schools not designated as disadvantaged has been well documented (Eivers *et al*, 2004; Weir, 2003). In particular, children who struggle with achieving the basic skills of reading are over-represented in schools serving disadvantaged areas (DES, 2005b, Eurydice, 2011). These children, who present with reading difficulties at an early stage in their schooling, typically experience a three-stage approach to address their literacy needs: classroom support, school support and school support plus (DES, 2003; DES, 2005c). They are very often withdrawn from the regular classroom and frequently receive a slower pace of instruction (Eivers *et al*, 2004), with reading instruction viewed as a problem solving

process in which children are taught a range of strategies to gain access to reading and understanding text. In this model of reading instruction, which is endorsed by the U.S. National Reading Panel (National Institute of Child Health and Human Development, 2000) and the *No Child Left Behind* legislation (2001), the emphasis is placed on cognitive aspects of instruction (e.g. sight vocabulary, phonics, phonological awareness, vocabulary and comprehension instruction).

The conceptual framework for this study embraces a more inclusive model of reading instruction (Bell & McCallum, 2007) which includes higher order, meaning-oriented, motivational instruction. This concept is illustrated in Figure 4.1 by the bi-directional arrows which propose a link between oral reading fluency and the affective domain of reading (both within the wider context of reading instruction).

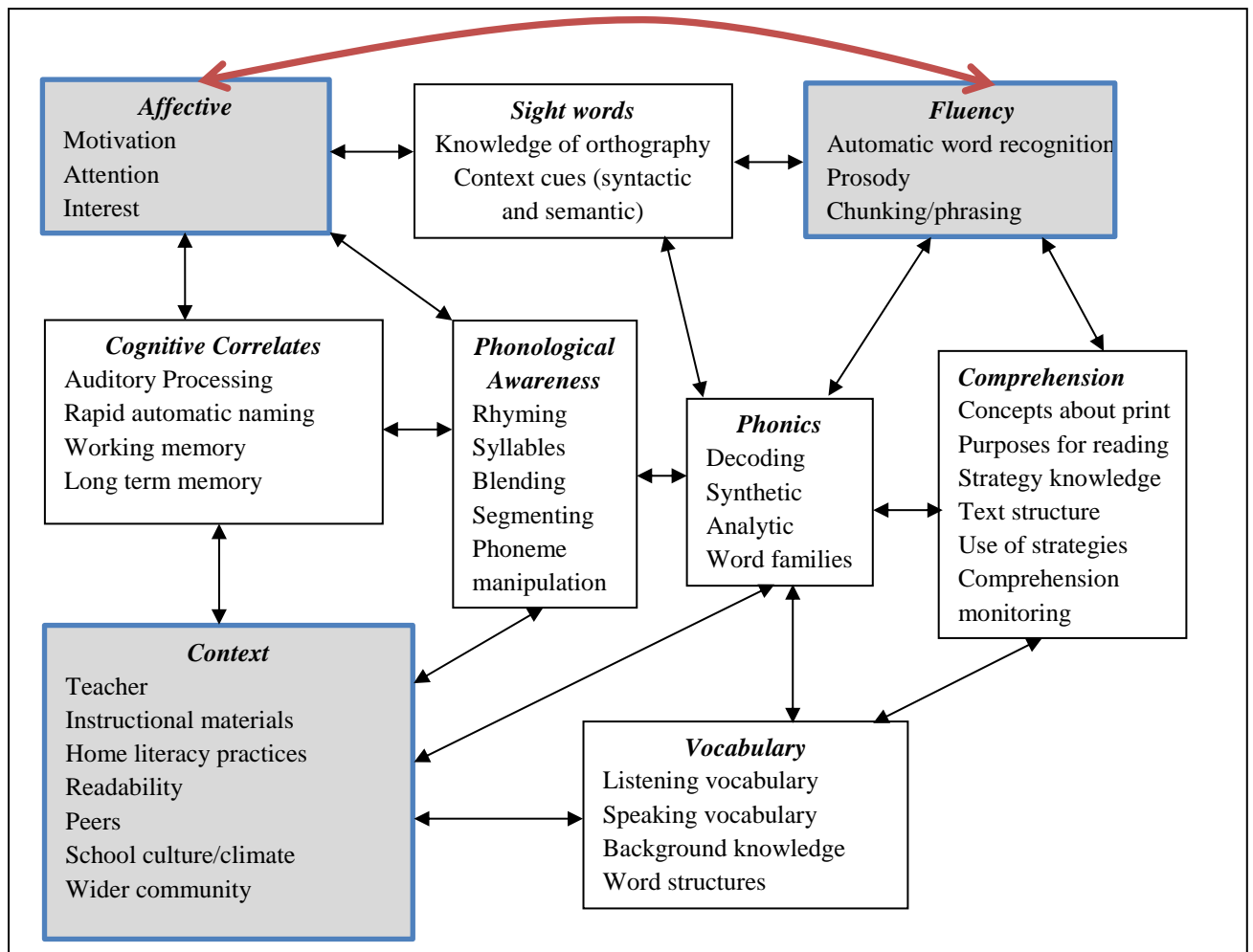


Figure 4.1: Inclusive model of reading (adapted from Bell & McCallum, 2007)

As outlined in the literature review in Chapter 3, many schools in the international context adopt instructional reading practices for struggling readers that are focused more on the motivational, engagement and self-efficacy aspects of compensatory literacy education. One such practice is Fluency Oriented Reading Instruction (FORI). Although this practice has been documented as a successful approach to teaching struggling readers (Stahl *et al*, 1997; Stahl & Heubach, 2005), it has not previously been the subject of a research project in Ireland. More specifically, the effect that this type of reading instruction may have on the motivation to read of struggling readers has not previously been investigated.

This void in the research in the Irish context led to the development of three broad research questions for the present study:

1. What is current practice of learning support teachers in relation to compensatory literacy education?
2. What are the effects of FORI on the motivation for reading of struggling readers in First Class?
3. What are the effects of FORI on the reading achievement of students attending learning support in First Class?

These questions were further elaborated on and led to the development of particular points of inquiry throughout the study as follows:

4. To what extent are learning support teachers employing oral reading fluency strategies in their literacy instruction?
5. What are the perceptions and beliefs of learning support teachers regarding the attitude to reading and the motivation for reading of struggling readers in their programmes?
6. What are the effects of Fluency Oriented Reading Instruction (FORI) on:
  - a. the reading self- efficacy of struggling readers?
  - b. the perceived difficulty with reading of struggling readers?
  - c. the orientation towards reading of struggling readers?

## 4.2 Research Design

Cohen *et al.* (2000, p.73) remind us that research design is governed by the notion of ‘fitness for purpose’. The term ‘research design’ in the context of a study can be ambiguous, and literature gives it varying meanings (Guba & Lincoln, 1994). For this study, research design refers to the strategies of inquiry or the tools that are used in the research. Creswell (1998) defines ‘design’ as the whole process of research from beginning to end, while Rossman and Rallis (2003) maintain that the design presents a plan, or road map, for conducting the study. It is with these varying meanings in mind that a mixed methods approach was deemed the best fit for the exploration of the complex research questions involved in the study.

The initial stage of the study (Phase One) sought to identify the current knowledge and practice of learning support teachers in relation to reading instruction in primary school classrooms in areas designated as disadvantaged. A sequential mixed methods strategy was employed during this phase (see Figure 4.2) where information was initially gathered through the use of a quantitative survey. Emergent themes arising from this survey were then further explored by conducting semi-structured focus group interviews with a sample of the initial respondents.

In the second stage of the study (Phase Two), the data from Phase One was combined with the literature and the perceived needs of the subjects of the study to design an intervention based on Fluency Oriented Reading Instruction (FORI). The research questions in this phase of the study focused on the potential impact that such an intervention would have on the motivation to read of poorly motivated, struggling readers in First Class. Details in Figure 4.2 illustrate the scope of qualitative and quantitative methods employed, both prior to the intervention and post-intervention, to examine the effects of FORI on the motivation for reading of the subjects of the intervention. Bi-directional arrows (coloured in red) indicate the concurrent triangulation of information carried out which is consistent with the mixed methods design employed in the study. The rationale for using mixed methods is outlined in the following section.



### **4.3 Rationale for Using Mixed Methods**

The literature on research methods reflects many disparate views on how best to collect data to inform educational research. Sarantakos (1998) reminds us that choosing an approach to social research depends on the nature and scope of the questions used in a particular study. When multiple research questions are considered that cannot be satisfactorily answered by a singular approach, an alternative approach is warranted. Advocates of mixed methods research suggest linking both quantitative and qualitative data to enable confirmation and corroboration of information to provide a clearer picture of the phenomenon under study (Creswell and Plano Clarke, 2007). When used together, quantitative and qualitative methods complement each other and allow for a more robust analysis, taking advantage of the strengths of each (Green *et al*, 1989; Green & Caracelli 1997; Miles & Huberman 1994). Supporting this view, Tashakorrie and Teddlie (2003) contend that ‘a major advantage of mixed methods research is that it enables the researcher to simultaneously answer confirmatory and exploratory questions and therefore verify and generate theory in the same study’ (p.15). The rationale behind employing a mixed methods approach to this study is that more could be learned about the research topic by combining the strengths of qualitative research with the strengths of quantitative research while compensating at the same time for the weaknesses of each method (Johnson & Onwuegbuzie, 2004). Indeed, the fundamental principle of using quantitative and qualitative approaches in combination is that it provides a better understanding of research problems than either approach alone. This has been called the ‘fundamental principle of mixed methods research’ (Johnson & Onwuegbuzie, 2004, p.18).

Creswell (2007) outlines three characteristics of mixed methods research that provide a fit for the present study. Firstly, mixed methods research involves the collection of both quantitative and qualitative data. Quantitative measures in the form of questionnaires were initially used to survey a wide population of learning support teachers who were teaching struggling readers. This survey was used to collect data on the type of literacy instruction employed by these teachers and to ascertain their perceptions and beliefs regarding the motivation and attitude to reading of the children in their classes. This was followed by a qualitative approach in the form of semi-structured interviews with a sample of the initial respondents.

The combined information gathered at this stage of the research informed the design and scope of the intervention for the second phase of the investigation. The second characteristic outlined by Creswell is mixing of the data during the research process. This allows the researcher to select methods that offer the best chance of answering specific research questions. In Phase Two of the study both quantitative and qualitative methods were used to examine the effects of fluency oriented reading instruction on the motivation for reading of struggling readers. Comparison of the data collected in this phase was facilitated by a concurrent triangulation approach to determine if there was convergence, differences or a combination of both. Creswell's third characteristic is that the data are collected either sequentially or concurrently. In this study data were collected sequentially in Phase One of the study and collected concurrently in Phase Two. In describing the research design of this study, the philosophy underpinning the research will now be presented along with an outline of how this paradigm intersects with the strategies of inquiry and the specific research methods employed.

#### **4.3.1 Paradigmatic issues in mixed methods research**

Advocates of combined quantitative and qualitative research have engaged in ardent disputes, with purists from both sides who favour a single method of inquiry. Historically, strategies of inquiry associated with quantitative research were rooted in the positivist and post positivist tradition and quantitative research was the dominant approach for much of the twentieth century (Babbie, 1990, 2007; Fowler, 2002; Maxwell & Delaney, 2004). In articulated assumptions consistent with this positivist philosophy, biases are eliminated and researchers remain emotionally detached and uninvolved with the objects of their study (Philips & Burbules, 2000). Criticisms of positivism and its limitations were well documented, however, and from the 1970s onwards a wide variety of methods was advocated instead. This led to qualitative research methods becoming more clearly visible and the emergence of constructivism, idealism, humanism and postmodernism as alternative worldviews (Guba & Lincoln, 1989; Lincoln & Guba, 2000). The contention from advocates of these world views was that research is value-bound and that logic flows from specific to general in such a manner that explanations are generated inductively from the data. Proponents of each tradition cited their own epistemology, axiology and

ontology, and hence the ‘incompatibility thesis’ was born (Reichardt & Rallis, 1994), which in turn led to what became known as the paradigm war (Creswell, 2003).

Johnson and Onwuegbuzie (2004) presented mixed methods research as a third approach in educational research. The advent of this alternative research method necessitated a search for a paradigm that could include both quantitative and qualitative approaches (Mertens, 2003). The most frequently cited paradigm that emerged in mixed methods research was pragmatism (Burke Johnson & Onwuegbuzie, 2004; Maxcy, 2003; Patton, 2015; Tashakorrie & Teddlie, 2003). Pragmatism is not committed to any one system of philosophy and reality. Hence, pragmatists take a balanced and pluralist position and are interested in discovering ‘which action to take next as one attempts to better understand the real-world phenomena including psychological, social and educational phenomena’ (Burke, Johnson & Onwuegbuzie, 2004, p.17). The research question and how best to answer it is central to the decision regarding which methods to employ more so than an allegiance to a particular world view (Tashakorrie & Teddlie, 2003).

Although philosophical ideas often remain largely hidden in social research (Slife & Williams, 1995), they have a significant influence on the present research study. For the purposes of this study, mixed methods is interpreted as a research design with philosophical assumptions as well as being a means of inquiry. The mixed methods approach employed in the study draws liberally from both quantitative and qualitative assumptions, using both approaches to collect and analyse data. As a methodology, it involved philosophical assumptions that guided the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in both phases of the research process. As a method, it involved a focus on collecting, analysing, and mixing both quantitative and qualitative data in the study.

The study was conducted through a pragmatic lens with research questions framed to shed light on the underachievement in literacy of children in First Class from disadvantaged backgrounds. Participants (learning support teachers) were involved in collaboration with the researcher to investigate how to intervene with struggling readers in a fashion that would impact favourably on their motivation to read. A mix of methods was utilised to capture the complexity of the problem. The research reflects the pragmatist paradigm in that the research focused on what would



work and also on finding a solution to the complex research questions involved in the study.

### 4.3.2 Typologies of Mixed Methods

In choosing a research design to frame a mixed methods study, one has to be mindful of the research problem in question and give consideration to factors such as timing, weighting, mixing and theorising (Cohen *et al*, 2003). These four factors help to shape the procedures of a mixed methods study. Creswell (2009) presents a classification of mixed methods designs incorporating six major strategies of inquiry. These include three concurrent and three sequential designs: a) the sequential explanatory strategy, (b) the sequential exploratory strategy, (c) the sequential transformative strategy (d) the concurrent triangulation strategy, (e) the concurrent embedded strategy, and (f) the concurrent transformative strategy. Creswell and Plano Clark (2007) suggest notation to indicate the various timing and weighting for each strategy. A “+” indicates a concurrent form of data collection with both quantitative and qualitative data collected at the same time while a “→” indicates a sequential form of data collection. In visual representations of mixed methods, “*Quan*” and “*Qual*” stand for quantitative and qualitative respectively, with capitalization indicating a weight or priority on the data, analysis and interpretation in the study.

In the current study a sequential explanatory design was employed in Phase One (see Figure 4.3), with weight given initially to collecting data from all learning support teachers in the catchment area. The results of the initial quantitative survey informed the secondary qualitative data collection.

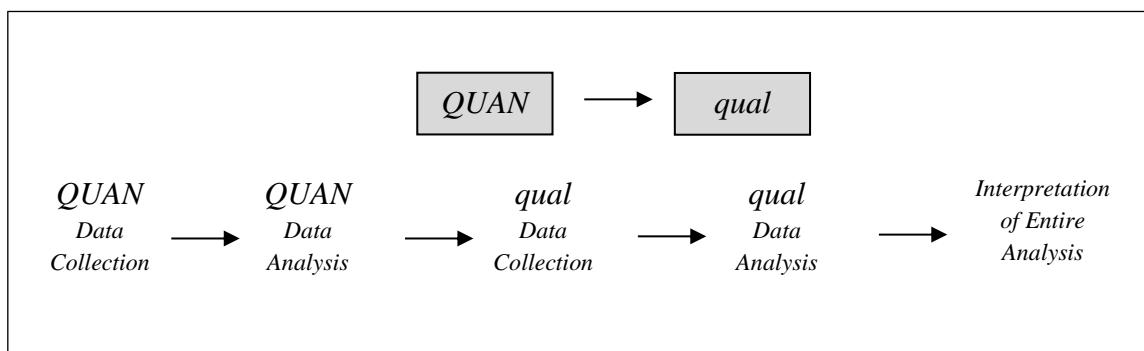


Figure 4.3: Sequential Explanatory Design

A concurrent triangulation design (see Figure 4.4) was employed in Phase Two of the study to research the effects of the reading intervention on the motivation to read of struggling readers.

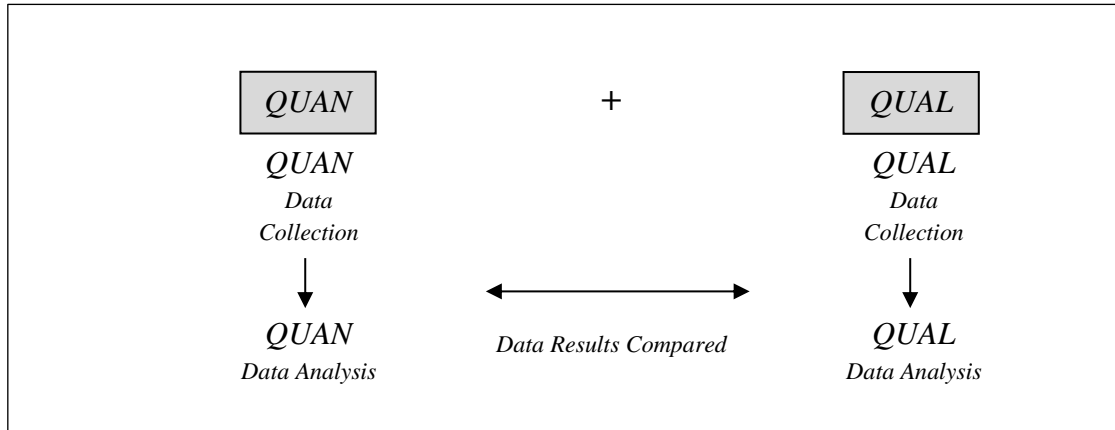


Figure 4.4: Concurrent Triangulation Design

#### 4.4 Phase One: Mixed Methods Sequential Explanatory Approach

The mixed methods sequential explanatory design of this phase of the study consists of two distinct approaches: quantitative and qualitative (Creswell, 2003). Implementation of these approaches refers to whether the quantitative and qualitative data collection and analysis come in sequence, one following another, or concurrently (Creswell *et al.*, 2003; Green *et al.*, 1989). In the sequential explanatory design (*QUAN* → *qual*), the data are collected in two consecutive phases. Thus the quantitative data is collected and analysed first. Then the qualitative data are collected and related to the outcomes from the quantitative research. Data in this phase of this study were collected using quantitative measures in the first case followed by semi-structured focus group interviews to gain a more complete understanding of the issue under study. Quantitative methods were deemed most appropriate for the initial data collection as it involved interrogating a phenomenon to examine its component parts (Merriam, 1998). In accordance with this, Firestone (1987) suggests that quantitative methods are ideal when a study seeks to focus on the use of established procedures and can be useful when gathering background data on a phenomenon.

The phenomenon in question for this stage of the study was the practice of learning support teachers in intervening with struggling readers. Surveys have been a

regular feature in the evaluation of literacy programmes and the teaching of reading (Austin & Morrison, 1963; Baumann *et al.*, 2000), and the use of a questionnaire is recommended when the purpose of the research is to ‘describe specific characteristics of a large group of persons’ (Jaeger, 1997 p.449). As it was necessary to obtain a picture of how a relatively wide sample of learning support teachers were teaching literacy (thus contributing to baseline data), a decision was made to use a questionnaire for initial data collection. This questionnaire (see Appendix 2) was designed to identify the knowledge, perceptions and practice of learning support teachers in DEIS Band 1 & 2 schools in the Dublin Northside Partnership Catchment Area. In particular, the teachers were surveyed to provide objective, factual data in relation to the following research questions:

- What is the current practice of learning support teachers in relation to compensatory literacy education?
- To what extent are learning support teachers employing oral reading fluency strategies in their literacy instruction?

While the questionnaire predominantly features closed Likert-style questions, open-ended questions were also included to allow respondents to further express their opinions and experience in relation to their practice. These questions revealed a rich stream of data and allowed participants to record their perceptions in relation to the motivation and attitude to reading of the children they taught (e.g. Q 3.2 in Appendix 2). However, while this survey was appropriate for an audit of current practice, the data collected required further exploration.

Creswell and Plano Clarke (2007) suggest linking quantitative and qualitative data to enable confirmation and corroboration of information or to develop analysis and create a clearer picture of the phenomenon under study. Influenced by this advice, semi-structured focus group interviews were subsequently conducted with a sample of the respondents to gain a more complete understanding of the issue under study and so to inform the next phase of the research. In particular these interviews sought information relevant to another key research question:

- What are the perceptions and beliefs of learning support teachers regarding attitude to reading and the motivation for reading of struggling readers in their class?

Reichardt and Rallis (1994) argue that combining qualitative methods (interviews and open-ended questions) with quantitative (closed questions in the questionnaire) brings to life the abstract information provided in the questionnaire, while maintaining an objective viewpoint. The quantitative data collected by the survey highlighted interesting patterns of practice which were then explored in more depth in the interviews. For example, the quantitative data revealed that teachers felt that the children in their learning support programme learned best when motivated to read. Therefore, questions were formulated and included in the interview schedule to investigate how they set about motivating these children for reading. Similarly, the data suggested that fluency oriented reading activities (e.g. choral, echo, antiphonal reading, Readers Theatre) were not widely employed by learning support teachers in their reading programmes. The focus group interviews provided an opportunity to further probe this finding.

#### **4.4.1 Questionnaire Design**

In designing the questionnaire the specific items considered from the outset were the general appearance, typeface, blank spaces, order of questions, and the placement and clarity of instructions. Cohen *et al.* (2011) argue that the way questions appear on a questionnaire is just as important as the questions themselves. A questionnaire should look attractive, be easy to answer and appear spacious and interesting. These considerations should encourage a potential respondent to complete the survey by conveying a sense of professionalism regarding the study as well as ease of completion. The questionnaire was designed to be as user-friendly as possible, with the inclusion of instructions in italics, the numbering of questions within sections and the use of bold type for all question stems. In regard to subject content when designing surveys, Peterson (2000) advises that effective questionnaire construction requires a systematic review of the relevant literature and warns that ‘garbage in is garbage out’ (p.27) in this respect. With this in mind, the literature in relation to teaching reading and oral reading fluency in particular was reviewed in great detail. The review of this literature was combined with my own experience of teaching

reading at both primary and third level to identify a list of all items about which I required information. This list was then examined to identify and remove any items not directly associated with the task. The next step was to consider the type of information I needed to collect. Careful examination of the list revealed that the information required could be categorised under the headings of behaviour, knowledge and attitudes. This provided an outline framework for constructing the questionnaire (Appendix 2).

A major consideration was the length of the questionnaire. This decision was not an easy one to make, as a respondent's perception of the time needed to fill out a questionnaire is not directly proportional to the amount of space the questions occupy. Denscombe (1998, p.151) suggests that 'every effort should be made to make the questionnaire as brief as possible, by restricting the scope of the questions to crucial issues related to the research'. This proved valuable in determining the focus and defining the parameters of the inquiry. The first draft of the questionnaire amounted to a lengthy list of potential questions that were considered central to the investigation. Attention was then focused on the wording of individual questions with respect to the technical language used, potential ambiguity and consistency of terminology across questions. Once the wording of individual questions was addressed, the questionnaire was divided into three discrete sections (see Appendix 2).

It is recommended that a questionnaire begins with easy, factual, non-threatening questions that do not require considerable thought or writing (Cohen *et al.*, 2011). Therefore the first section sought general background information (questions 1-11) and surveyed a respondent's level of agreement on precisely worded statements (questions 12-13). Multiple choice questions were predominantly used in this section, as this style of question was deemed appropriate for topics seeking factual information (see Table 4.1 for example). The second section addressed elements of a respondent's own practice as learning support teachers (questions 14-18) and the third section explored teachers' perceptions and beliefs regarding the motivation and attitude of the children in their learning support programmes (questions 19-23).

Table 4.1: Example of multiple choice questions (Q 1.9, Appendix 2)

Q 1.9 Please indicate any of the following modes of intervention that you use with children receiving learning support in <u>First Class</u> . (please tick any circle(s) that apply)					
Withdraw children from class for learning support (group instruction)	Withdraw children from class for learning support (individual instruction)	Provide learning support for children in their own class setting	Team/parallel teaching (working with other teachers in class)	Station teaching with other teachers in class setting	Peer tutoring
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### 4.4.2 Formulating the Questions

Denscombe (1998 p.146) suggests that questions in questionnaires fall mainly into two broad categories: ‘fact and opinions’. The questions in the current questionnaire fell into both these categories. For example the general information section sought factual information about teachers’ qualifications and general teaching experience, their school setting and learning support set-up and their specific experience as a learning support teacher. The remainder of this section sought the opinions of teachers on a range of statements about their own practice and about the children participating in their programmes. These broad categories were surveyed using both closed and open-ended questions. In formulating individual questions for a survey, Cohen *et al.* (2011) recommend a variety of question types to improve the attractiveness of the questionnaire and to make it a more interesting experience for the respondent. This variety in question format prevents boredom and reduces the risk of the respondent falling into a pattern of answering questions in a particular format, such as choosing the same number on a Likert scale. On the other hand, a consistency in question formats has the advantage of allowing the respondent to become familiar with what is required and to answer the questions quickly and with clarity (Munn & Drever, 1999).

When formulating the questions, every effort was made to ensure that they were clear and concise. Oppenheim (1998) recommends that questions should not be any longer than twenty words and should avoid the use of jargon, proverbs, acronyms, abbreviations or double negatives. Initially, my questionnaire consisted

primarily of closed questions using the Likert rating scale (Likert, 1932). The greater specificity and consistency yielded by these closed questions allows one to generalise results that can be reported across respondents. In addition, the use of closed-ended choices allows for a more systematic analysis of data collected (Cohen *et al.*, 2011). This type of question was used as such questionnaires are quick to complete (see Table 4.2 for example) and attract a high rate of completion by respondents (Oppenheim, 1998). In an effort to vary these Likert-style questions, a prudent use of grids was employed to encourage participants to respond. A variance in the scales from question to question was also included.

Table 4.2: Example of Likert-style question (Q 2.1, Appendix 2)

Q 2.1 In the case of those children in your <u>First Class</u> learning support programme who experience difficulties in reading, please indicate the extent you agree that the following are typically a contributing factor ( <i>please tick the appropriate circle</i> )								
		strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
(i)	Children have poor oral language ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Although closed questions are quick to complete and facilitate coding during analysis, they are limited in that they are restricted to pre-determined choices and do not allow respondents to add any explanations or remarks (Patton, 2002). It was clear that a questionnaire limited to this type of question was not only unattractive to potential respondents but also lacked the opportunity for participants to respond in their own words. With this in mind, a wider variety of question types were included to improve the attractiveness of the questionnaire and make it a more interesting experience for the respondents. The first amendment was to include open-ended questions that did not place restrictions on the answers respondents could provide and presented the possibility that ‘gems of information that otherwise may not have been caught in the questionnaire’ might be revealed (Cohen, Manion & Morrison, 2007, p.255). By allowing participants to answer in their own words, in contrast to

the limited scope of closed questions, more interesting responses invariably result, often revealing insights that may not have been anticipated (Oppenheim, 1998). Open-ended probe questions were also appended to closed-end questions to prompt additional information from survey participants (see Figure 4.5 for example).

<p>Q 3.1 Please outline any other factor that typically describes the attitude to reading of learning support children in <u>First Class</u></p> <hr/> <hr/>
--

Figure 4.5: Example of open ended probe appended to a closed question (Q 3.1, Appendix 2)

#### **4.4.3 Piloting the questionnaire**

No matter how experienced a researcher is in questionnaire design, it is rarely possible to create a first draft requiring no further amendment (Cox, 1996). Therefore, pre-testing is essential and several researchers have observed that piloting a questionnaire is the most effective means of pre-testing in order to increase reliability, validity and practicability (Oppenheim, 1998; Morrison, 1993, Wilson & McClean, 1994). Johnson (1994) observes that a pilot study is always desirable since it shows gaps in logic, highlights incomprehensible language or layout, and often determines whether the questionnaire is effective for the purposes of the study. In conducting the pilot for this study, the focus was not so much on answering the research questions or testing the hypotheses, but more on whether participants understood the questionnaire, gave adequate responses, and presented responses that would inform the investigation. Piloting also gave an indication of the time needed to complete the questionnaire and highlighted any important issues that may have been omitted (Wilson & McLean, 1994).

In choosing participants for the piloting, the aim was to get the maximum of useful feedback as readily as possible. Munn & Drever (1999) recommend that at the pilot stage researchers choose individuals who are likely to be sympathetic to the study but who are also willing to give forthright comments and sharp criticism. This serves to test the questions as thoroughly as possible before the survey is sent out to



respondents. Following this advice and to ensure that the questionnaire possessed a degree of content validity and reliability, a group of learning support teachers with a broad range of experience were selected to pilot the questionnaire. These included four learning support teachers in DEIS schools who were not part of the study and three other learning support teacher from non-DEIS schools. All the participants were chosen on the basis of their considerable teaching experience in the compensatory education domain and their willingness to give forthright comments. Most importantly, they all worked in different schools as learning support teachers and so formed a representative sample of the wider group that would be surveyed in the main study (Bell, 2002). After they completed the questionnaire the process was discussed with each of them individually, using pilot questions which included prompts in relation to the time taken to complete, the clarity of language and instructions, and observations on any possible omissions.

As a result of the pilot some significant changes were made to the original questionnaire. Some questions were omitted as they were unlikely to yield useful or relevant information or because they were deemed redundant. Where questions were seen to overlap they were combined into one question. On the other hand, questions were also added to probe and clarify issues. For example, the question regarding the motivation for reading of children in First Class was extended to provide an opportunity for respondents to include what they saw as key factors for motivating children in their learning support programme. In other instances, several questions were drawn together and restated economically, for example the range of questions about activities employed as primary foci of reading instruction (Q 2.3, Appendix 2). In the original questionnaire one question was presented as a rank order question. The pilot study respondents found the question in this format difficult to understand so it was re-presented as a Likert scale type of question.

There were also some issues from respondents in relation to their ability to indicate a level of agreement on statements regarding the children who participated in their learning support programmes. Pilot respondents expressed concern that they had difficulty answering some questions accurately in the absence of an 'unsure' category. To address this issue, options such as '*neither agree nor disagree*' or '*somewhat important*' were included in the Likert scale where appropriate. Some questions that caused confusion because of the language used were rephrased to ensure the participants understood precisely what information was sought. For

example in Q 1.14 (i) the statement originally phrased as *Children are aware of their status as a reader* was replaced by *Children are aware that they have reading difficulties*.

Having amended the questionnaire to reflect the responses of the pilot group, two lecturer colleagues who had prior experience as learning support teachers were approached to complete the questionnaire as a final pilot. The feedback received identified structural issues such as spacing, use of italics and a suggestion in one case to include a descriptor for a technical term (Q 2.3 (ix), Appendix 2). These final edits were addressed prior to distributing the questionnaire to the survey sample.

#### **4.4.4 Sampling and Gaining Access**

Sampling involves selecting individual units to measure from a larger population (Patton, 2002). The target population for this phase of the study was learning support teachers in disadvantaged primary schools who had children from First Class in their literacy programmes. The Institute where I work is situated in the Dublin Northside Partnership Catchment Area which incorporates Dublin 3, 5, 13 and 17 and has a total population of approximately 127,000 people. There are twenty-one DEIS Band 1&2 primary schools in this catchment area providing a local and finite geographical setting for the present study. This was particularly important as the second phase of the study would involve an intervention in three of the schools in this area.

Patton (2002, p.230) maintains that ‘the logic and power of purposeful sampling lie in selecting information-rich cases for a study from which one can learn a great deal about issues of central importance to the purpose of the inquiry’. As it happens, seven of the twenty-one DEIS schools in the catchment area are senior primary schools with no children in First Class and so were not suitable for inclusion in the study. For the purpose of the study a convenient, purposive sample (Cohen *et al.*, 2007) of learning support teachers from the other fourteen DEIS primary schools in the Partnership Area was used. Given the precise focus (learning support teachers) and finite geographical setting, complete coverage of the target population was feasible for the survey.

As recommended by Maykut and Morehouse (1994), I adopted an overt approach to gaining access and contacted the principals of all the schools involved prior to delivering the questionnaires. Most of the schools involved were also school

placement partnership schools with my own Institute, so I was known to the principals through my role as a school placement tutor. Furthermore, many of the learning support teachers in these schools would have attended continuous professional development courses on literacy that my institute offers for our partnership schools. Consequently, I found that access to the schools was not a problem and in the majority of cases I got to meet with the learning support teachers to explain the purpose and scope of the survey. Where this was not possible I enclosed a cover letter designed to encourage the participants to become involved in the research project (see Appendix 1). Couper (1997) illustrated the importance of this introductory letter in the absence of direct contact with participants by empirically linking questionnaire introductions to subsequent answers to questions.

Achieving a high return rate is an ongoing challenge in educational research involving questionnaires. Cohen *et al.* (2011) suggest that a typical response rate on first attempt would be 40 percent with the potential to rise to 75 percent with diligent follow-up while Fogelman (2002) suggests that due to increasing pressure on schools and teachers, a 60% response rate for a questionnaire is considered quite acceptable. In an effort to boost the response rate of my survey I chose to visit each school involved and personally deliver the questionnaires. I collected 75 per cent of these questionnaires and provided all other participants with a stamped, self-addressed envelope to encourage response. I am in no doubt that delivering and collecting these questionnaires personally was a key factor in attaining a hundred percent response rate to the survey. This personal contact with my participants also facilitated a qualitative element to my research model as I held informal conversations with them during the collection process which provided much additional information. Field notes were recorded from these conversations and used later in constructing a schedule for semi-structured interviews with a selection of these learning support teachers.

#### **4.4.5 Analysis of the quantitative data**

All test data gathered were entered into the computer and the data was analysed by setting up a database in Microsoft Excel (2010). Initially all data was entered with numbers assigned as unique identifiers to identify each questionnaire. The data was then coded by assigning every response item on the questionnaire with a numbered

code. The data from all respondents was then entered into the Excel framework. The data was then cleaned by comparing the data entered in the database with data in the original questionnaires (Neuman, 2006). This was possible for all responses given the relatively small number of questionnaires (n=14). The data was then analysed using the functions in the Excel software. Findings across different schools were analysed through the use of cross tabulation with pie charts and graphs generated to examine the data further (see Appendix 3 for example). These graphs were also used for feedback purposes to all respondents at the end of Phase One of the study.

Early analysis of the data sought to identify patterns that could be further explored in interviews with a selection of the initial respondents. For example data that revealed that learning support teachers placed a heavy emphasis on teaching the cognitive aspects of reading such as phonics and word analysis was used to frame questions to further probe this finding. Another finding indicated that children in learning support programmes typically read without fluency and experienced difficulty reading with expression, automaticity and at an appropriate rate (see Appendix 3). In some instances graphs were generated from the initial analysis of quantitative data (see Figure 4.6 for example).

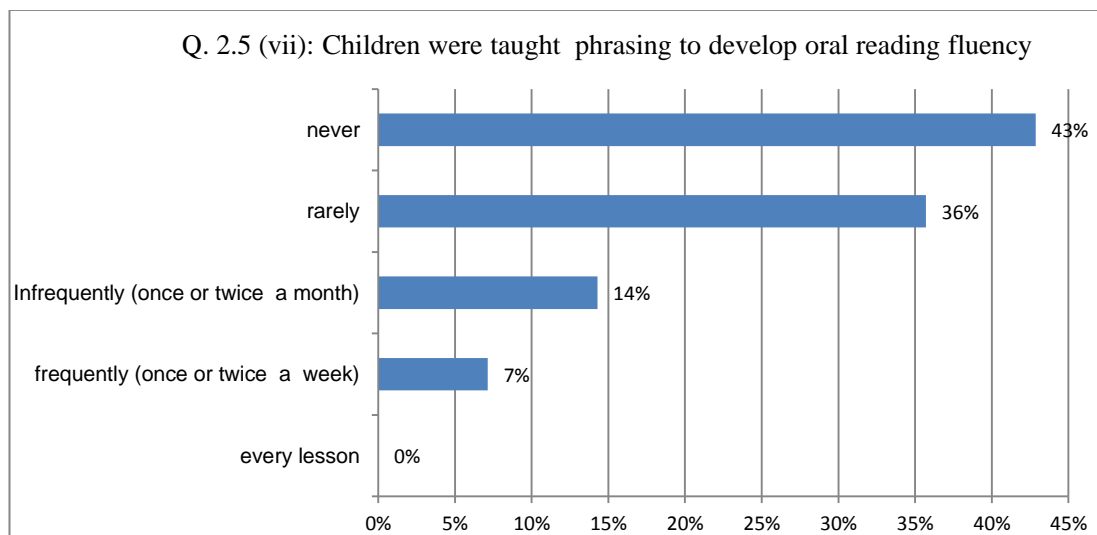


Figure 4.6: Example of analysis of frequency of an oral reading fluency activity

As these findings were central to the research question, they were added to the interview schedule for further exploration (see Appendix 5).

The analysis of the open ended questions was compiled on a word processing programme (see Appendix 4) using the constant comparative method (Glaser & Strauss, 1967). This allowed data to be coded and analysed for patterns and emergent themes. It also provided an opportunity to identify outliers or controversial voices within the data set (Miles & Huberman, 1994). Mindful of the limitations of the quantitative instrument in answering the research questions it was clear that qualitative interviews would be necessary to elicit further data in order to achieve a more profound insight into the current practice and perceptions of learning support teachers.

#### **4.4.6 Research Instrument: Interviews**

There are many types of interviews, each of which differs from the others in structure, purpose, and the role of the interviewer. The most common way of deciding which type of interview to use is by determining the amount of structure desired. Bell (1993) and Merriam (1998) see the alternative types of interview as ranged somewhere on what they call a continuum of formality. Highly structured, questionnaire-driven interviews where the interviewer behaves much like a machine fall at one end of the continuum. At the other end are unstructured, open-ended, conversational formats. The semi-structured interview is situated halfway along the continuum scale and is a much more flexible version of the structured interview. Rubin and Rubin (2005 p.4) describe semi-structured interviews as ‘conversations in which a researcher gently guides a conversational partner in an extended discussion’. The researcher elicits depth and detail about the research topic by following up on answers given by the interviewee during the discussion. Issues to be explored can be determined in advance and a schedule of questions prepared. By carefully designing the questions and considering the pertinent issues, the researcher can discover what is important to understand about the phenomenon under study (Maykut & Morehouse, 1994) and the interviewee is encouraged to speak at will and to expand on thoughts and ideas raised by the researcher. This includes probing the interviewee with supplementary questions where necessary to clarify meaning (Borg & Gall, 1989). In summarising the main characteristics of a semi-structured interview Drever (1995) writes:

It is a formal encounter on an agreed subject, and on the record. The main questions set by the interviewer create the overall structure with prompts and probes filling in the gaps. The prompts encourage broad coverage and the probes explore answers in depth. (p.13)

Ribbins (2007 p.208) states that we interview people 'to explore their views in ways that cannot be achieved by other forms of research'. In choosing semi-structured interviews as a secondary research method in Phase One of the study, the rationale was that this approach would elicit 'thick description' (Geertz, 1973) and insights from the learning support teachers who were happy to elaborate and explore further the themes emerging from the initial survey. The semi-structured interviews were conducted with two groups of learning support teachers who had participated in the initial survey (four in one group and three in the other). These interviews allowed for the generation of better data as they were conducted in an open-ended way which ensured that points raised by interviewees could be developed and explored. All the interviewees were asked about the same topics; some elaborated more on particular points, which led to further exploration of the issues raised. The schedule of topics or themes provided the starting point for discussion of each area.

Certain key questions were asked of all interviewees, such as enquiring about their views on how children who were struggling readers could be motivated to read and the role parents played in their learning support programmes. In this regard there was a highly structured aspect to the proceedings. However, the interviews were typically characterised by a list of more flexibly worded questions based on issues emerging from analysis of the questionnaires. A mixture of closed and open questions were included and the interviewees were provided with a fair degree of freedom in what to talk about, how much to say and how to express it. For Gergen (1999 p.50), a researcher must be aware of his/her own cultural assumptions so that these can be suspended, if necessary, in order to understand another person's view. I was, therefore, mindful of my position as a literacy lecturer conducting interviews with primary school teachers and the possibility that my own cultural assumptions could be a factor in how I interpreted what was being reported.

Whether interviews are structured or otherwise, it is vital to have a reliable system of recording the information for further analysis. Merriam (1998) identifies tape recording as the most common way to record interview data. All interviews were recorded using a digital voice recorder, to enable me to listen for meaning

when I later transcribed the interviews and also to reflect upon the content of the conversations. Relying solely on written notes from the interviews would not have provided an accurate enough record for later analysis and would have impeded the natural flow of the interviews as conversations. Permission to record the interviews was sought and the interviewees were invited to read and sign a consent form that assured confidentiality and anonymity as recommended by Taylor and Bogdan (1984). The tape recordings proved particularly useful for checking precise wording of statements and in forming content analysis of the data. I undertook the transcription of these interviews myself as ‘this fosters greater familiarity with the interview text and enables you to note the subtler nuances of the interaction’ (Brown and Dowling, 1998 p.76).

#### **4.4.7 Creating the Interview Schedule**

The interview schedule was derived from the findings of the initial quantitative survey of learning support teachers. Maykut and Morehouse (1994) outline a number of steps in the development of a robust but flexible schedule for semi-structured interviews. Once the research focus has been clearly identified, they recommend beginning the process by brainstorming possible topics, concepts and questions. At this point of the process all ideas are recorded and no exclusions are made. These ideas are then examined for similarities and are grouped and labelled as a category of inquiry. They emphasise that this ensures that the categories are arrived at inductively arising from the professional experience and working knowledge of the researcher. As an extensive review of the relevant literature was carried out as part of the study elements of this were included in the interview schedule as well.

Certain elements of the interview schedule were related to data revealed in the responses to closed questions in the questionnaire, such as the prompt: *‘Teaching fluency oriented reading activities such as Readers Theatre or antiphonal reading was reported as being rarely or never used as a focus of instruction with learning support children in First Class. Would this be the case in your teaching?’* This was based on the analysis of the quantitative data and was designed to investigate further the use of fluency oriented reading instruction in learning support programmes. As the questionnaire also included open-ended questions and opportunities for participants to add comments this data was also used to create the interview

schedule. For example, in order to explore their views on the use of levelled books with struggling readers participants were presented with the following comment included in one respondent's questionnaire: '*It is important that children read books that are at their reading level. If they are reading at this independent level they will attempt to read more readily and are more likely to succeed*'. Interviewees were then asked their opinion on this statement and were probed to ensure that the responses were fully elaborated and understood. This use of comments derived from the questionnaires allowed the researcher to de-personalise controversial and sensitive issues as recommended by Merriam (1998) and made the interviews more interesting and comfortable for the interviewees.

#### **4.4.8 Conducting the Interview**

Cohen *et al.* (2007) note that the benefit of the semi-structured interview is that it enables the comparing of information between respondents, as well as achieving a clear understanding of the individual's experiences. The style of my interviews was open and flexible and any variability in responses was noted and often used to probe interviewees further. As recommended by Patton (2002) each interview began with the positioning of the interviewer within the study as a researcher and a lecturer in education. This clarified the motives and reasons for conducting the research from the outset. Merriam (1998) suggests that the interviewer emphasises that the interviewees have been chosen because they have something important to contribute to the study. This was communicated to the participants both overtly by referring to their experience and knowledge in the learning support field and more discretely through friendly conversation, affirmative facial expressions and positive body language. To ensure that the interviewees were put at ease, the simple, straightforward, non-controversial questions were asked first with more difficult questions posed later in the interview (Patton 2002). Each interview began with the interviewees being asked if they had any comments on their experience on completing the questionnaire. This was followed by general questions to establish background information.

While the categories and questions were prepared in advance, the sequence varied from interview to interview as the order of the questions depended on the responses given by the participants. Maykut and Morehouse (1994) remind us that



the ‘qualitative posture is one of flexibility and responsiveness to the unexpected emergence of unanticipated twists and turns in the content of the interview’. To this end flexibility to deviate from the precise questions was afforded to interviewees. In one instance this proved particularly relevant when an interviewee related how she had successfully used cartoons as a genre for motivating children to read. This anecdote later influenced the use of cartoons in redesigning the questionnaire for assessing children’s motivation for reading in Phase Two of the study.

Throughout the interviews a number of probes were used to delve deeper into a participant’s response when necessary. According to Patton (2015, p. 466), ‘probing is a skill that comes from knowing what to look for in the interview, listening carefully to what is said and what is not said and being sensitive to the feedback needs of the person being interviewed’. He identifies three types of probes: detail oriented probes, elaboration probes, and clarification probes. All three of these were employed in the course of the interviews. Detail oriented probes were used when more information was needed on a topic, elaboration probes were used to encourage the interviewee to continue speaking on a given topic, and clarification probes were used in situations when the interviewer was unsure of what the interviewee was talking about.

Mindful that the characteristics and background of both the researcher and the interviewee can affect the interaction in an interview (Hitchcock & Hughes, 1993), I found that the use of quotations derived from the questionnaire responses helped to distance myself from the question. This was particularly effective in instances when respondents were provided with negative comments, such as *‘we can hardly expect the children to read when their parents have difficulty in reading’*. Interviewees responded readily to this type of probe throughout the process.

#### **4.4.9 Data Analysis**

The data for analysis at this stage consisted of transcriptions of each interview and the field notes taken during the interviews. Each transcript was coded in order to identify the source of the data and to ensure quotes could be traced back to original transcripts. According to Maykut and Morehouse (1994), qualitative data is analysed using a continuous, cyclical process involving data reduction, data organisation and interpretation. They propose a discovery or inductive approach in early data analysis

to discover ‘a large array of potentially important experiences, concepts, ideas, themes ... a beginning search for the important meanings in what people have said to you, in what you have observed’ (p.132). Using a constant comparative method (Glaser & Strauss, 1967), the data was searched for emerging patterns. During this process the data was ‘unitised’ (Lincoln & Guba, 1985) facilitating the construction of what Maykut and Morehouse (1994) refer to as the *audit trail*, which in turn contributes to the trustworthiness of the data. In this initial analysis of the data, I sought to minimise the effect of personal experiences and prior beliefs around current practice and made a conscious effort instead to ‘stand back and question them to see if they are blinkering the researcher’s vision of what is happening’ (Denscombe, 2003, p.102). There were two focus group interviews conducted in this phase of the study. Each was assigned an individual code as follows: FG1 and FG2. Five discrete themes emerged from the analysis of the data collected in these interviews and individual responses that warranted inclusion were numbered accordingly. The following example demonstrates the coding in action: FG2:3, r17: Focus Group Interview # 2; theme # 3; response # 17.

For each interview an interview summary sheet was drawn up and returned to the interviewees with a copy of the interview transcript with a view that respondents would read both the summary and the transcripts and suggest any amendments or clarifications they felt were necessary. Lincoln and Guba (1985) suggest that conducting these ‘member checks’ serves to heighten the trustworthy nature of the data and is a crucial technique for establishing credibility. This is corroborated by Maykut and Morehouse (1994), who postulate that member checks can help a researcher know if he or she has produced a recognisable reality for the participants. Member checks also serve to ‘validate the findings thus far’ (Denscombe, 1998, p.212) and facilitate the process of ‘in-dwelling’ as the perspective of each interviewee can be understood on the basis of multiple interactions (Maykut and Morehouse, 1994, p.26). In this instance five of the seven member checks were returned with minor additions. It was helpful that at least two of the interviewees from each focus group returned the member checks. In each case these checks offered further clarification rather than contradicting the information supplied.

Using several copies of each updated transcript I used a visual wallpaper approach (Maykut and Morehouse, 1994) involving ongoing analytic coding to reveal a set of propositions that could be validated, amended or deleted as the

analysis process continued. Guided by research questions 1, 4 and 5 as outlined in section 4.1 of this chapter, other analytic methods such as matrices and flowcharts were used to verify the proposition that learning support teachers did not typically employ oral reading fluency strategies in their programmes of literacy instruction. The proposition that learning support teachers considered motivation for reading a vital factor in teaching struggling readers was also verified in this manner.

#### **4.4.10 Ethical Issues**

The ethical issues in relation to Phase One of the study were concerned with learning support teachers participating in a survey based on their own current practice. McNamara (1994) identifies five ethical concerns to be considered when conducting survey research. These guidelines deal with voluntary participation, no harm to respondents, anonymity and confidentiality, identifying purpose, and analysis and reporting. Each guideline is addressed here individually with explanations to help eliminate or control any ethical concerns.

First, researchers need to make sure that participation is completely voluntary. The consent letter issued to invite teachers to participate in the study explicitly stated that they were under no obligation to complete the questionnaire or to answer all questions (see Appendix 1). McNamara's (1994) second ethical guideline is to avoid possible harm to respondents. This could include embarrassment or a feeling of discomfort about questions. As this study focused on professional practice and opinion, it did not include sensitive questions that could cause embarrassment or uncomfortable feelings. A third ethical guideline is to protect a respondent's identity. This can be accomplished by exercising anonymity and confidentiality. A survey is anonymous when a respondent cannot be identified on the basis of a response. A survey is confidential when a response can be identified with a subject, but the researcher promises not to disclose the individual's identity (McNamara, 1994). To avoid confusion, the cover letter clearly identified the survey as being confidential with regard to responses and the reporting of results (see Appendix 1). Participant identification was kept confidential and was only used in determining who had not responded for follow-up purposes. McNamara's (1994) fourth ethical guideline is to let all prospective respondents know the purpose of the survey. The purpose of the study was provided in the consent letter, indicating that

despite the focus on reading attainment in Ireland over recent years, the performance of those children in receipt of learning support had largely been understudied. The consent letter further explained that the study would examine contributing factors for those children in First Class who struggle to master the reading process and look at the practice and beliefs of the learning support teachers who teach them (see Appendix 1). At the initial meeting when questionnaires were delivered, I also explained that the results of the study would be used in a dissertation for a PhD degree. The fifth ethical guideline, as described by McNamara (1994) is to accurately report both the methods and the results of the surveys to professional colleagues in the educational community. Following the completion and analysis of the survey, an invitation was extended to the principals and learning support teachers of all participating schools to attend a presentation of preliminary findings of the initial phase of the study.

In relation to the interviews conducted in the initial phase of the study, assurances of confidentiality were given from the outset and I ensured that all interviewees understood the purpose of the interview and the aims of the overall study. As all interviewees had already completed the initial survey and had met with me when I delivered the questionnaire, they were all familiar with the main aspects of the study. Prior to the commencement of the interview they were asked to sign a consent form giving their written permission to record and use the transcripts generated during the interviews. Finally, ethical approval was sought from the Marino Institute of Education Ethical Research Committee and from UCC for this initial phase of the study and was granted (see Appendix 10). This process included completing an ethics form and providing examples of the data collection instruments and the processes involved in seeking and receiving informed consent by the participants.

The results of the quantitative and qualitative research in Phase One of the study informed the design and development of an on-site reading intervention based on Fluency Oriented Reading Instruction (FORI). The chapter will now focus on the research methodology of Phase Two of the research, which examined the effects of FORI on the oral reading fluency of struggling readers and on their motivation for reading.

#### **4.5 Phase Two: On-Site Reading Intervention**

The results of the first phase of the study indicated that the participating learning support teachers felt that poor motivation for reading, lack of fluency in reading, and difficulties associated with home background were significant factors in the reading achievement of children from First Class in their programmes (see Appendix 4). Further probing during subsequent interviews with a selection of these teachers revealed that (a) fluency oriented reading practices were not typically used in their instructional programmes with these children, and (b) they felt that motivation for reading was a crucial factor in children learning to read at this stage of their schooling. This information provided the impetus for the second stage of the study.

In this second phase the effect of an on-site fluency oriented reading intervention on the motivation for reading of struggling readers was explored. The target group for the study were children in First Class who were receiving learning support for reading (Grade selection was based on Stahl and Heubach, 2005).

##### **4.5.1 General Research Design (Phase Two)**

A mixed methods concurrent triangulation strategy was adopted for the second phase of this study to gather data from the teachers (both class teachers and learning support teachers), the children and their parents. In this triangulation approach both quantitative and qualitative data were collected concurrently providing cross-validation and an opportunity to determine if there was convergence, differences or a combination of both in the data (Creswell, 2009). While the data was collected concurrently and equal weight was afforded to each method, they will be described separately in the following sections. The mixing of methods will be addressed more closely in the interpretation and discussion in subsequent chapters.

Quantitative measures were employed in this phase to assess children's reading ability. This involved using standardised and criterion referenced tests to individually assess children's oral reading fluency levels before and after the intervention. Pre-testing of children was carried out one week before the intervention commenced and post-testing took place one week after the conclusion of the eight week programme. These tests were administered to determine children's reading accuracy, reading rate, reading fluency, and word reading efficiency levels.

Children’s motivation for reading was also assessed before and after the intervention using quantitative measures. Questionnaires were used with teachers and participating children to assess children’s motivation for reading before and after the intervention. Qualitative measures were used to triangulate the evidence from these survey instruments by conducting semi-structured interviews with the teachers and conversational interviews with the children at the same time. These conversational interviews were also conducted with the children six months after the intervention to explore enduring effects of the intervention.

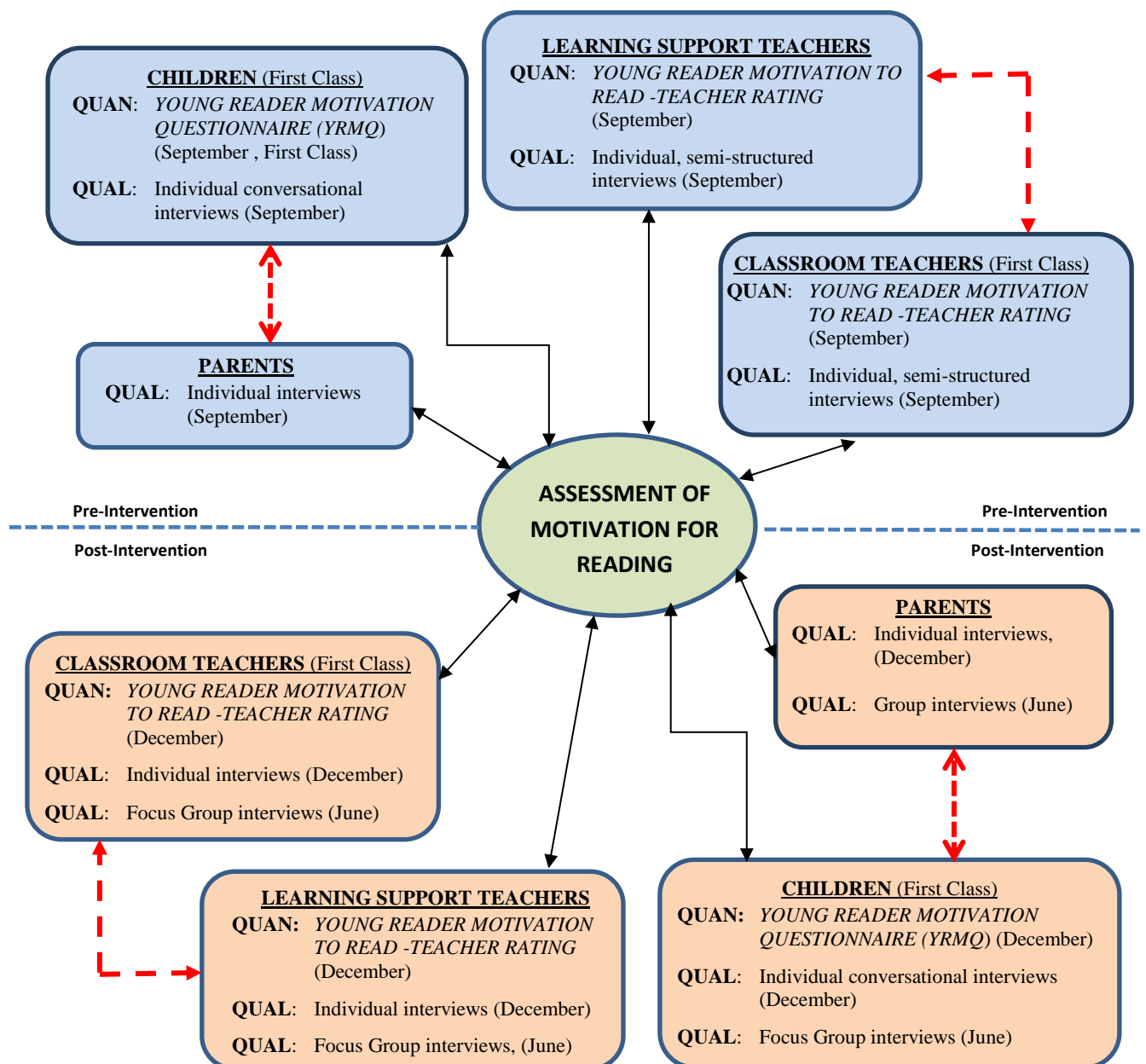


Figure 4.7 Assessment of Motivation for Reading (Concurrent Triangulation Design)

Individual semi-structured interviews and focus group interviews were also held with parents to triangulate data on children's motivation for reading. These interviews took place before and after the intervention and again six months later. The concurrent gathering of information throughout this phase provided cross-validation and multiple opportunities to determine if there was convergence in the data. An elucidation of the triangulation of data to ascertain motivation for reading in Phase Two is presented in Figure 4.7 where details of the research carried out is illustrated. Bi-directional arrows depicted in red indicate where comparison of data was used between children and parents and between classroom teachers and learning support teachers to triangulate assessment of children's motivation for reading both pre and post intervention. A summary of the research schedule for Phase Two of the study is included in Appendix 9.

#### **4.5.2 The Research Context**

This research study took place in the learning support classrooms of three primary schools in designated areas of disadvantage. For purposes of confidentiality, I have referred to the schools by the following fictitious names: Belle School, Ben School, and Bon School. All three schools are well established in their respective communities.

The Belle School is located in a newly developed area and is a vertical co-ed school (Junior Infants to Sixth Class). The school has two First Classes and children from both these classes who were identified as struggling readers were participants in this research study. This school is designated as DEIS Band 2 status and draws its students from a geographical area adjacent to the school.

The Ben School is located in an established urban community with most children coming from the immediate surrounding area. The school is also a vertical co-ed school and is designated as DEIS Band 1 status. The school has one First Class and one split Senior Infant and First Class and participants in the study were selected from both these classes.

The Bon school also enjoys designated DEIS Band 1 status and is located close to the other two schools. It is a vertical co-ed school with a single First Class. Six children who were identified as struggling readers in this class were nominated to participate in the study.

### **4.5.3 Selection Process of Schools**

In the school selection process, all of the disadvantaged schools in the catchment area who participated in the first phase of the study were considered as eligible for inclusion in the intervention. Principals and learning support teachers from all these schools attended a feedback information seminar from the initial survey which outlined the key findings from Phase One of the study. At this seminar an expression of interest in participating in the proposed reading intervention was sought (see Appendix 6). Ten of the fourteen schools expressed interest in being included in the second phase of the study. A decision was made at this stage to carry out the intervention in three different sites in an effort to minimise bias and/or the potential influence of one individual learning support teacher on the results.

Three schools were identified as potential sites for the intervention on the basis of their close geographical proximity to each other. The experience and qualifications of the learning support teachers in these schools was also a significant factor in their selection. Each teacher had significant experience in learning support teaching although it was evident from preliminary discussions that there was no standard or common approach for using reading instruction strategies in their classes. In recognition of their commitment to the initial stage of the investigation, the other participating schools were guaranteed that findings from the proposed intervention would be shared with them in due course. A confirmation letter was sent to the three selected schools (see Appendix 7) and the principals and the learning support teachers were invited to a further information seminar to outline the scope and details of the proposed intervention. Following consultation with the staff and principals at their respective schools, the learning support teachers in each of the three schools agreed to participate in the study (see Appendix 8).

### **4.5.4 The Research Subjects and Participants**

The research subjects for the intervention were children in First Class who were struggling readers and were identified as being poorly motivated for reading. Eighteen children (six from each participating school) drawn from five different classes in the three schools were initially proposed as subjects for the study. However, two of these children were excluded following the initial assessment as they presented as being highly motivated for reading despite their documented



reading difficulties. This positive assessment of their motivation for reading was confirmed in interviews with their parents prior to the intervention. One other child was excluded on health grounds at the request of his parents. Consent was granted for the remaining fifteen children (see Appendix 8) who were deemed suitable subjects for the intervention.

All of the children (eight boys and seven girls) were between the ages of six years one month and seven years two months at the beginning of the study with a mean age of six years, ten months. There were seven different nationalities represented in the cohort along with one child from the travelling community. All children were reading below grade level at the beginning of the study as evidenced by independent reading assessments of word reading efficiency and oral reading fluency. The other research participants for the intervention were three learning support teachers, five grade teachers (First Class) and the parents of the participating children.

#### **4.5.5 Teacher Professional Development.**

Prior to the intervention, the learning support teachers in this study participated in approximately fifteen hours professional development on fluency oriented reading instruction and aspects of reading intervention design (see Appendix 35). During the seminars, teachers were familiarised with the instructional models to be employed and were given sample lesson plans for the implementation of the proposed intervention. Seminars included videotapes that introduced oral reading fluency instructional strategies and that modelled the proper execution of fluency-oriented instruction. Discussions were facilitated with the teachers regarding the integration of the proposed instructional approach into their own individual learning support programmes. During these seminars the teachers were encouraged to talk about what was going on in their respective classrooms and to work through any concerns and questions they had with implementing the proposed fluency oriented reading instruction.

Materials for this instruction were identified (and in some cases designed) as part of the professional preparation for the intervention (see Appendix 11). In the course of these seminars four levelled reading texts were identified and chosen as the focus for the intervention (see Appendix 12). These texts which were sourced on the

Reading A-Z website ([www.readinga-z.com](http://www.readinga-z.com)) and had reading levels that correlated closely to other books already in use in the three schools (see Appendix 19 for correlation comparisons). The texts, though short, were interesting enough to warrant discussion and vocabulary instruction on individual words and were selected based on their suitability for the type of reading instruction planned. They had carefully controlled language, repetitive patterns and repeated vocabulary and were suitable for fluency oriented reading instruction and for repeated reading in particular. One significant advantage in using the Reading A-Z website was that multiple copies of the texts could be printed, offering the opportunity to supply the texts to parents, class teachers and children. A license for each participating school was obtained and texts were selected for use over the course of the intervention. There was also a facility to generate word-free copies of the books to facilitate retelling and vocabulary instruction. Learning support teachers were supplied with multiple copies of the core text books to be used in the intervention. The contact between myself and the teachers during the professional development for the intervention was both informal (e.g. stopping by the schools to bring materials) and formal (scheduling set times for professional development seminars).

#### **4.5.6 The Intervention**

The intervention, based on Fluency Oriented Reading Instruction (FORI), took place over an eight week period in the three selected schools. Each day, learning support teachers in these schools instructed struggling readers who were withdrawn from their base class and were taught in groups of five in a learning support room. The fluency oriented reading instruction used in the study was an adaptation of an approach to reading instruction developed by Stahl and Huebich (2005). It was designed to increase the oral reading fluency of the children over the course of the intervention with the hypothesis that this type of instruction would also have a positive influence on their motivation for reading. The intervention featured the gradual release of support from a more knowledgeable reader (in this case the learning support teacher) towards independent reading by the children over the course of a unit of instruction (see Figure 4.8).

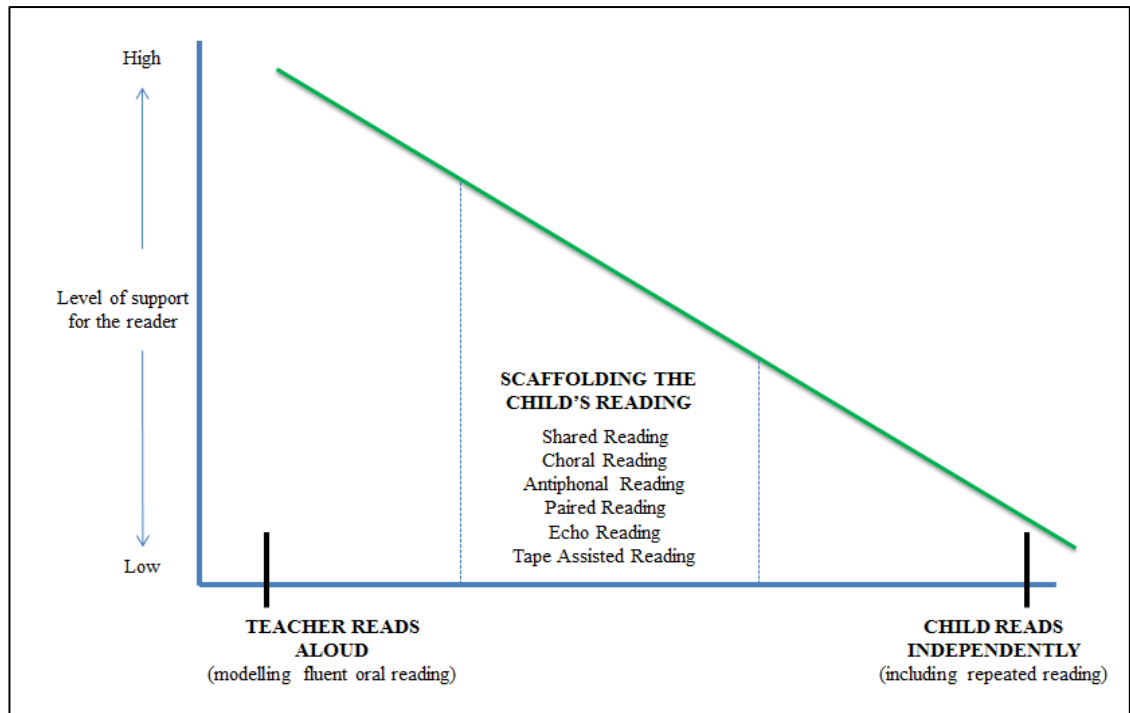


Figure 4.8 Gradual Release of Responsibility: From Modelling To Independent Reading

At the beginning of each unit the learning support teacher carried out full responsibility for modelling a fluent rendering of the text, with a view that the children would be able to read the same text independently by the end of the unit. The programme was agreed by the participating teachers and featured consistent elements such as modelling fluent reading, assisted guided oral reading instruction (e.g. echo reading, choral reading, antiphonal reading, and paired reading), partner reading and home reading. Word study and syntax activities were also integral elements of the intervention to ensure children had opportunities to build up their sight word knowledge in order to recognise words quickly.

Research on reading instruction indicates that children need plenty of opportunities to read significant amounts of connected text to learn to read fluently (Stahl and Huebach, 2005; Schwanenflugel *et al.*, 2009). Hence, a feature of the intervention was the repeated reading and timed repeated reading of the same text to improve the childrens' automatic word recognition along with their use of appropriate expression. To ensure that children were not bored or fatigued by using the same text, a wide variety of fluency related activities were designed based on all texts. At the beginning of each unit the learning support teachers were furnished with

multiple copies of the selected core text and a set of resources for each planned activity in the unit (see Appendix 13).

Creating and disseminating these materials ensured that there was a consistency of approach across all intervention sites. It also gave me an opportunity to reaffirm the work of the teachers during the intervention and to gain valuable feedback throughout the study. Given the focus of inquiry on motivation for reading in the study, a fundamental principle underpinning the approach in this intervention was that children be afforded the opportunity to practice and perform. Each Friday over the course of the intervention I visited each school to attend a performance by the children featuring elements of the programme. This had a motivating influence on the children's participation and allowed me to stay close to the research and to observe the consistency in the approach across schools.

The intervention was divided into four units of instruction with each one focused on fluency-related activities built around a single text. Each unit was taught over two consecutive weeks using a pre-determined Fluency Oriented Reading Instruction programme for each week (see Table 4.3 for a sample weekly plan). The first lesson of each unit commenced with the teachers presenting the text with a variety of pre-reading activities that introduced the characters and the seminal vocabulary of the narrative. The teachers read aloud from the appropriate text while the students followed along using their text. During this highly supportive activity, the children were given the chance to observe the text as it is enunciated without having to decode the words for themselves. They were afforded the opportunity to listen to the fluent reading of the passage and be exposed to prosodic modelling of the text. After the teachers read the text to their students, a discussion ensued about the text that was read.

On the second day of the unit of instruction, the teachers asked the children to echo read the text. Children were instructed in the use of toobaloos (see Appendix 17) during this activity, which ensured immediate reinforcement by hearing their own voice amplified. This proved to be a highly motivating activity for the children and allowed the teachers to use increasingly longer sections of text during the intervention. The children eventually were echo reading entire paragraphs, which kept the children's focus on word identification and avoided having them repeating the text from aural memory.

Table 4.3: Example of Weekly Plan for Fluency Oriented Reading Instruction (Week One of a Unit)

	Monday	Tuesday	Wednesday	Thursday	Friday
<b>SCHOOL ACTIVITY</b> [based on selected text]	<p><b>Before Reading</b> Teacher introduces the text (background knowledge, vocabulary, title, pictures, characters, plot)</p> <p><b>Modelled Reading</b> Teacher reads text or selection of text aloud; students listen Teacher repeats reading of text and students follow along with their own copy</p> <p><b>Responding to Text</b> Discussion takes place as selection is read to develop text comprehension. Use of graphic organizers (e.g. diagrammatic innovation, story map) Matching Activity: Characters to names e.g. memory game</p>	<p><b>Before Reading</b> Retelling the story (<i>wordless books</i> to be used here as visual cue to retelling); recall of key characters and names; character map (diagram)</p> <p><b>Audio assisted reading</b> Children read along with an audio version of the text. Children practice until they can read the story <i>fluently</i> and accurately.</p> <p><b>Echo Reading</b> Teacher reads one or two sentences... up to a paragraph, and students echo that reading</p> <p><b>Responding to Text</b> Comprehension developed through various strategies such as student questioning, visualisation etc.</p>	<p><b>Before Reading</b> Phrasing: Slide and Glide (Teacher reads text stopping and allowing students to complete phrase)</p> <p><b>Choral Reading</b> (a) Students choral read same text selection (b) Cumulative choral reading</p> <p><b>Repeated Choral Reading</b> Children are introduced to the concept of reading for the duration of the one minute timer while choral reading</p> <p><b>Responding to Text</b> Sentence Reconfiguration</p> <p><b>Phrasing:</b> Matching phrases (sentence completion); using phrase strips</p>	<p><b>Before Reading</b> Phrase grid activity. Dice game where children finish phrase based on the text corresponding to the number they throw</p> <p><b>Partner reading</b> Paired Repeated Reading Same text (partners selected by teacher to ensure mixed ability) Whisperphones used to facilitate multiple synchronous paired reading</p> <p><b>Individual Whisper Reading</b> Toobaloo used here to facilitate immediate feedback to children as they hear themselves read through the device</p> <p><b>Responding to Text</b> Write and draw activity based on individual words identified by teacher</p>	<p><b>Timed Repeated Reading</b> Children are introduced to the concept of reading for the duration of the one minute timer and recording the WCPM on their graphs. Words provided (and noted) to child after 3 secs if unknown. NOTE: Individual sight word lists can be introduced as a Timed Reading Activity in week 2</p> <p><b>Word study</b> on 'tricky' words Children complete activities in individual scrap books e.g. story map, sentence reconfiguration, phrase completion</p> <p><b>Performance Element</b> Performance of text and of selected FORI activities e.g. cumulative choral reading,</p>
<b>MOTIVATIONAL ASPECT</b>	Introduction to timed reading (character card sheets used for timed reading e.g. how many characters can you read in a minute)	Sight Word Activity: sight word hunt using wooden templates. Children record the sentence/phrase on their wipe boards.	Super Stamps introduced for completion of activities. Stamps recorded in bar graph configuration to depict progress	Motivational resources to be used at teacher's discretion to encourage performance.	Record progress in Timed Repeated Reading on graph  STAR recording template Scooby Doo Reading Medals
<b>RESOURCES</b>	Texts One minute timer	Texts Wordless books Wipe boards Home reading log	One minute timer; Super Stamps Slide and Glide sheets Wipe off phrase strips Home reading log	Whisperphones; Toobaloo Phrase Grids Stickers, stars, cards, smiley erasers; Home reading log	FORI Scrap Books Timed Repeated Reading Graph Home reading log
<b>HOME ACTIVITY</b>		Children take book home and read it to parent/guardian. Home reading log is signed and number of pages recorded	Children take book home and read it to parent/guardian. Home reading log is signed and number of pages recorded	Children take book home and read it to parent/guardian. Home reading log is signed and number of pages recorded	Children take book home and read it to parent/guardian. Home reading log is signed and number of pages recorded

On the third day of the unit, teachers asked their children to perform a choral reading of the passage. This choral reading allowed all children in the group to read the text at the same time as the teacher, which gave them a chance to read the text in a situation where scaffolding occurred. The children were engaged in partner reading of the text on day four of the unit. In order to motivate this reading in pairs, children were allowed to use whisperphones (see Appendix 17) to read to each other. This consisted of two children, each of whom had a whisperphone and a connecting tube, being paired to read one-half of the selected text. The typical format was that one child read a page, while the other followed along. The roles were then reversed.

The fifth day of instruction each week involved performance related activities designed to motivate pupils to continue to participate in the intervention and to engage children in activities such as timed repeated reading and cumulative choral reading.

A constant feature of the intervention was the requirement that children read passages from the core text at home each day and have a parent or guardian sign a home reading log (see Appendix 15). This was an important element of the intervention as it ensured that parents were kept informed of progress and remained involved in the process. In the second week of the instructional unit the emphasis was on increasing children's motivation to read by engaging in a variety of reading activities that encouraged the children to read with increased decoding speed and accuracy. Teachers recorded the use of these core fluency oriented activities (e.g. word dash, timed repeated reading, phrase reading) in an instructional log (see Appendix 14). The motivational aspect of the intervention was increased by the children recording their progress in these reading activities over the week in their FORI scrap books (see Appendix 16).

The prosodic element of fluent reading was also addressed in the second week of each unit when children were introduced to play scripts incorporating vocabulary from the core narratives (see Appendix 17). Children re-read these scripts in order to prepare for a Readers Theatre performance on the final day of each unit. This strategy, which combined reading practice and performing, enhanced children's reading skills and confidence by having them practice reading with a purpose.

#### **4.5.6.1 Intervention Fidelity**

Learning support teachers were trained in all of the FORI lessons before administering them. Additionally, all lessons were written out as scripts to help ensure the planned lessons were adhered to and that there was uniformity of instruction across teachers and groups. To determine the fidelity of the lessons, a minimum of three instructional sessions were observed each week. For each lesson, teachers were expected to include a minimum of two of the core FORI activities as outlined in Appendix 14. Similarly, for the sessions involving a performance lesson, the teachers were to afford each child the opportunity to perform independently on a previously rehearsed fluency oriented task.

Finally, children were inevitably absent for an occasional instructional day due to illness, for example, or their class being involved in another activity. When children missed a lesson, catch-up sessions were held to instruct them on the content of the lesson, either in a group or individually. Across all sites and over the period of the intervention, a total of four children required such catch-up sessions. Thus, all children received instruction on all FORI lessons.

### **4.6 Quantitative Data Collection in Phase Two**

Quantitative measures in the form of standardised reading assessment instruments to assess reading ability and questionnaires to assess motivation for reading were employed in this phase of the study before and after the intervention.

#### **4.6.1 Assessment of Reading Ability**

Reading researchers have endorsed both oral reading fluency tests and the reading of isolated word lists as effective, appropriate, and reliable ways to assess reading expertise, especially that of primary age students (Fuch *et al.*, 2001; Wiederholt & Bryant, 2001; Torgesen, Wagner & Rashotte, 1999). Two standardised testing instruments and two criterion-referenced tests were used to establish the reading ability of the children participating in this study. In an effort to avoid tester bias, an independent research assistant was engaged to individually test all children involved in the study for oral reading fluency and word reading efficiency. Children were assessed individually and with parental permission (see Appendix 8) by the same research assistant outside of their classrooms but in their own school building.

The Test of Word Reading Efficiency - 2nd Edition (TOWRE- 2) was used to assess isolated word and non-word reading fluency skills and the Gray Oral Reading Test – 5<sup>th</sup> Edition (GORT-5) was chosen to assess reading fluency of connected text with comprehension. Both test instruments, the GORT-5 and the TOWRE-2, were used to individually pre-test and post-test each child. They were pre-tested using Form A of each reading assessment and post-tested using Form B. The purpose for each test, their reliability, and their validity are summarised in the following paragraphs.

Widely used in research as a quick and reliable assessment of word-level reading skills, the TOWRE-2 test is employed in identifying children in early primary school who will require intensive or explicit instruction in word reading skills. The purpose of the test is to measure an individual's ability to pronounce printed words accurately and fluently (Torgesen, Wagner & Rashotte, 1999). It is an individually administered five-minute test and is composed of two subtests: the Sight Word Efficiency (SWE) subtest, and the Phonetic Decoding Efficiency (PDE) subtest. There are two forms of each test: Form A and Form B. The SWE test measures how many real printed words (n=108) are accurately pronounced in forty-five seconds. This assessment consists of four columns of words arranged in increasing order of difficulty. Each child is asked to read as many words as possible during the forty-five-second time period. The number of words correctly read is used to establish the raw score. The TOWRE Sight Word Efficiency subtest (Form A) has high reliability (0.90 to 0.97, Torgesen Wagner, & Rashotte, 1999). The standard scores, which are age-adjusted, were based on the norms listed in the manual and were used to analyse the data. The PDE subtest measures the number of pronounceable printed non-words (n=66) accurately sounded out in 45 seconds (Tindal, 2004). The TOWRE produces five scores for comparison: a raw score, age and grade equivalency scores, percentile ranks, and scaled scores for each of the two subtests and a total test score (Total Word Reading Efficiency Index). The TOWRE's high reliability and validity provided an accurate indication of sight word reading growth and phonetic decoding growth for each participant in the study.

The second standardised test used in the study (GORT-5) is an individual assessment that takes between fifteen and forty-five minutes to administer (Wiederholt & Bryant, 2001). The GORT-5 yields five types of normative scores: grade and age equivalents, percentile ranks, scaled scores, and the Oral Reading



Index (ORI). The scores provide helpful information for identifying students who are significantly behind their peers in oral reading ability. The score also help in selecting intervention strategies, evaluating student progress, and documenting student results to share with families (Wiederholt & Bryant, 2012). Overall, the GORT-5 provides an efficient and objective measure of growth in oral reading, assists in the diagnosis of oral reading difficulties, and is a highly reliable and valid assessment instrument for measuring oral reading fluency (Crumpton, 2003). The test was particularly useful in the context of this study as it produces four scores to determine of oral reading fluency: oral reading rate, oral reading accuracy, oral reading fluency, and reading comprehension. The test consists of sixteen developmentally sequenced reading passages that begin at a very simple reading level and progress to a very difficult reading level. The research assistant timed each student's reading of each passage to determine a reading rate, marked deviations from print to determine an accuracy rate, and asked five comprehension questions for each story to determine a comprehension score. The combined reading rate score and accuracy rate score formed a reading fluency score. Each of these four measures are converted to age and grade equivalency scores, standard scores, and percentile ranks (Wiederholt & Bryant, 2001).

The third reading assessment used in the study was selected from *Reading A-Z*, a subscription-based website that offers differentiated reading resources and fluency assessment tools. This site uses objective (quantitative) and subjective (qualitative) leveling criteria to measure text complexity (for comparisons to other text levelling systems see Appendix 19). The Fluency Timed Reading Passage selected from this site offers a criterion-referenced one-minute timed assessment of oral reading fluency. For the purpose of this study, an age appropriate passage (Level F) with a total word count of eighty-six words was selected (see Appendix 28). To assess their oral reading fluency rate and accuracy, students were required to read for one minute from this previously unseen, levelled passage to measure the number and accuracy of words read. The fluency score is derived by subtracting any words read incorrectly, skipped or requiring assistance (provided after 3 to 5 seconds hesitation to maintain momentum). The total is referred to as words read correctly per minute (WCPM).

The fourth assessment instrument used in the study to assess oral reading fluency was the National Assessment of Educational Progress's (NAEP) Oral

Reading Fluency Scale (see Appendix 29). This scale provides a rubric for assessing prosodic elements of reading fluency such as the pitch, stress, and duration with which children read text. The scale provides descriptors of prosodic reading from a rating of 1 to 4 (Levels 1 and 2 = *nonfluent*; Levels 3 and 4 = *fluent*). Level 4 indicates meaningful phrasing, expression, and appropriate interpretation of author's syntax. In contrast, Level 1 indicates word-by-word reading and inappropriate interpretation of syntax.

In order to assess their expressive ability, children read from connected familiar texts and were assigned a reading fluency level according to their performance as evaluated on the NAEP Oral Reading Fluency Scale. The student's classroom teacher provided the text in each case to ensure that the child was familiar with the vocabulary and was being assessed for expressive reading rather than word reading efficiency or comprehension.

#### **4.6.2 Assessment of Motivation for Reading**

##### ***4.6.2.1 Children's Self-Reported Motivation Assessment***

The motivation for reading of struggling readers was assessed before and after the reading intervention using the Young Reader Motivation Questionnaire – Student Form (S – YRMQ). The items on this questionnaire were derived from two standard questionnaires - the *Young Reader Motivation Questionnaire* (Coddington & Guthrie, 2009) and the *Me and My Reading Survey* (Mazzoni, Gambrell, & Korkeamaki, 1999) - and were adapted to the aims of the study.

The items were in the form of questions e.g., *Are you good at remembering words?* instead of the more typical declarative format e.g., *I am good at remembering words*. This wording was chosen based on research that has revealed that declarative items orally administered to younger students can be confusing (Chapman & Tunmer, 1995). This survey was chosen over more commonly used instruments such as Wigfield, Guthrie, and McGough's (1996) Motivation for Reading Questionnaire because it was designed to be used with younger children. The motivational constructs of self-efficacy, perceived reading difficulty, and reading orientation were theoretically derived from previous work on efficacy and task-orientation and were examined using both self-report measures (Chapman & Tunmer, 1995, 2003) and teacher ratings (Lepola, Salonen, & Vauras, 2000).

The S – YRMQ was composed of three subscales to represent the three motivational constructs to be assessed: Efficacy for Reading, Reading Orientation, and Perceptions of Reading Difficulty (see Appendix 21). The Efficacy for Reading subscale of the S – YRMQ included six items e.g., *Do you think you read well?* and *Are you good at remembering words you have seen before?* The Reading Orientation subscale of the S – YRMQ included ten items e.g., *Is it fun for you when you read books?* and *Do you like to read during your free time or do something else?* while the Perceptions of Difficulty subscale of the S – YRMQ included six items (e.g., *Are the books you read in class too hard?* and *Do you need to get some extra help in reading?*) The S – YRMQ was administered to each child individually at the beginning of the intervention and again eight weeks later, at the completion of their series of lessons.

#### **4.6.2.2 Teacher Ratings of Students' Motivation to Read.**

Children's reading motivation was also assessed using the teacher form of the Young Reader Motivation to Read–Teacher Rating (T-YRMR). This ratings form was designed to parallel the student form with questions worded to reflect teachers' perceptions of their students' motivation for reading. Class teachers and learning support teachers completed this questionnaire (see Appendix 20). The items for the scale used were selected from an existing instrument, *The Teacher Questionnaire on Student Motivation to Read* (3rd Edition) by Sweet, Guthrie, and Ng (1998). As this previously published scale was designed to assess teachers' perceptions of motivated readers, many of the items are based on observable behaviours that are theoretically indicative of motivated readers. Questions were thus worded to reflect the teachers' perceptions of their students' motivations for reading. The T-YRMR contained 20 items, all worded in declarative format e.g., *This student thinks he/she is good at remembering words.*

A complete list of all items in the T-YRMR can be found in Appendix 20. Teachers responded to each item on a 4-point scale (1 = *No, Never*; 2 = *No, Not Usually*; 3 = *Yes, Sometimes*; 4 = *Yes, Always*). The T-YRMQ is composed of three subscales: Perceptions of Student Self-Efficacy for Reading (5 items), Perceptions of Student Reading Orientation (9 items), and Perceptions of Student Difficulty in Reading (6 items). Teachers were told that reading self-efficacy was defined as students' "beliefs regarding ability and proficiency in reading tasks" (Chapman &

Tunmer, 1995). The Reading Self-Efficacy subscale of the T-YRMR included five items e.g., *This student thinks that he/she can work out sounds in words*, and *This student thinks he/she can read well*. Student reading orientation was defined for the teachers as “concentration on task, verbal behaviour indicating task involvement, and willingness to think and experiment in play and problem-solving situations” ((Lepola, Salonen, & Vauras, 2000, p. 158). The Perceptions of Student Reading Orientation subscale included nine items e.g., *This student likes to play word games in class* and *This student thinks it is fun to read books*. Student difficulty was defined for the teachers as the belief that “reading activities are hard or problematic” for this child (Chapman & Tunmer, 1995, p. 154). The Perception of Student Difficulty in Reading subscale of the T-YRMR included six items e.g., *This student finds reading to the class hard* and *This student needs extra help in reading*. Two additional Likert-style questions were included in the questionnaire to gauge teachers’ overall view of each child’s achievement level in reading for their age and their overall level of motivation for reading.

#### **4.6.3 Measures for Administering Student Questionnaire**

Since these children were not able to read the questionnaire themselves, conditions were kept constant, and the questions and responses were read to the child as the child followed along. The piloting of this questionnaire with children of a similar age and reading ability had revealed some issues that needed to be addressed. These children had some difficulty understanding the relatively abstract phrases such as “no never”, “sometimes” and “yes always”. Test items to correspond with these responses were included as practice items in the revised questionnaire e.g. *Do you eat grass for breakfast* and *do you wear a tracksuit to school*. Children were allowed to indicate their answer by pointing to a physical representation of the response (see Appendix 23). There were also some difficulties with terms such as *disappointed* and *embarrassed* so emoticons were introduced to facilitate responses (Appendix 23).

Perhaps the most significant outcome of the pilot process, however, was the discovery that children at this age displayed a tendency to supply a response to the teacher that was likely to find favour. To address this and to introduce a third dimension to the process the questionnaire was rewritten using cartoon characters (see Appendix 22). The children were very familiar with and had a fondness for the

chosen character, Scooby Doo. A further pilot with a small number of children confirmed that this approach worked a treat with the children disregarding the researcher and conversing openly and honestly with the cartoon character. The revised questionnaire now had two representations.

The questionnaire was administered orally to students by the same researcher. Children were told that the questionnaire had to do with their interest and enjoyment in reading and that their answers would help people to better understand what children in First Class think about reading. Both teacher and child had a copy of the questionnaire and after hearing a question, the child chose their response by verbally answering to the cartoon character or pointing to one of the physical representations.

In answering the questions the children were given a funnel to process multiple choices offered. For instance for the first question “*Can you work out really hard words by yourself when you read?*” the child was given time to think about the question and was prompted to choose either, “Yes” or “No.” If the child responded “Yes” then the researcher further prompted the child by asking, “Can you work out hard words by yourself *sometimes* or *always*?” If the child responded “No”, then the researcher further prompted the child by asking, “Can you *sometimes* work out hard words by yourself or *never*?” The responses offered by the children were recorded by the researcher and the next question was read to the child. This answer response prompting was continued for all 22 items. Children were given as much time as necessary to answer each question. If the child had difficulty in understanding the question, it was read again until the child was ready to respond. Administration of the S – YRMQ took approximately five minutes and at the conclusion of the testing, children were reassured that their answers were very helpful and were given a small reward.

#### **4.6.4 Teacher Measures.**

Class teachers were given a copy of the Teacher – Young Reader Motivation Questionnaire (T-YRMQ) for each child in their class participating in the study (see Appendix 20). The researcher explained the purpose of the questionnaire to each teacher and answered any additional questions. The teachers completed the forms for the children in their class and returned them to the researcher within a week.

Completing the T-YRMQ required approximately five minutes per child with six children for each teacher for a total of 30 minutes. The learning support teachers also completed the T-YRMQ, independent of the classroom teachers with the same children. The positive correlation of these responses proved to be a valuable validity factor in establishing levels of motivation for reading of individual children (see Appendix 27)

#### **4.7 Qualitative Data Collection in Phase Two**

Qualitative measures in the form of conversational interviews, semi-structured interviews and focus group interviews were employed in this phase of the study before and after the intervention to collect data on children's motivation for reading. Conversational interviews were held with children immediately after they responded to the questionnaire. Individual semi-structured interviews were held with all teachers and the parents of each child before the intervention to collect and triangulate data on children's motivation for reading. Immediately after the intervention semi-structured interviews were once again conducted with teachers and parents. Six months after the intervention, focus group interviews were conducted separately with children, parents and teachers to monitor the enduring effect of the intervention.

##### **4.7.1 Interviewing Children**

Young children have limited communication and concentration skills and in a peer group they are often reserved, thus making focus groups or unstructured one-on-one interviews inappropriate for their developmental stage (Eder & Fingerston, 2002). As recommended by De Vos *et al.* (2002) individual semi-structured conversational interviews were conducted with all participating children before and after the reading intervention. The conversational one-on-one interview allows flexibility for children to express themselves in their own way, as well as for the researcher to explore the children's responses as they unfold (De Vos *et al.*, 2002). These interviews were conducted in conjunction with the administering of the Young Reader Motivation Questionnaire – Student Form (S – YRMQ) and were typified by a conversational approach to gain insight into the children's perception of their own motivation for reading. Edmunds & Bauserman, (2006) note that the benefit of the semi-structured,

conversational interview is that it enables the comparing of information between people, as well as achieving a clear understanding of the individual's perspective, which is in line with the aim of this study. Since flexibility was noted as being of benefit in interviewing children, the conversational interviews were guided by an interview schedule rather than dictated by it. The use of open-ended questions allowed the children to freely express themselves in the direction indicated by the interview guide (De Vos *et al.*, 2002). For these reasons, guided conversational interviews were used to gain a detailed picture of the children's beliefs, perceptions or accounts regarding their motivation to read. The schedule for these interviews can be seen in Appendix 33.

#### ***4.7.1.1 Communication Techniques Used for Interviewing Children***

The following communication techniques, as recommended for interviewing by De Vos *et al.* (2002), were applied during this study and facilitated the collecting of rich data. Minimal verbal responses, such as, '*Mmm*', or '*I see*' were used to indicate to the child that the researcher was listening. Wilson and Powell (2001) argue that since children are still in the process of adding meaning to their experiences, a researcher can enable them to gain clarity in their own thinking by paraphrasing the responses offered. With this in mind the children's own words were paraphrased and stated in another way with the same meaning such as, '*What you are saying is, you don't read by yourself at home*'. Children's dialogue can be ambiguous due to their development stage, thus requiring clarification of the child's message on the part of the researcher (Wilson and Powell, 2001). To this end, further questions were sometimes needed -for example Encouragement is an effective technique to use with children, as their concentration fluctuates easily. Prompts such as '*Really! Tell me more*' or '*So, when do read at home then?*' were used to keep children's attention on the topic and to encourage them to follow a line of thought. In qualitative research, the researcher is part of the research, gets directly involved with the participants, and is the "instrument" of the research (De Vos *et al.*, 2002). Prompts and comments on my own thinking or feelings were used to encourage the children to respond freely to questions and say more on a topic such as, '*I sometimes have to look very closely at words to read them properly. Do you ever have to do that?*' Where children were reluctant to elaborate on their responses or indeed unsure as to the level of response desired, gentle probing was used as a strategy to enrich the data. This took many

forms including questioning, feigning puzzlement, encouraging the participant to carry on speaking, or simply allowing more time for responses to questions e.g., ‘*Do you mean that you never read by yourself before you go to bed .... even for a few minutes?*’

While listening skills are of the utmost importance when interviewing children and interruptions should be avoided where possible (Wilson and Powell, 2001), it was necessary in many cases to interject with prompts (both verbal and non-verbal) to let them know they were being listened to and to encourage them to keep talking. These interviews were recorded using a discreet digital device to minimise distraction.

#### **4.7.2. Interviews with Teachers**

Individual semi-structured interviews were conducted with all participating teachers (five class teachers and three learning support teachers) once before the intervention and once at the end of the intervention. Interviews were conducted in accordance with procedures and ethical concerns addressed earlier in this chapter in the context of Phase One of the study. The schedule for the interviews with the teachers can be seen in Appendix 26. Interviews were based on the information gleaned from the questionnaires on perceptions of student motivations which were completed by all teachers. In order to obtain a complete and contemporary understanding of teacher perceptions of the motivation for reading of individual students, interviews were conducted with their classroom teacher and learning support teacher on the same day (and usually directly in succession). This provided opportunities for cross referencing information between teachers and resulted in quality information on individual students. For example, in the course of these interviews a conflicting view on the motivation for reading of one child emerged between the classroom teacher and the learning support teacher. Further probing and interviews with both the child and her parents confirmed that while the child was experiencing significant difficulties in reading she was enthusiastic, had an interest in books and did not perceive reading to be extraordinarily difficult. Given that the study was investigating effects on children with a low level of motivation for reading, it was resolved to exclude the child from this particular intervention.



### **4.7.3 Interviews with Parents**

Individual interviews were conducted with parents before the intervention and group interviews were conducted immediately after the completion of the intervention and again six months later. These interviews took place in each research site (n=3). The schedule for the interviews with parents can be seen in Appendix 25. An extract of the transcription of one of the post-intervention group interviews is included in Appendix 32.

### **4.7.4 Reflective Journals**

At the conclusion of the study, the reflective journals completed by each teacher were collected and analysed. These journals provided valuable formative information on children's reading performance on the FORI activities and included observations on aspects of children's motivation for reading over the course of the intervention. This helped to evaluate, in a subjective and qualitative manner, how well each teacher implemented the fluency oriented reading instruction plan throughout the study. Furthermore, at the conclusion of the study, each learning support teacher completed a report on their perception of the effects of the intervention on the children in their programme (see Appendix 31). This provided additional qualitative data and painted a well-rounded picture of the strategies used by each teacher throughout the study.

### **4.7.5 Data analysis for interviews**

The transcripts for interviews with teachers and parents and for conversational interviews with children for this phase of the study were coded in order to identify the source of the data and to ensure quotes could be traced back to the original transcript. In coding all these variables, for convenience, the letters A, B and C were assigned to the Belle School, the Ben School and the Bon School respectively, to identify the three different sites. According to this method then data from the learning support teacher in the Belle School was coded as LSA1, data from a parent focus group in the Bon School was coded as PFGC and data from a particular student in the Ben School received the coding SB1, SB2 etc. as appropriate. Interviews were categorised according to four major themes reflecting the research

questions for this phase of the study and were also assigned a descriptive code. For example, quotes pertaining to reading achievement were assigned the code RA, and quotes referring to the motivational constructs of self-efficacy, reading orientation and perceived difficulty with reading were assigned SE, RO and PRD, respectively. After each piece of data had been assigned a code, a further layer of analysis was conducted to extract and deduce the meaning of each one. This led to decisions about what data should be included and in which category. According to Lincoln & Guba (1985) this essential task of categorising brings together into temporary categories those data bits that apparently relate to the same content. It is then important to ‘devise rules that describe category properties and that can, ultimately, be used to justify the inclusion of each data bit that remains assigned to the category as well as to provide a basis for later tests of replicability’ (p. 347). Each quote that warranted inclusion was then numbered within the category for reference purposes. The full key to the coding assigned to the various interviews conducted is presented in Table 4.4.

Table 4.4: Codes assigned to interviews

Participants	Code	Examples of Code + transcript key
Learning Support Teachers (3)	LSA1; LSB1; LSC1	LSC1/RO/3
Class Teachers (5)	CTA1; CTA2; CTB1; CTB2; CTC1	CTC1/RD/4
Children (15)	SA1; SA2; SA3; SA4; SA5 SB1; SB2; SB3; SB4; SB5 SC1; SC2; SC3; SC4; SC5	SB1/PRD/3
Parents (individual)	PA1; PA2; PA3; PA4; PA5 PB1; PB2; PB3; PB4; PB5 PC1; PC2; PC3; PC4; PC5	PA5/SE/1
Parents (focus groups)	PFGA; PFGB; PFGC	PFGC/RO/6

#### **4.8 Ethical Issues (Phase Two)**

Phase Two of the study took place in three discrete school settings. Obtaining consent for school-based research faces particular challenges because of the involvement of a range of different stakeholders, including school boards, principals, teachers, parents and children (Valentine, 1999). Ethical issues arose in this case because the research involved teachers and children completing a survey. As well, parents, teachers and children were being interviewed before and after the proposed intervention. Interviews in particular have an ethical dimension. Cohen, Manion & Morrison (2011) identify three main areas of ethical issues: informed consent, confidentiality and the consequences of the interviews while Kvale and Brinkmann (2008) also include the researcher's role in the ethical dimension of the interview process. Informed consent entails informing the participants about the purpose of the research and the main features of the design and voluntary participation is essential. Letters of consent for interviews with teachers, parents and children outlining the scope of the study and the voluntary nature of participation are included in Appendices 6, 7 & 8.

Confidentiality and the consequences of the data generated from the interviews were addressed at this stage. The guidelines for reasonably-informed consent issued by the US Department of Health, Education and Welfare and cited in Cohen *et al.*, (2003, p.51) were followed to ensure the participants' confidentiality and self-determination. Individual meetings were convened with the principals and learning support teachers of the three schools participating in the proposed intervention. At these meetings the purpose of the research and the proposed research methods and data collection were outlined. Potential benefits that the participants might reasonably expect from engaging in the research were presented. The following potential benefits in particular were highlighted: enhanced literacy achievement; engagement and motivation of children in the reading process; development of teacher expertise; opportunity for the school to engage in research to address a national problem; alternative methods in intervening with struggling readers and an opportunity to provide resources for literacy teaching in the school. The learning support teachers were informed of the requirement to embark on a professional development course (approximately 15 hours) on Fluency Oriented Reading Instruction (FORI) prior to the commencement of the intervention. The full

extent of their role and responsibility in the intervention was outlined. Brenner (2006) recommends that informed consent should be obtained through the use of a letter or form that specifies the nature of the research, the procedures participants can be expected to engage in, and the means by which confidentiality will be protected. At this stage the learning support teachers completed and signed a letter of consent indicating their commitment to participate in the study (see Appendix 8).

There are particular sensitivities when the research involves children. A decision by a minor to participate in research is considered to constitute assent, defined as ‘a child’s affirmative agreement to participate in research’ (DHHS, 2005, p.1). A child’s assent needs to be complemented by a decision of a ‘legally recognised surrogate decision-maker’ (Baylis *et al.*, 1999, p.6), i.e., the parents and/or guardians. The parents of the children selected for inclusion in the intervention were invited to an information meeting at each school. At these meetings the rationale for conducting the proposed study and the nature of the intervention were outlined in detail. Potential benefits to the children participating in the intervention (e.g. enhanced literacy achievement as well as engagement and motivation in the reading process) were presented to the parents. At the end of the meetings parents were given an opportunity to ask questions in relation to their children’s participation in the proposed intervention. They were then invited to sign a consent form if they wished for their child to be included in the intervention. I also sought written consent from parents who participated in focus group interviews (see Appendix 8).

#### **4.9 Credibility of research findings**

The second phase of this study draws liberally and interchangeably on quantitative and qualitative data gathered concurrently throughout the course of the intervention. In order to manage threats to trustworthiness, it is imperative that a variety of strategies are used to describe research findings in a way that authentically represents the meanings as described by the participants (Creswell, 1998, 2003). For the findings to be considered plausible, then, the responsibility is on the researcher to make each stage of the research process visible (Maykut and Morehouse, 1994). This is accomplished here by detailing the purpose of the study, how participants became involved in the study, the specific setting, the data collection and analysis

procedures, and the processes by which outcomes are established. Many of the issues related to the credibility or trustworthiness of the data for this study have been discussed throughout this chapter and are referred to briefly here.

Anney (2014) suggests that one way of increasing the trustworthiness of findings is to utilise multiple methods of data collection so that the limitations of one method can be offset by the strengths of another. The design of this mixed method study has ensured that a variety of methods including questionnaires, interviews, test measures, and observations were used to investigate the research problem from many viewpoints (see Figure 4.2). Researchers have documented further measures that the researcher can use to boost the credibility of their findings (Lincoln and Guba, 1985; Shenton, 2004).

One such measure is persistent observation, the purpose of which is ‘to identify the characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail’ (Lincoln and Guba, 1985, p.304). This involves the researcher continuously identifying and clarifying the salient features of the phenomenon being studied. As applied in this study, persistent observation involved maintaining a journal of memos from site visits as well as constant and concurrent examination of both quantitative and qualitative data over the course of the intervention. This is exemplified by embedding a concurrent triangulation design for the second phase of the study (see Figure 4.4).

Another crucial measure to increase trustworthiness is the use of member checks as described earlier in this chapter. Member checks were used at various points in this study. In the first phase of the study all focus group participants received a transcript of their interview for verification purposes. In the second phase quantitative data such as test results on children’s reading achievement pre- and post-intervention were shared and discussed with the learning support teachers and the class teachers to clarify emerging patterns and to inform practice.

Finally, the researcher should provide a clear audit trail to ensure credibility of the findings. An audit trail involves an examination of the inquiry process and product to validate the data, whereby a researcher accounts for all the research decisions and activities to show how the data was collected, recorded and analysed (Bowen, 2009; Li, 2004). In this study this was achieved by systematically coding the qualitative data and carefully interrogating and filing interview transcripts,

observation notes, records collected from the field, and test scores for crosschecking during the inquiry process.

#### **4.10 Summary**

This chapter provides a detailed account of the research design and methodology employed for the study along with the conceptual framework underpinning the research. The approach, methods and analytical processes of the research study are outlined in detail with a rationale presented for adopting a mixed methods approach for both phases. In the first phase of the study, in order to identify current knowledge and practice of learning support teachers in relation to reading instruction, a sequential mixed methods strategy featuring a quantitative survey followed by semi-structured interviews was employed. The results of this phase of the research were analysed and used to design the intervention for the second phase of the study. A mixed methods concurrent triangulation strategy was adopted for the second phase where both quantitative and qualitative data were collected concurrently. The use of two discrete but complementary classifications of mixed methods approaches for the research conducted through a pragmatic lens facilitated alignment between the epistemological, ontological and research approaches of the study. This chapter explained how data was collected to generate evidence to address the research questions. This material and the responses to research questions are addressed in the following chapters.

## **5 PRESENTATION AND ANALYSIS OF FINDINGS (PHASE ONE)**

### **5.1 Introduction**

This chapter sets out the results and analysis of the findings from the first phase of the study. The purpose of this initial phase was to establish baseline data on the current practice of learning support teachers in relation to teaching struggling readers at a critical juncture of their early school years. The hypothesis was that instruction for children who experienced reading difficulties at the emergent stage was typically weighted on a highly structured, bottom-up approach with an emphasis on cognitive rather than affective processes. If this was found to be true, then the case for a reading intervention that focused on the engagement perspective of reading would be established. The hypothesis was tested through a survey and subsequent focus group interviews of learning support teachers in DEIS Band 1 & 2 schools in the Dublin Northside Partnership Catchment Area (DNPCA). Having discussed the design and administration of the questionnaire and interviews in the previous chapter, the findings in relation to the knowledge, perceptions and practice of learning support teachers in the DNPCA are presented here. Both quantitative and qualitative data are used concurrently to address the following research questions:

1. What is current practice of learning support teachers in relation to compensatory literacy education?
2. To what extent are learning support teachers employing oral reading fluency strategies in their literacy instruction?
3. What are the perceptions and beliefs of learning support teachers regarding the attitude to reading and motivation for reading of struggling readers in their programmes?

The findings are discussed under several broad headings reflecting these research questions and other significant elements that emerged from the process of data reduction and analysis. In Table 5.1 evidence that generated the findings is presented in the context of the evaluation level and the research questions. A key to the coding for the analysis of both qualitative and quantitative data is also included here.

Table 5.1: Link between study framework and research questions (Phase One)

Evaluation Level	Research Questions (RQ)	Evidence	Code
Current practice of learning support teachers (RQ 1 & 4)	What is current practice of learning support teachers in relation to compensatory literacy education?	Questionnaires to learning support teachers  Semi-structured focus group interviews	As per questionnaire e.g. Q 2.1 (vi)  FG1; FG2
	To what extent are learning support teachers employing oral reading fluency strategies in their literacy instruction?	Questionnaires to learning support teachers  Semi-structured focus group interviews	As per questionnaire  FG1; FG2
Teacher perceptions (RQ 5)	What are the perceptions and beliefs of learning support teachers regarding the attitude to reading and the motivation for reading of struggling readers in their programmes?	Questionnaires to learning support teachers  Teachers' perceptions gleaned through semi-structured focus group interviews with sample of learning support teachers	As per questionnaire  FG1; FG2 [e.g. FG1: 2, r5 = Focus Group 1:Theme 2, Response 5]

## 5.2 Research Sample (Phase One)

### 5.2.1 The Questionnaire

For this phase of the study a convenient, purposive, non-probability sample of learning support teachers was selected. The questionnaire, which was distributed to all learning support teachers of children in First Class in DEIS primary schools in the DNPCA (n=14), received a complete response rate (100%). This catchment area was selected as it has twenty-two DEIS Band 1&2 primary schools, each with learning support programmes for children with reading difficulties. In determining the validity of the data collected it is imperative to examine any potential biases that may exist. There is some element of bias with regard to the school size of the selected sample, with almost four fifths (78%) of respondents working in large schools with sixteen or more teachers. While this is not representative of the general teaching population in Ireland, it must be noted that the study was conducted in urban schools in the capital where schools are typically larger than rural areas.

The study focused exclusively on students in First Class so learning support teachers in senior schools (those schools with Third to Sixth Classes only) were not



surveyed. Respondents were well spread across the eligible school types, with both co-educational schools and single sex schools represented (see Figure 5.1).

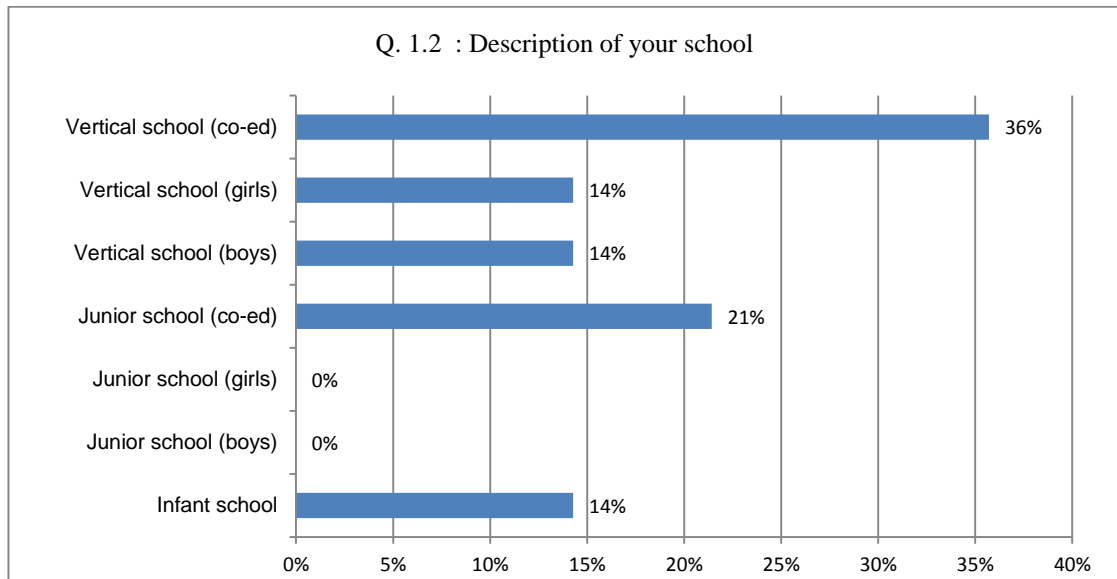


Figure 5.1: Description of school types included in the survey

While the sample indicates a large proportion of experienced teachers (over fifty percent teaching for more than ten years) only twenty-eight percent (28%) had more than three years' experience as learning support teachers. Exactly fifty percent (50%) of the respondents had a qualification in compensatory education (Q1.5, Appendix 2), which is representative of learning support teachers in primary schools in Ireland (Eivers *et al*, 2004; Travers, 2011).

### 5.2.2 Focus Group Interviews

The purpose of the focus group interviews was to further probe the responses offered in the survey and thus provide a more complete picture of current practice, perceptions and beliefs of learning support teachers. These discussions also proved valuable in bringing further clarification to seminal issues previously identified in the literature review.

The candidates for the focus group interviews were drawn from the original questionnaire respondents. As the total population of learning support teachers who completed the survey was relatively small (n=14), they were all invited to participate in the focus group interviews. Seven of these teachers agreed to be interviewed and

were divided into two focus groups for convenience. These teachers represented a wide range of school types (junior schools, vertical schools, single-sex schools, co-ed schools) and possessed varying levels of experience in learning support provision. While a gender balance among interviewees would also have been desirable, there were only two male learning support teachers in the original sample and neither of these teachers was available for the focus group interviews. However, one of these was involved later as a participant in the second phase of the study.

The schedule for the interviews was drawn from both quantitative and qualitative information gleaned from the initial survey and can be seen in Appendix 5. Data from these interviews will be discussed here alongside the findings from the survey in the context of the research questions.

### **5.3 Current practice of learning support teachers**

This section reports on the instructional emphases and professional knowledge of learning support teachers in relation to reading instruction. The extent to which teachers involve parents in their learning support programmes is also examined with a view to informing the development of the reading intervention for the second phase of the study.

#### **5.3.1 Modes of intervention**

The main role of the learning support/resource teacher in Irish schools is to provide supplementary teaching, either in the pupils' own classrooms or in a learning support room (DES, 2000). When respondents were asked to identify the modes of intervention they used with children in their learning support programmes, seventy-five percent (75%) indicated that they withdrew children from the classroom setting for either individual or group instruction (see Figure 5.2). This is reflective of research by Weir & Moran, (2014) which found that the vast majority (91%) of learning support provision in a sample of Irish urban primary schools serving disadvantaged pupils was conducted by entirely or mostly withdrawing children from class. It is also in keeping with literature on compensatory education in Europe, which indicates that the most common approach to assist children who present with reading difficulties is to withdraw them from the regular classroom and provide learning support tuition, either individually or in smaller groups (Eurydice, 2011).

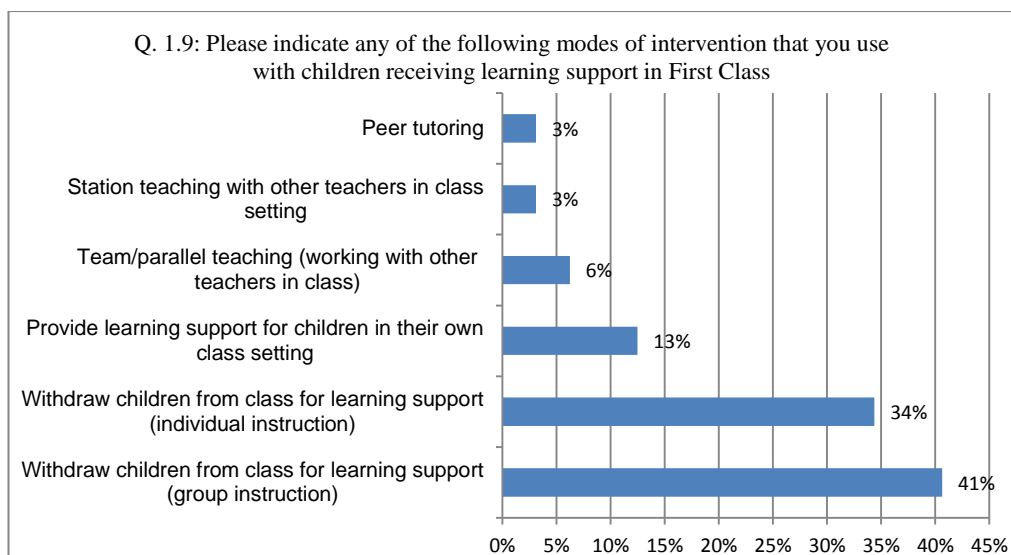


Figure 5.2: Modes of Intervention of learning support teachers

While respondents in this study reported that a relatively small amount (13%) of learning support provision for children also took place in their own classroom setting, this was not the norm. In elaborating on this statistic, one focus group interviewee explained that learning support activity carried out in the base classroom was typically in the form of station teaching carried out in conjunction with the class teacher and other personnel. This teacher further elaborated that she felt this type of reading intervention ‘wasn’t appropriate for assessing children and implementing individualised programmes’ (FG2:1, r12). Learning support teachers reported a preference for withdrawing children because it afforded them the opportunity to design and deliver individual education plans and ‘allowed them more autonomy in their teaching’ (FG2:1r14). In addition to pedagogical rationale for withdrawing children from class, school policy was also proffered as a reason for this practice:

The resource teacher or learning support teacher carries out reading assessments on all children who are seen to have reading difficulties at the end of senior infants. It’s school policy then that these children are prioritised for support and this is done by assessing their individual needs and setting up a timetable to attend the learning support teacher. (FG2:1r16).

This practice of withdrawing children from class for learning support has raised questions in relation to the homogeneity or otherwise of these instructional groups (Slavin, 1987). One assumption is that grouping children according to their ability

allows the teacher to provide more individual attention, repetition, and review for low achievers (Puzio, & Colby, 2010). A strong support (78%) for grouping children in relation to their reading ability was expressed by respondents in the survey (see Table 5.2). It was evident from the focus group interviews that there was a preference for teaching children of similar ability and, when convenient, with common reading difficulties.

Table 5.2: Preference for grouping children according to reading ability

Q 1.12 (iv)	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
Children who participate in my learning support programme learn best if they are grouped in relation to their reading ability	0%	0%	0%	21%	21%	36%	21%

This practice, while prevalent among respondents, appeared to contravene the recommendation in a circular released to schools by the DES in 2003 which proposed that:

...children need to belong to a peer group and to mix with children of different abilities in a variety of situations. Research on mixed ability teaching illustrates that children of lower ability benefit greatly and children of average or above ability are not academically disadvantaged. (Circular, 24/03, DES, 2003).

The recommendation of this circular was presented to interviewees to probe the merits or otherwise of selecting homogenous groups for compensatory reading lessons. While there was accord among teachers in recognising the benefits of having children with different strengths within withdrawal groups, it was evident from the discussions that there was a resistance to embrace mixed ability grouping as a *modus operandi*. In some instances the school policy on resource teaching was once again offered as a reason for this practice while in others it was explained that children were assigned to groups on the basis of achieving similar results on standardised assessments. When it was pointed out that the literature (Farstrup & Samuels, 2002) suggests that students from diverse backgrounds are at a disadvantage in acquiring reading skills when traditional approaches such as ability

grouping is practiced, a robust rationale for homogenous grouping was presented as the following transcript reveals:

It's much easier to teach children who have similar reading difficulties and that's not saying that they are identical difficulties. The pace of your teaching can be suitable for all the group and you can plan activities and prepare resources that all children will be able to use .... I mean otherwise we would be taking children in an individual basis like Reading Recovery. That would mean that we would get to less children with some losing out altogether. (FG1: 1, r8).

This reported preference for withdrawing children of similar reading ability for learning support had implications for the design and delivery of the proposed intervention in the second phase of this study. It was intended that children with reading difficulties who had a common disposition towards reading (i.e., poor motivation for reading) would be selected as candidates for this phase. Hence, the practice of withdrawing children from their classroom setting for learning support and grouping these children in relation to their reading ability was a good fit for the planned intervention. Importantly, it was a significant factor in deciding that the intervention would be carried out with children in groups withdrawn from the base classroom rather than using an in-class support model. While this approach appears to contravene the recommendation of circular 24/03 (DES, 2003), it is consistent with the research on reading instruction that suggests small group settings are more effective than larger groups for children who struggle with reading in the early years (Swanson and Hoskyn, 1998; Scammaca et al., 2007; Eurydice, 2011).

### **5.3.2 Instructional emphases**

The literature on effective reading instruction for struggling readers recommends that a multi-component approach is adopted (Gambrell, Mandel Morrow & Pressley, 2007). This ideally incorporates a balance between word attack skills, vocabulary and fluency development, and comprehension instruction, all in the context of a motivating environment (Pressley, 2006). However, the results of the survey conducted with learning support teachers suggests that the overall approach to teaching reading to struggling readers could be described as largely traditional with a

distinct emphasis on a bottom-up approach to reading (see section 3.1.1) and on decoding skills in particular.

Question 2.2 on the questionnaire investigated the reading skills that learning support teachers included regularly in their instructional programmes. Teachers were asked to indicate the frequency (every lesson, once or twice a week, once or twice a month, rarely, never) with which they taught the essential components of reading as identified by the NRP (2000).

It is clear from data presented in Figure 5.3 that all teachers regarded teaching phonics as central to the reading instruction provided for struggling readers in First Class. Over three quarters (77%) of teachers surveyed reported teaching phonics in *every lesson* with a further twenty-three percent (23%) teaching it *frequently* (once or twice a week). This was significantly different, for example, to the frequency with which oral reading fluency was taught in learning support programmes, with almost three quarters (71%) of respondents teaching it *rarely* or *infrequently*.

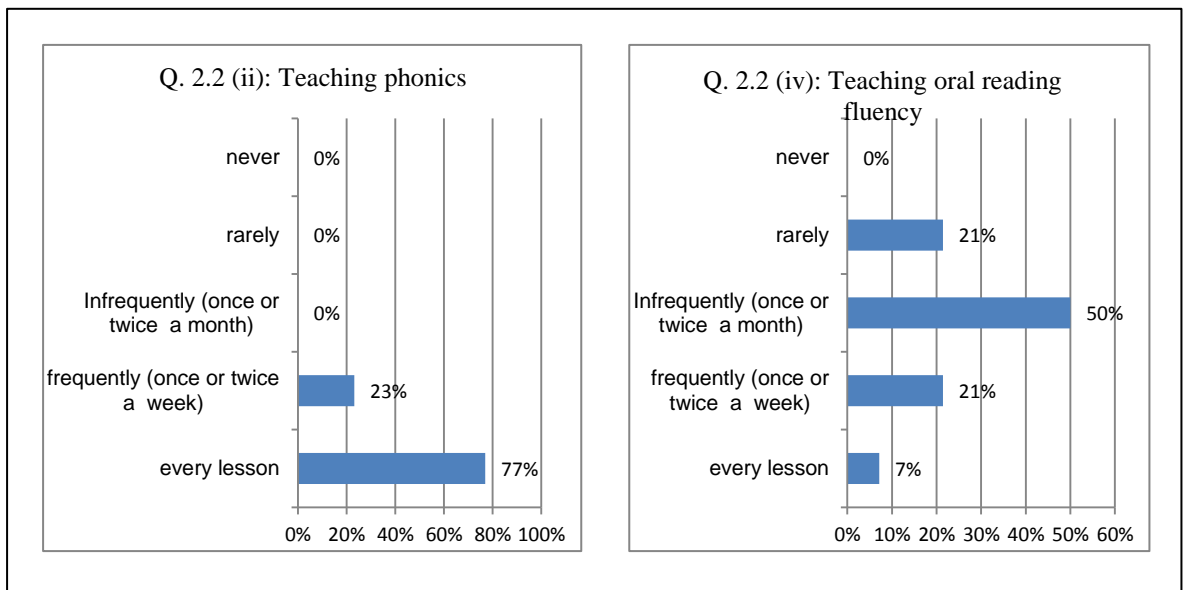


Figure 5.3: Frequency of instruction of phonics and fluency as reported by LS teachers

When asked to describe a typical reading instructional session in their learning support programme with children withdrawn from First Class, it was noteworthy that all teachers began by describing and discussing skill instruction in the context of word work and phonics. Further probing of this revealed that a highly

structured approach to teaching the alphabet code was a constant feature of learning support programmes for struggling readers at this age. Teachers in both focus group interviews stressed the importance of ‘making sure that they know all their sounds and blends before tackling more complicated skills’ (FG1:2, r7). One teacher pointed out that children very often did not have access to learning support until they were in First Class and noted that many of these students had ‘missed the boat when it came to learning their consonant and vowel sounds’ (FG2:2, r5).

This view is reinforced by the findings of the initial survey, which sought the opinion of learning support teachers on whether phonics and word decoding were contributing factors for struggling readers in their programmes. Results indicated an agreement that these were significant factors, with over three quarters (76%) of teachers *agreeing* or *strongly agreeing* that children typically had difficulties with letter-sound relationships when reading (Figure 5.4). A similar percentage (78%) *agreed* or *strongly agreed* that children typically experienced difficulty in decoding grade-level words accurately (Figure 5.5).

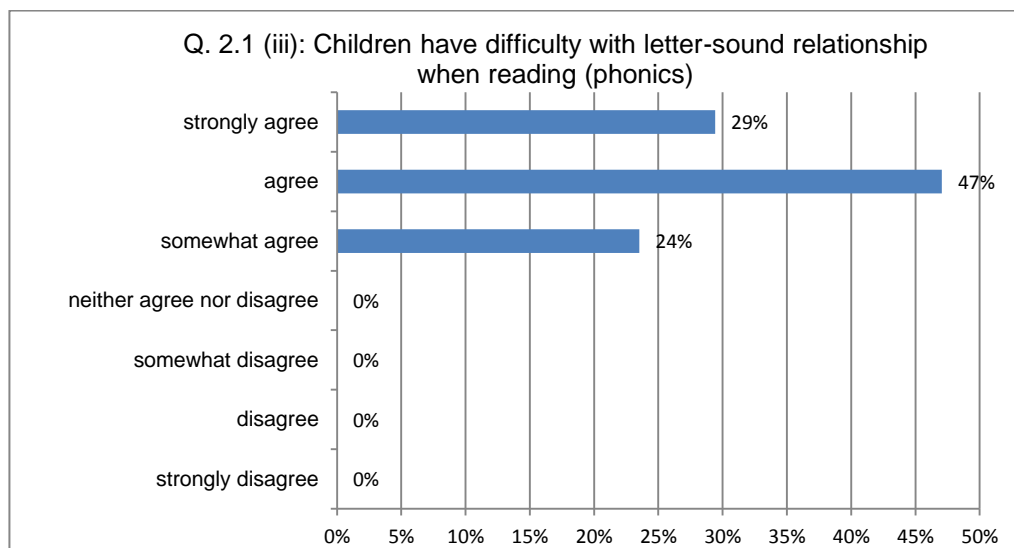


Figure 5.4: Phonics competency as a contributing factor to children’s reading difficulties

There was general agreement among interviewees that teaching word attack skills through a systematic phonics programme was a fundamental pillar of their reading programmes, although it should be noted that it was also stressed that this was not the case for teaching children in more senior classes. When it was suggested that it was the prime responsibility of the classroom teacher to ensure that children

were taught the alphabet code, one teacher reported that she felt ‘it was expected of me to teach phonics to those children who struggled at reading as I am seen as the expert in this area ... and I can focus directly on these skills in the smaller group’ (FG1:2, r4). Further evidence of this was provided by another interviewee who expressed the view ‘that phonics was the most important area for children with reading difficulties as children needed to learn the sounds associated with all letters before they can read fluently’ (FG1:2, r8). The idea that struggling readers need focused teaching is reflective of the literature on reading interventions, which concludes that ‘ordinary teaching (no intervention) does not enable children with literacy difficulties to catch up’ (Brooks 2007, p. 31) and suggests that early and timely intervention may prevent impaired reading skill development.

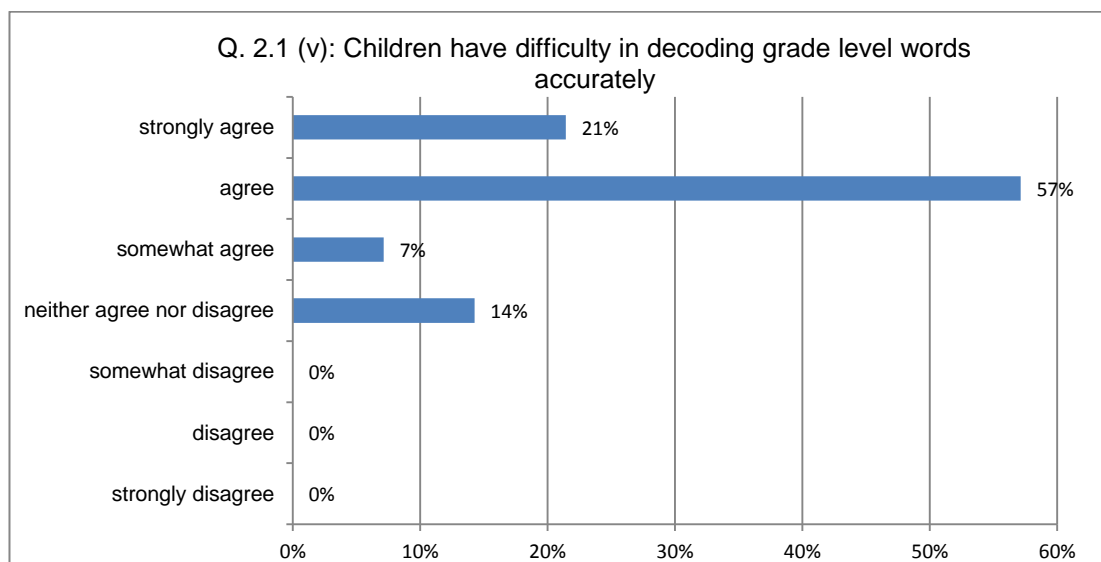


Figure 5.5: Decoding competency as a contributing factor to children’s reading difficulties

When probed about the infrequency of other essential reading components as part of their learning support programme (e.g., oral reading fluency as seen in Figure 5.3) one teacher appeared to regard reading instruction as a hierarchical process when she argued that ‘there was not much point in trying to teach reading comprehension or reading fluency when children cannot decode the words’ (FG1: 2, r10). Another teacher said that she felt under pressure to teach phonics because ‘they are doing Jolly Phonics in the classroom and the class teachers expect us to do the sounds with them’ (FG1:2, r12).



The reported emphasis on word attack skills and phonics in particular by learning support teachers is consistent with the ‘bottom-up’ approach to reading as described by Nunan (1991). This approach, which appears to have gained prominence in teaching struggling readers in Irish schools (Kennedy, 2009), may also be influenced by the presence of highly structured and prescriptive phonics programmes that are regular features of instruction for children in junior classes. It also correlates with earlier findings by Duke (2001) and Eurydice (2011) that teachers of struggling readers frequently place more emphasis on cognitive aspects of reading instruction (e.g. word recognition and comprehension) than on higher order, meaning-oriented and motivational instruction.

While it is acknowledged that young children need a systematic approach to learning the alphabet code (Cunningham & Cunningham, 2002) and that word attack skills are a necessary element of the reading process (Fawson & Reutzel, 2000), research also indicates that these skills are not sufficient on their own in addressing the needs of struggling readers (Allington, 2012; James-Burdumy *et al.*, 2010; Lenski, 2001; Slavin, Lake, Davis, & Madden, 2011). In some instances it is argued that struggling readers are even placed at a disadvantage in acquiring reading skills when an over-emphasis on skill instruction is practiced (Farstrup & Samuels, 2002).

### **5.3.3 Role of parents in learning support programmes**

Parents play a critical role in the literacy development of their children in what they believe, say, and do (Desforjes & Abouchaar, 2003; Senechal, & LeFevre, 2002). While parental involvement in schools and their influence on reading was not specifically probed in the initial survey, an open-ended question offered teachers the opportunity to name any factors they deemed to be an influence on children’s reading achievement. The responses revealed that almost eighty percent (78.57%) of teachers alluded to home influence as a significant factor in this regard (see Q2.1 Appendix 4). The responses to this question were further analysed. Using a cyclical process involving data organisation and interpretation emerging patterns and themes were identified. These included the lack of parental support and encouragement for reading, the motivation of parents to help with reading, the availability of reading material outside of school, and the literacy levels of some parents. These themes provided the framework for questions on this topic in the focus group interviews.

Teachers reported that children in their learning support programmes did not always receive encouragement and support at home for reading. Further discussion on this topic revealed a feeling among teachers that parents viewed learning and teaching as ‘primarily the domain of the school’ (FG2:3, r13) and that they were ‘more than willing to let it up to the teachers’ (FG2:3, r12). This notion of the parent as a passive if not altogether absent presence in children’s literacy experience at home came across quite strongly in discussions. Although interviewees acknowledged that ‘the vast majority of parents wanted the very best for their children’ (FG1:3, r9), they also conveyed the message that parents often struggled to provide the necessary back up at home:

I know for many of my children they never get to listen to a story being read at home. I mean very often there is little or no reading material in the home. Our Home School Liaison Officer did a survey....she actually went to the houses to see what books were available to children at home and found that there was very few age appropriate books in the homes and parents said that they rarely read to their children. I know this has changed a bit now with the storytime project that’s going on in some schools, but generally there’s not much support at home. (FG2:3, r6)

This observation is consistent with research on national policies for support of low achievers in reading across Europe, which found that the majority of students with reading difficulties come from socio-economically disadvantaged families who tend to lack educational resources, including books (Dobbins & Martens, 2012).

When it was suggested that the school had a responsibility to involve parents in their children’s reading development, there was general agreement albeit with some reservations. Some teachers were positively disposed to including parents in their learning support programmes at school, while others saw the benefits of helping parents to help children with reading at home:

We already have parents helping out with C.A.P.E.R in our school so it wouldn’t be a huge step to involve them in our learning support programme. The challenge would be in organising it...like you probably wouldn’t have parents every day and then they may not be available when you would need them. (FG1:3, r12)

I think the most important aspect of parent's involvement is at home. After all, we only have the children for a short period each day whereas they are at home every evening, every weekend and all through holidays. If parents could be encouraged and taught how to help with reading, it would be so valuable and would have a huge impact on children's reading. (FG1:3, r14)

The reservations expressed were in relation to the ability of some parents to assist their children who experienced reading difficulties. One teacher commented that she felt that some parents didn't have the confidence to help their child with reading, while the following remarks reflected a similar concern among teachers in relation to the level of literacy of some parents and their competence to help with reading at home:

Some of the parents of the children in my class have difficulties with reading themselves so it's like a vicious circle. These parents really want their children to read because of their own experience but feel helpless. (FG2:3, r7)

It's hard to expect some parents to help their child if they have reading difficulties themselves. Our Home School Liaison teacher set up classes for adult literacy for all parents in the school and it was incredible to see how many parents of our struggling readers were attending...it was also interesting that many of them gave up these classes. (FG2:3, r8)

Notwithstanding the generalisation of these comments with regard to the literacy levels of parents, the literature on reading achievement does indicate that struggling readers might lack effective support from their families as they tend to have 'less well-educated parents and less encouraging home environments', (Eurydice, 2011, p.69). This does not, however, justify an abdication of responsibility by teachers and schools in assisting parents. The literature also cautions that parents are not likely to be able to help struggling readers effectively without focused and supported instruction (McNaughton, Parr, Timperly, and Robinson, 1992) and that it is important to provide guidance to parents to help them gain confidence in their ability to help their children in this regard (Castle, 1994).

In the original survey teachers were asked to rate their level of agreement on a statement regarding parents' awareness of their children's reading ability. Results

indicate a spread of opinions on this topic. While over half (57%) of teachers *agreed* that parents were aware of their children’s reading ability, only seven percent (7%) *strongly agreed* with this statement (see Figure 5.6). Given that over one third (35%) of teachers had reservations on this issue, it was discussed further in the course of the focus group interviews. It transpired that there was a variation between teachers’ written responses on this topic and those communicated in the interviews. Teachers explained that while they agreed that parents were aware of their child’s reading difficulties, it was usually at a ‘very general level’ (FG2:3, r1) and very often this awareness was as a result of communication received from the school when seeking consent for their child to be withdrawn from class for learning support. Teachers reported that communication with parents typically occurred through the classroom teacher and ‘their progress in reading and other areas of the curriculum is usually explained at parent teacher meetings’ (FG2:3, r10). It also emerged that while some parents were invited to assist with interventions such as paired reading or buddy reading, they typically were not involved in the learning support programmes. Teachers posited that even though parents were made to feel welcome in the schools ‘they never put themselves forward for working formally with teachers’ (FG1:3, r16). The issue here may well reside with the schools and their policies in this regard.

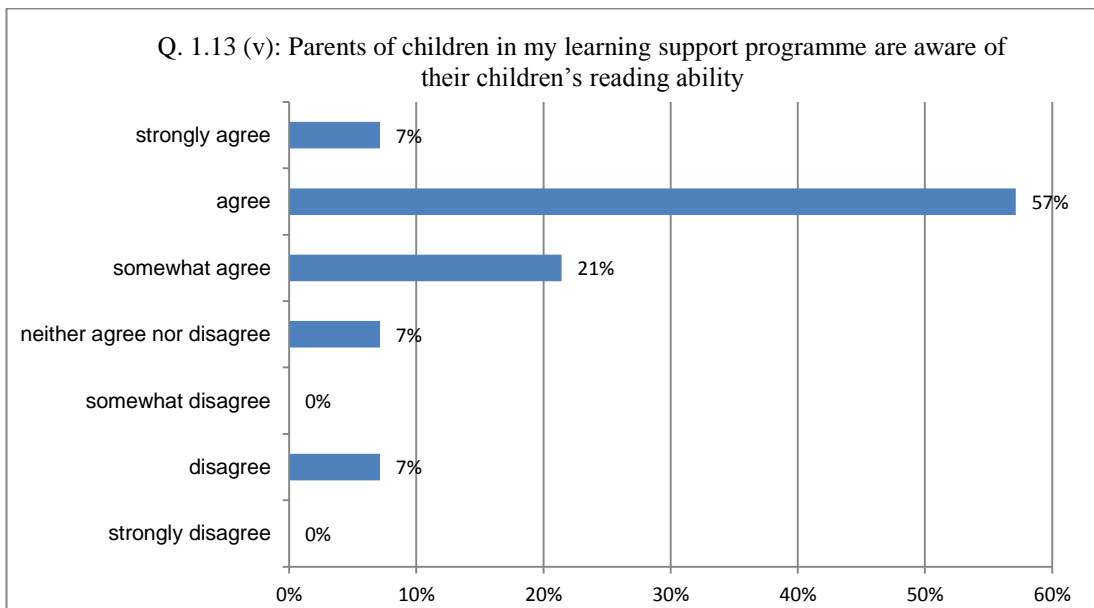


Figure 5.6: Teachers’ perceptions of parental awareness of children’s reading difficulties

When asked whether they thought that parental involvement should be part of a school learning support programme, teachers were open to the idea but were 'unsure how it would work in every day practice' (FG1:3, r18). It was acknowledged by each interview group that parents should be aware of the type of support their child receives when attending learning support and ideally play an active role in this process. One teacher offered the following comment in this regard:

I feel we could be doing a lot more to bring parents into the loop in relation to reading. If we were more proactive and invited parents into explain what we do, surely that would help. If they realised how powerful they are in the whole process they would be shocked. If we could get parents even to listen to children reading the books that we use with them and I don't know anything as powerful as reading with your child and reading to your child...Parents are never going to just put themselves forward and you can't blame them. We just have to go out and get them. (FG2:3, r17)

This astute observation fits well with the literature on academic achievement (Lein, Johnson & Ragland, 1997; Taylor *et al.*, 1999), which suggests that successful schools do not wait passively for parents to get involved in their child's education but work hard to reach out to parents, communicating to them that they are powerful influences on their child's development. It was recognised that one way to increase parental involvement in reading instruction would be to train parents to help their children at home and so assist in implementing reading interventions.

In summary, teachers felt that children who struggle with reading in the early years of school would benefit from more encouragement and support from parents. There was also a consensus that parents want to help their children at home and at school but may not know how best to do this. In the surveyed schools (all of which were situated in areas of economic and social disadvantage) it was felt that some parents may feel unable to become actively involved due to their own lack of reading confidence and/or reading competence. Teachers recognised the value of including parents in any reading interventions for struggling readers, but had some reservations about the ability of parents to help at home, specifically in relation to children with reading difficulties.

#### 5.4 Oral reading fluency instruction in learning support programmes

A primary aim of this phase of the study was to establish the extent to which learning support teachers employ oral reading fluency strategies in their literacy instruction. The literature on reading instruction confirms that oral reading fluency has been positively associated with reading achievement in the early years of primary school (Kuhn, & Rasinski, 2011; Paris, 2011) and particularly with struggling readers (Rasinski, Homan, & Biggs, 2009; Stahl & Heubach, 2006). However, the data from the survey and the ensuing interviews presented here suggests that fluency oriented reading instruction was not a regular feature of learning support programmes designed for struggling readers.

In responding to a question on instructional practice (Q2.2, Appendix 2), seventy-one percent (71%) of teachers reported that they *infrequently* or *rarely* included oral reading fluency instruction in their lessons with twenty eight percent (28%) of teachers teaching it *frequently* and only seven percent (7%) including it in *every lesson* (see Figure 5.7).

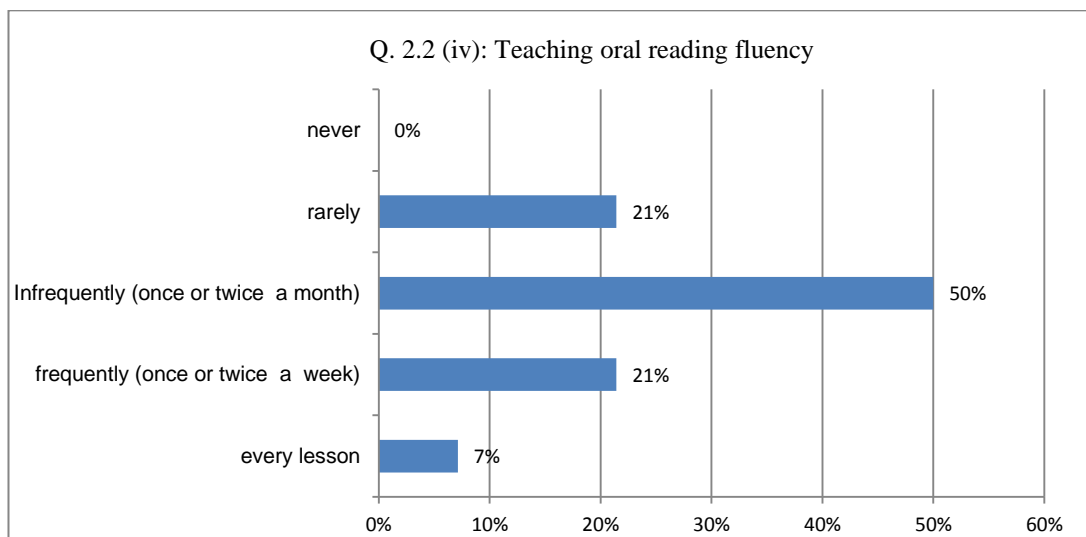


Figure 5.7: Frequency of reading fluency instruction as reported by LS teachers

This was a curious finding considering respondents also identified that children in their learning support programmes typically experienced difficulty in the area of reading fluency (see Table 5.3). When compared to the frequency with which other elements of reading were taught (e.g. phonics), it would appear that oral reading fluency instruction was the poor relation in learning support programmes for

children in First Class (see Figure 5.3 above). When probed further on this topic, teachers offered various reasons as to why oral reading fluency instruction was not a regular feature in their instructional programmes. A common thread across interviews suggested that there was a disconnection between the views teachers held in relation to teaching reading and their definition of fluency. Responses indicated a very specific and one-dimensional understanding of oral reading fluency. In particular these responses indicated that the *rate* of reading was paramount in assessing if a child was reading fluently:

When I think of oral reading fluency, the speed that children read a text comes to mind. If a child is reading every word as a separate unit then it's not likely that they will be fluent or that they will understand what they read. Children in my groups often struggle to decode words so their reading is never fast enough to sound fluent. (FG1:4, r2)

Children in my group do get to read fluently when they have been practicing with the same book over a period of time. When we use the short levelled readers they can eventually read the books much faster by the end of a week. (FG2:4, r3)

If most of the words are known by sight they will have better chance of reading at a fast enough rate to be fluent. (FG1:4, r6)

Other teachers associated oral reading fluency with the ability to read with 'confidence and accuracy' (FG2:4, r5) and 'without having to sound out individual words' (FG2:4, r10). While there was some reference in these comments to reading rate and accuracy, it may be tentatively concluded from the interviews that teachers had a narrow interpretation of oral reading fluency.

A more comprehensive definition is offered by Kuhn, Schwanenflugel, & Meisinger (2010), who describe oral reading fluency as a combination of accuracy, rate, automaticity, and oral reading prosody. This definition informed the inclusion in the survey of specific oral reading fluency components as potential contributing factors for children who experience reading difficulties. Subsections (v), (vi), (viii) and (ix) of Q 2.1 of the questionnaire (see Appendix 2) probed teachers, levels of agreement as to whether perceived deficits in oral reading fluency skills were typically contributory factors to children's reading difficulties. Teachers were

unequivocal in their view that this was the case with each skill. Seventy-nine percent (79%) of respondents firmly indicated (*agreed* or *strongly agreed*) that reading accuracy and reading with expression were contributing factors to reading difficulties among children in their support programmes, while there was even stronger agreement (86% *agreed* or *strongly agreed*) that children typically had difficulty reading words automatically and at an appropriate rate (see Table 5.3).

When asked to comment on these results, teachers focused once more on the reading accuracy element and took the opportunity to restate their reasons for focusing on decoding skills in their tuition with children in First Class:

...if children don't acquire the skills to decode words accurately at this stage, there is a possibility that they may give up on reading altogether. (FG2:4, r19)

They take so much time and energy figuring out words that comprehension is difficult for them. Children at this age need to know lots of sight words and have a good knowledge of phonics. (FG2:4, r20)

Table 5.3: Oral reading fluency deficits and children's reading difficulties

2.1 In the case of those children in your <u>First Class</u> learning support programme who experience difficulties in reading please indicate the extent you agree that the following are typically a contributing factor		strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
(v)	Children have difficulty in decoding grade level words <i>accurately</i>	0%	0%	0%	14%	7%	57%	22%
(vi)	Children have difficulty in decoding grade level words <i>automatically</i>	0%	0%	0%	14%	0%	50%	36%
(viii)	Children have difficulty reading with <i>expression</i>	0%	0%	0%	14%	7%	50%	29%
(ix)	Children have difficulty reading at an appropriate <i>rate</i>	0%	0%	0%	7%	7%	57%	29%



It would also appear from the following transcript that other reading fluency components such as prosody and automaticity were not as high on the reading instruction agenda when it came to intervening with struggling readers:

- R: Do you think that you can *teach* children to read with expression?
- FG2: I think it's something that children develop as they get older and they know more sight words. I'm not sure it's the first thing I'd be trying to teach a child who is struggling to read...especially if they can't even decode words.
- R: And how about teaching children to read with automaticity?
- FG2: What do you mean by automaticity?
- R: Well, before I tell you what I mean what comes to mind when you hear the word automaticity in relation to reading?
- FG2: Reading words by sight...like automatically when they see them.
- R: Yes, anything else?
- FG2: Reading a text without hesitation.
- R: And do you think that is something that struggling readers should be taught?
- FG2: Well it's something that they will need to do eventually, but I think it's difficult to teach that skill before children have the basics.
- R: The basics?
- FG2: Sight words, letter sounds, blending, punctuation...

Teachers in both focus groups confirmed that these oral reading fluency skills were not typically included in their reading instruction for struggling readers. One teacher commented that she 'didn't hear anything in college about reading fluency' (FG2:4, r9), while another pointed out that the lack of fluency instruction may be partly attributed to the absence of reading fluency in the English Language Curriculum (NCCA, 1999a; NCCA 1999b):

In our school we draw up our English plans in conjunction with the class teachers to make sure we are all singing from the same hymn sheet so to speak. Like we identify all the areas like phonics, comprehension, oral language, spelling and so on and then we identify the areas we are going to work on. But fluency is not on our grid as it doesn't have a content objective in the English Language curriculum. I do involve children in ways to develop fluency but I'm not sure I'd say I 'teach' it. (FG2:4, r8)

This observation correlates with observations on the paucity of references to fluency related activities across the strands of the English Language Curriculum (NCCA, 1999a) as previously noted in Table 2.1. One of the teachers reported that she was aware of strategies for teaching oral reading fluency as a result of her training as a Reading Recovery teacher and attendant courses with the PDST (Professional Development Service for Teachers):

We were introduced to strategies that helped children to read with more pace and accuracy...children were timed while they read an unseen passage and then timed again after a period of instruction. This gave an indication of children's progress in reading fluency. (FG1:4, r12)

It is interesting to note that this description of teaching oral reading fluency once again focuses very much on pace and accuracy, with the omission of any reference to automaticity and prosody. This corresponds with the findings already discussed. In general, it may be concluded that although teachers acknowledge that children need to read with pace and accuracy, the teaching of strategies to achieve these skills along with strategies for improving children's reading prosody are not typically included in lessons for struggling readers.

This conclusion is further supported by findings regarding instructional emphases as probed in Q2.5 on the survey (see Appendix 2). This question asked learning support teachers to report the frequency with which they included individual reading fluency activities in their reading lessons. Considering twenty eight percent (28%) of teachers reported that they included instruction in oral reading fluency in every lesson or once or twice a week (see Figure 5.3), it would be reasonable to expect that reading fluency activities would be frequently employed by those teachers. However, when the responses of these teachers were cross-tabulated with their responses to Q2.5 there was a contradiction in evidence. For instance sixty-six percent (66%) of the teachers who indicated that they taught oral reading fluency frequently reported that they *infrequently* or *rarely* taught phrasing to develop oral reading fluency, half of these same teachers (50%) *infrequently* or *rarely* used choral reading of text as an activity, and only a quarter of them (25%) *frequently* used timed repeated reading as an instructional activity. Research on reading identifies each of these activities as core elements of oral reading fluency instruction (Allington, 2009; Kuhn & Rasinski, 2011; Kuhn & Stahl, 2004; Rasinski, Homan & Biggs, 2009).

This suggested that teachers were unsure of what constitutes oral reading fluency instruction.

Further analysis in this regard revealed that teachers were more knowledgeable about some strategies than others. Teachers were familiar with approaches such as repeated reading, Readers Theatre and echo reading but were less aware of other strategies like antiphonal reading and slide and glide phrasing (Rasinski, 2010). Furthermore, despite being familiar with some of these strategies, teachers indicated that they did not include them frequently in their learning support programmes.

In order to explore their understanding of oral reading fluency at a deeper level, teachers were probed on their interpretation of *disfluent* reading. One teacher described it as ‘choppy reading’ (FG2:4, r2), while another referred to it as ‘reading in a word-by-word fashion or when children do not put words together into phrases’ (FG2:4, r11). One interviewee elaborated by saying that disfluent reading also tended to ‘lead to difficulties in comprehension’. This view is consistent with Rasinski (2010) who points out that word-by-word reading denies readers the opportunity of gaining meaning carried by combinations of words, so teachers need to include instruction on phrasing in their reading lessons to ameliorate this situation.

However, despite their concerns in relation to the ‘word calling type of reading’ (FG1:4, r7), which meant children ‘often didn’t understand what they read even though they read all the words correctly’ (FG1:4, r10), a significant majority (79%) of teachers *rarely* or *never* taught phrasing to develop oral reading fluency (Figure 5.8).

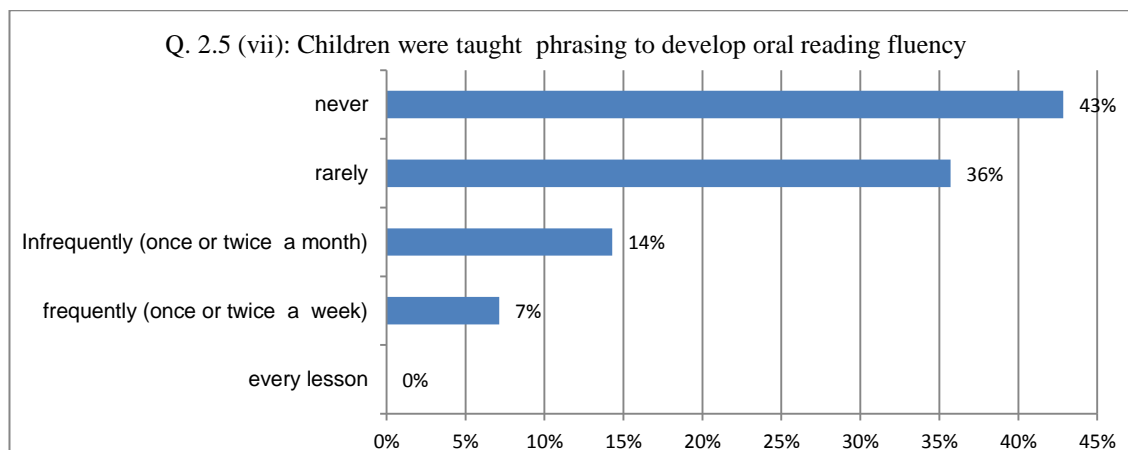


Figure 5.8: Frequency of instruction of phrasing as reported by LS teachers

When pressed further on why this was the case, one teacher gave the following insight into why phrasing was not a frequent feature of instruction for struggling readers:

When children are having difficulty decoding individual words it's not likely that they are going to read a full phrase as a unit. I know that's what we would like to hear when they're reading but if they are stopping before every word to sound it out they are not going to read a phrase with fluency. Maybe if they were very familiar with the text it might happen...but then sure it's like they are reading or saying it from memory. (FG2:4, r14)

This observation was interesting for a number of reasons. Firstly, it appeared from this description that children were reading text at a level below instructional level and potentially at frustration level as identified by Rasinski (2004b, see Table 3.2) Secondly there was an assumption that repeated reading of the same text or assisted reading of the text was likely to lead to rote learning. It was noted that while teachers agreed unanimously on the benefits of repeated reading of the same text, they had reservations about reading the text repeatedly for children. While acknowledging the benefits of modelling fluent reading of text before independent reading was attempted, one teacher was concerned that 'you wouldn't know if children could decode or not when they went to read it' (FG1:4, r7). It was not surprising then that teachers *rarely* or *never* (93%) had children listen to fluent modelling of text on audio (see Figure 5.9).

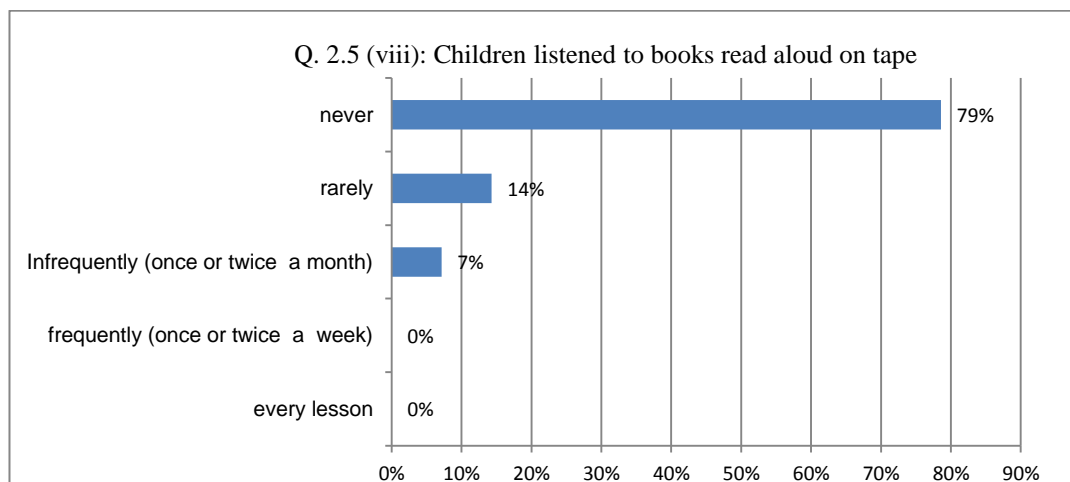


Figure 5.9: Frequency of children listening to fluent audio of text

Despite the apparent lack of fluency oriented reading instruction included in reading programmes as indicated by learning support teachers, there were encouraging reports of the use of one method found to be an effective remedial reading strategy with struggling readers. Repeated reading is regarded as a major, if not the primary, instructional component in the vast majority of interventions designed to increase learners' fluency (Kuhn & Stahl, 2003). Research on this method indicates that when students orally practice a piece of text, they improve on their rate, accuracy and prosody (Samuels, 2006) and hence develop their comprehension of that text (Rasinski, 2010). Over a third of respondents (36%) reported that they engaged children in repeated reading of the same text in the course of every reading lesson with a further forty three percent (43%) including it in their lessons once or twice a week (Figure 5.10). With almost eighty percent (80%) of respondents reporting that they frequently used this reading strategy, it was the most popular oral reading fluency activity employed by learning support teachers.

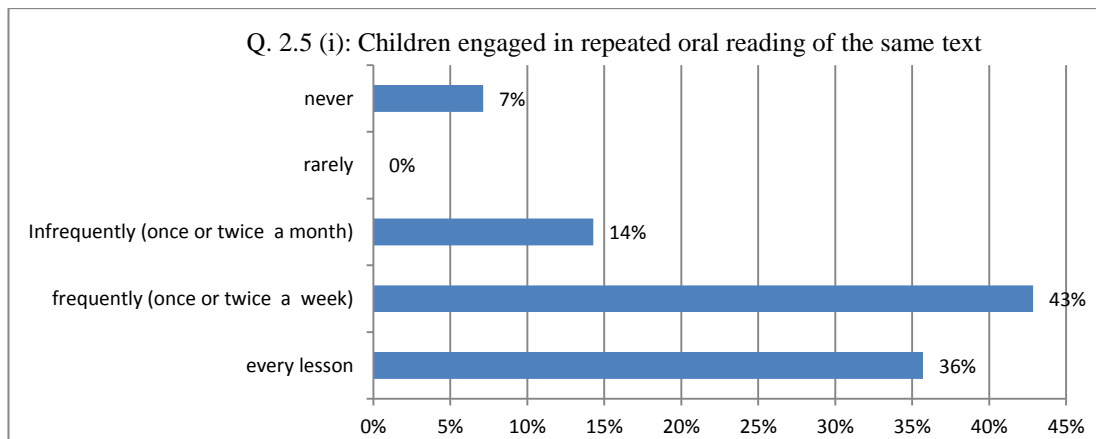


Figure 5.10: Frequency that children were engaged in repeated oral reading of text

One respondent in the survey took a contrary stance on this issue, expressing the view that ‘children get bored of reading the same text over and over again’ (Appendix 4: Q3.4, R11). This comment was used to gain further insight into teachers’ views on repeated reading. Discussions revealed that there was little support among interviewees for this stance with the following comment being representative of teachers’ views:

I definitely wouldn’t agree that children get bored with reading the same text. Obviously just reading the same text over and over again

in a round robin manner would not be recommended, but young children enjoy hearing and reading stories that they are familiar with...I suppose it depends on how you approach it. (FG1:4, r15)

Further probing gave an insight into the reasons why learning support teachers used repeated reading as an instructional method in their learning support programmes. It was pointed out that repeated reading provided more benefit to struggling readers than to more competent readers ‘who tend to be less content to engage in reading the same text over and over’ (FG1:4, r11). One teacher observed that children who struggle with reading need to engage with the same text many times ‘before they can move from decoding individual words to understanding what is read’ (FG1:4, r17). Another posited that children have a better chance of ‘reading more words by sight’ if they encounter them many times in the same context (FG1:4, r15). Two general reasons were proffered by teachers in support of repeated reading of the same text. One was that repeated reading afforded children the opportunity to ‘learn the vocabulary and so have a better chance of understanding what is read’. The other was that ‘more work could be done on word study of individual words in context when reading the same text many times’ (FG2:4, r16). The potential for repeated reading in developing oral reading fluency was also probed in the interviews as can be seen from the following transcript:

R: Do you think that repeated reading would be helpful in developing oral reading fluency?

FG2: I’m sure that children would read the same text with more fluency if they read it many times, but we have to be careful that they are not just learning it off by heart.

R: Mmm, that’s interesting. Could a child improve on their reading fluency by reading the same text even if they knew it by heart?

FG2: I don’t think they would be improving on their fluency necessarily. They might read all the words correctly but they still mightn’t be fluent. I think that there is a better chance that the children will improve on their decoding of words and understand the text rather than get fluent.

One strategy for motivating students to repeatedly read individual passages with a view to improving oral reading fluency is Readers Theatre (Martinez *et al.*, 1999; Rasinski & Hoffman, 2003). When teachers were asked in the survey how often they used Readers Theatre in their learning support programmes, over half of

respondents (57%) reported that they *never* used it with a further fourteen percent (14%) *rarely* using it as an instructional tool (Figure 5.11).

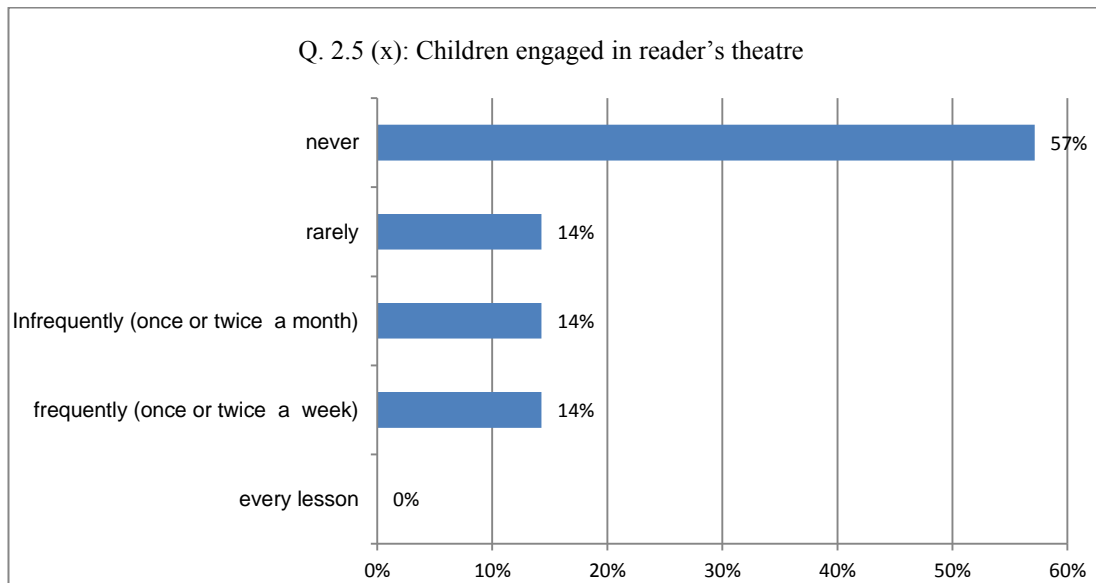


Figure 5.11: Frequency that children were engaged in Readers Theatre

This finding is corroborated by teachers' views on the level of importance they placed on giving children regular opportunities to read aloud as a performance activity. Only seven percent (7%) of the respondents rated this performance related activity as *vital*, with a further thirty-six percent (36%) viewing it as *important* in the context of motivating children to read (see Figure 5.12).

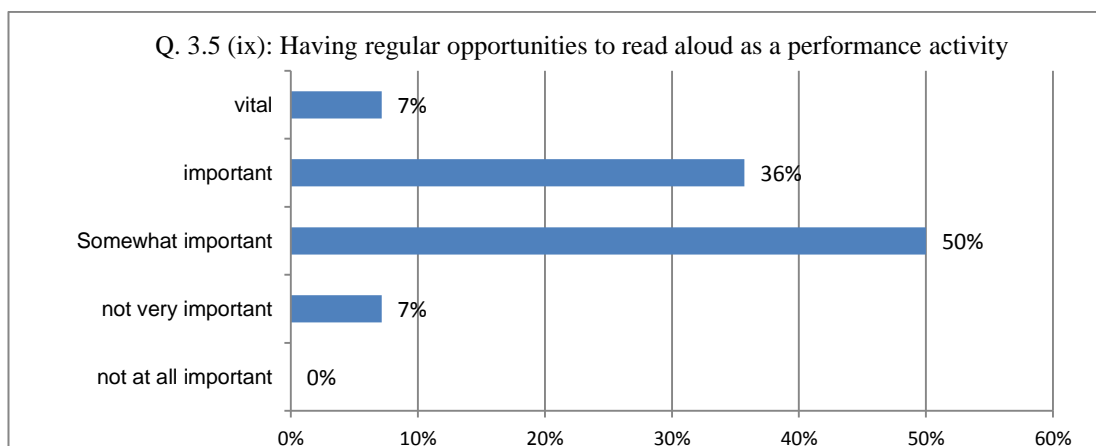


Figure 5.12: Rating on the importance of reading aloud as a performance activity

Despite evidence of the importance of repeated reading in developing oral reading fluency (Kuhn & Stahl, 2003), these findings imply that teachers used this strategy more as a means to increase sight word proficiency and to develop reading comprehension than other discrete fluency skills.

### 5.5 Teachers' perceptions of the motivation for reading of struggling readers

Research on motivation and literacy achievement has provided evidence that success in reading demands the integration of cognitive, language and motivational engagement (Guthrie & Wigfield, 2000). Given the focus of the intervention for the second phase of the study, it was imperative in this initial phase to examine teachers' perceptions of the motivation for reading of struggling readers in their learning support programmes. In exploring their views on motivational engagement teachers were asked to respond to a range of statements regarding the motivation for reading that was typical of children in their learning support programmes. In addition to this, teachers were asked to rate the importance of selected reading-related activities in improving children's motivation for reading.

The data revealed that the vast majority of teachers (86%) *strongly agreed* that children in their reading support programmes made most progress when they were motivated to read (see Figure 5.13), with a similar percentage (86%) *agreeing* that if children were motivated they would be more likely to improve their reading ability (see Figure 5.14).

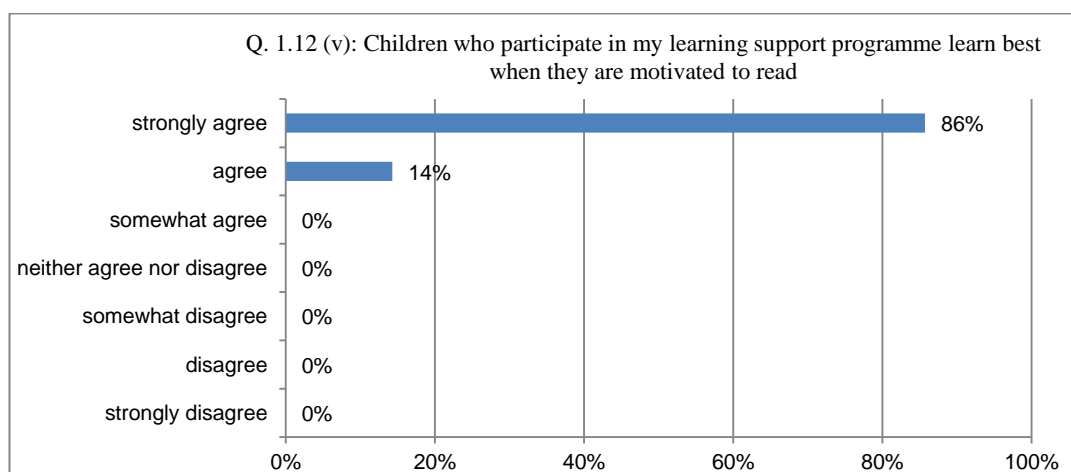


Figure 5.13: Children learn best when motivated to read



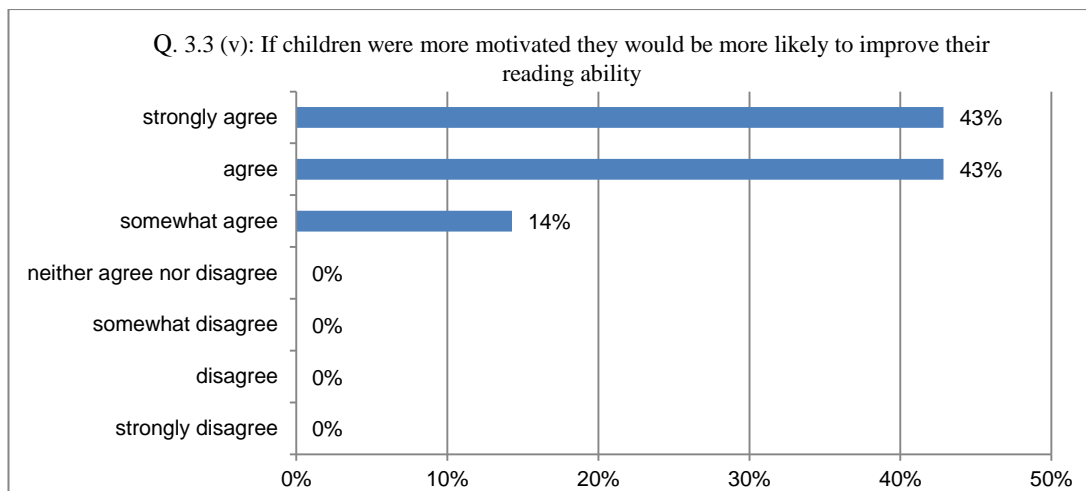


Figure 5.14: Motivated children and reading ability

It was interesting to note that despite the importance of motivation in reading achievement as attributed by learning support teachers, almost three quarters (72%) of them also *agreed* or *strongly agreed* that children in their reading support programmes typically had low motivation for reading (Figure 5.15).

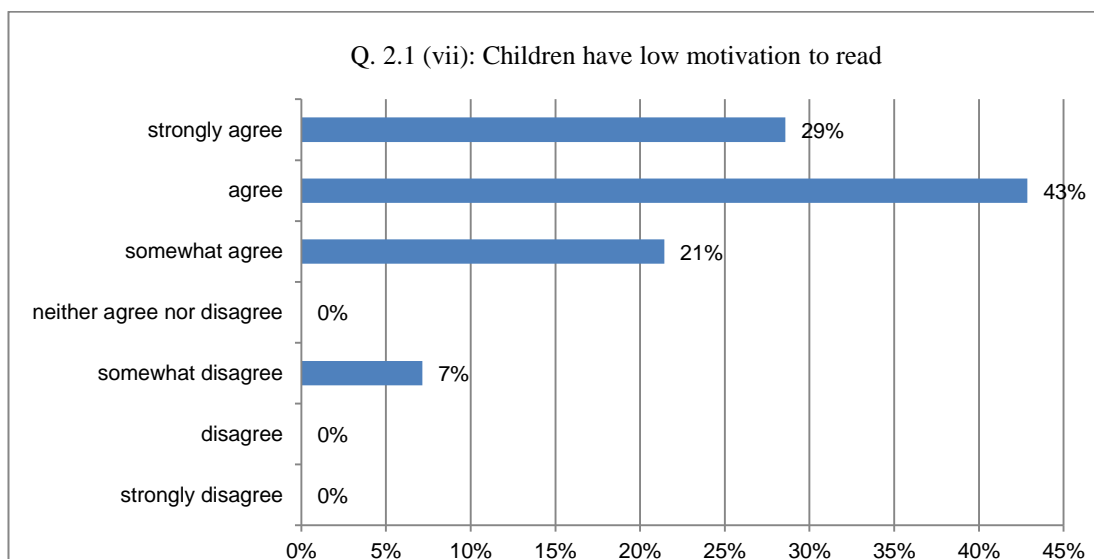


Figure 5.15: Motivation levels for reading of children in LS programmes

Interviewees were asked if addressing low motivation was, therefore, a priority in teaching young children who were struggling with reading. In answering this question teachers identified the perils and often temporary benefits of extrinsic motivation in relation to academic achievement (Stipek, 1996). One teacher reported

that success in motivating children was often aligned with tangible rewards and did not have an enduring effect:

Children in my group often are motivated to finish their book at the level they are on because they want to get the star or the certificate, but this is short-lived as they rarely would want to read other books when finished. (FG1:5, r5)

Another teacher identified the value of intrinsic motivation in predicting reading achievement:

When I get a new group for reading...maybe at the beginning of First Class... I know pretty much straight away the children who are going to get on well. They'll go looking to read a book and are enthusiastic about reading and often want to bring a book home. (FG1:5, r15)

This is consistent with research by Deci *et al.* (1999) which found that 'intrinsic motivation energises and sustains activities through the spontaneous satisfactions inherent in effective volitional action' (p. 658). These observations on intrinsic and extrinsic motivation also find resonance in the literature on motivation and reading achievement. A widespread research finding is that internal motivations (personal interest, natural curiosity) are positively correlated with reading achievement, while external motivations (pressure, requirements, rules) are not correlated with reading achievement (Guthrie & Coddington, 2009). Teachers in this study were of the view that it was difficult to motivate children in an area that they were already failing. As a consequence engaging reluctant readers became a 'chicken and egg situation where children would be motivated if they experienced success but would only experience success when they had a level of competence' (FG1:5, r3). In recognising the central role of motivation in the reading process, another interviewee stated that if she could 'only get them motivated to read on their own volition they would be half way there' (FG2:5, r4). This is consistent with research on motivation and reading which suggests that as students become more motivated to engage in the reading process, they are subsequently more likely to be successful (Wigfield & Guthrie, 1997a).

In the light of this research teachers were asked if they regarded their instructional methods as motivational. The following transcript of a sample

conversation on this topic gives another insight into the type of instruction that pervades in learning support classrooms and is consistent with the highly cognitive approach described earlier in this chapter:

R: How do you set about motivating your struggling readers for reading?

FG2: The children who come to my reading group very often have poor motivation for reading. They have been in school for two years and their experience of reading has not been positive, so one of my first objectives is to make sure they experience success. I usually start with very simple texts and we identify all the sounds that are needed to decode these texts. We also play sight word games like ‘go fish’ and ‘snap’ and matching activities.

R: And do you find that motivating for children to read?

FG2: Well I’m not sure about the instructional part of the lesson but they are motivated to play the games... if I didn’t play the reading games they would definitely remind you.

R: And is there anything else you do that motivates them to read?

FG2: When children read their list of sight words they get a reward, a star, and when they finish their book at whatever level they are at, they also get a reward. This is very motivational for them.

The impetus to continue to probe teachers on children’s motivation for reading was provided by responses to the question on the survey rating children’s perceived interest in reading. It was noteworthy that fifty percent (50%) of teachers who indicated that children had low motivation for reading also *agreed* or *strongly agreed* that children were typically interested in reading (see Figure 5.16). A distinction was made here between interest in reading and motivation for reading (Guthrie & Wigfield, 2000). Teachers explained that many children in their support programmes demonstrated an interest in reading by ‘enjoying listening to stories, reading their levelled readers and playing the language games which we frequently use in class’ (FG1:5, r5), but many of these children ‘had little motivation to read a book outside of formal lessons or at home’ (FG1:5, r6).

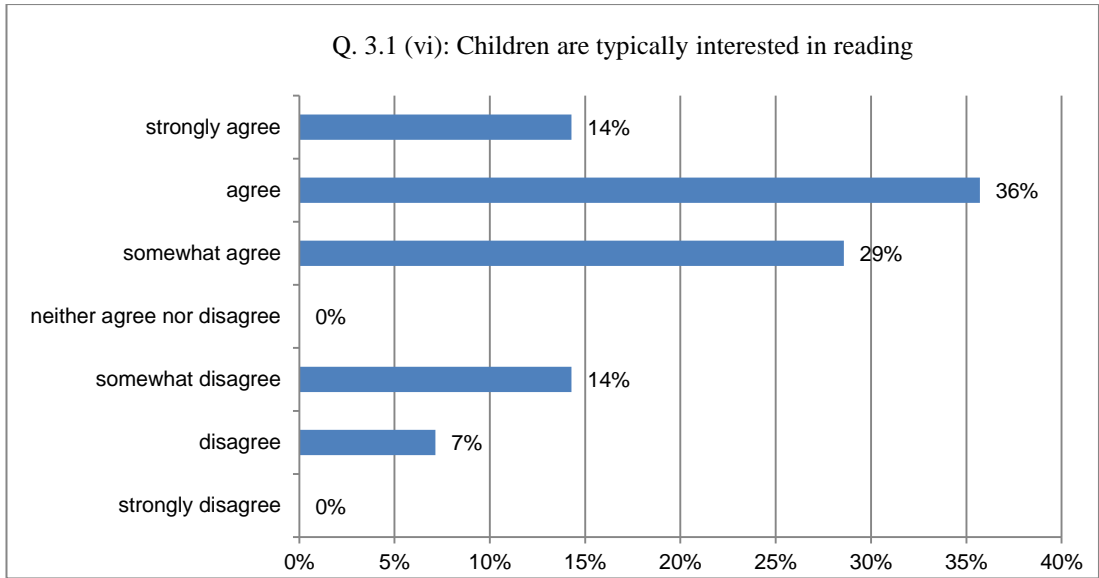


Figure 5.16: Teachers' perceptions of children's interest in reading

This was reinforced by responses to a question about children's independent choice of play-time activity. No teacher expressed agreement that children typically would elect to read a book if given free choice of play time activity (see Figure 5.17).

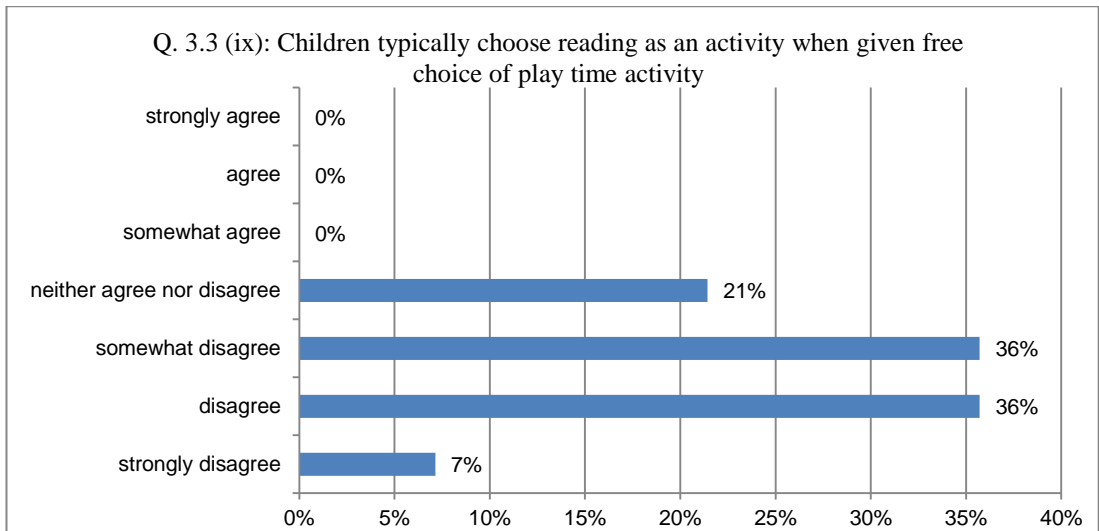


Figure 5.17: Choice of reading as a play time activity

Teachers attributed this finding to the fact that struggling readers are not intrinsically motivated to read on their own and so read less than more competent readers. This is borne out by literature on motivation and reading which indicates that students who are intrinsically motivated spend three hundred percent (300%)

more time reading than students who have low intrinsic motivation for reading (Wigfield & Guthrie, 1997b). It also finds resonance with research by Morgan and Fuchs (2007) which found that teachers rated poor readers as less intrinsically motivated to read, more likely to avoid reading tasks in the classroom, and less likely to self-select book reading as a free-time activity than good readers.

Consistent with these findings are the responses offered by teachers to an open-ended question seeking other characteristics that typically describe the attitude to reading of struggling readers:

‘Children are generally excited about books but lack motivation to read on their own.’ (Appendix 4: Q3.2, R11).

‘Reading is typically an effort. Children are not motivated to read except when it’s associated with games.’ (Appendix 4: Q3.2, R5).

‘Children are only motivated to read their levelled readers.’ (Appendix 4: Q3.2, R6).

One question in the original survey (Q. 2.1, Appendix 2) featured a list of statements derived from the literature on reading instruction that have been identified as causal factors for children with reading difficulties (Allington, 2012; Pressley, 2006; Snow, Burns & Griffin, 1998). Respondents were required to rate their level of agreement or disagreement with each statement as it pertained typically to children in their own learning support programmes. Teachers’ responses to these statements (see Table 5.3 and Figure 5.15 for sample responses) correlated highly with the research in this area. Research on surveys also points to the value of expansion type open-ended questions to explain, illuminate or expand on a specific quantitative question (Babbie, 1990; Moser & Kalton, 1971). In this instance it could be argued that more compelling data was gleaned through an open-ended element incorporated into question 2.1. This question invited teachers to indicate any other factors they felt contributed to the difficulties in reading experienced by children in their programmes. Over seventy percent (71.4%) of teachers alluded specifically to lack of motivation for reading as a contributing factor to difficulties in reading experienced by their children (see Appendix 4). Similarly, in another open-ended question, when teachers were asked to outline factors that typically describe the attitude to reading of children in their programmes, fifty percent (50%) cited low motivation (see Q3.2, Appendix 2 & 4).

As described by teachers then, motivation is a serious impediment for children with reading difficulties in First Class. This is significant given the research that increasingly suggests low motivation as an underlying cause of long-term reading difficulties (Baker, 2000; Pressley, 2002a; Quirk & Schwanenflugel, 2004; Wigfield, 2000).

## **5.5 Chapter Summary**

The questionnaire and focus group interviews in the first phase of this study sought to investigate current practice of learning support teachers in relation to struggling readers and to identify the extent to which these teachers employ oral reading fluency strategies in their literacy instruction. The findings confirm that the primary focus of instruction by learning support teachers is on teaching reading from a bottom up approach, with an emphasis on phonics skills and decoding rather than contextual reading of continuous text in an automatic and expressive manner. While the emphasis on these cognitive aspects of reading and phonics in particular is reflective of the literature on interventions for struggling readers (Allington, 2012; Guthrie & Wigfield, 2000), it may also point to a lack of awareness by teachers of the benefits of other motivating methods such as fluency oriented reading instruction (FORI). This raises some issues in relation to the instruction that young children receive in learning support programmes at a critical juncture of their development (First Class) and which may have an effect on their long-term interest, attitude and achievement in reading. These findings have been replicated by other researchers (e.g. Knapp, 1995; Allington & McGill-Frazen, 1989), with similar investigations revealing that struggling readers frequently receive qualitatively different and less motivating instruction compared to their higher achieving peers (Ysseldyke *et al.*, 1989; Duke, 2001). The findings of this study may highlight the need to re-assess previous and current approaches to interventions with struggling readers in their formative years.

A fluency-oriented approach to literacy instruction supported by the implementation of fluency strategies has been shown to greatly assist the reading development of struggling readers and facilitates a greater level of comprehension than strategies that focus exclusively on learning skills from a bottom up approach (Kuhn *et al.*, 2010; Stahl and Heubach, 2006). In general teachers in this study

appeared unaware of the potential benefits of oral reading fluency instruction when intervening with struggling readers. The data presented in this chapter revealed that while teachers were familiar with some of these strategies they did not include them frequently in their learning support programmes. The findings suggest that a narrow interpretation of reading fluency and limited knowledge of fluency oriented strategies are contributing factors in this regard. It is clear that the more traditional approaches employed to teach struggling readers need to be complemented by instruction that embraces the engagement perspective.

The findings presented in this chapter also report on the perceptions and beliefs of learning support teachers regarding the attitude to reading and motivation for reading of struggling readers in their programmes. The data revealed that teachers believed that motivation was a critical factor for children in making progress in reading in their programmes. The findings also confirmed teachers' perceptions that children with reading difficulties typically had low motivation for reading.

The second phase of this study examined the effects of fluency oriented reading instruction on the motivation for reading of children with reading difficulties in First Class. The findings and analysis of data from the implementation of the reading intervention are addressed in the next chapter.

## 6 PRESENTATION AND ANALYSIS OF FINDINGS (PHASE TWO)

### 6.1 Introduction

The current practice of learning support teachers in relation to struggling readers was examined in the previous chapter along with teachers' beliefs regarding the attitude to reading and motivation for reading of these students. The findings, as outlined there, informed the design of a reading intervention for struggling readers in First Class, which constitutes the second phase of this study. This chapter presents the findings and analysis of the research conducted before, during and after this intervention. The intervention, which focused predominantly on fluency oriented reading instruction (FORI), was carried out in three schools selected from the initial survey sample conducted in Phase One. It was implemented on a daily basis by learning support teachers who had completed twenty hours of professional development on fluency oriented reading instruction prior to the study. These teachers also contributed to the design of the intervention, the selection of texts and the development of FORI lesson plans.

The learning support teachers in each school, in conjunction with class teachers, selected struggling readers who were identified as having low motivation for reading as potential candidates for the intervention. After an initial assessment of their reading ability and their motivation for reading, fifteen children were selected to participate in the intervention. The findings and analysis presented here focuses on the effects of this intervention on both the reading achievement and the motivation for reading of the participants. In particular the discussion and analysis addresses the following research questions:

1. What are the effects of FORI on the *reading achievement* of struggling readers?
2. What are the effects of FORI on the *reading self-efficacy* of struggling readers?
3. What are the effects of FORI on the *reading orientation* of struggling readers?
4. What are the effects of FORI on the *perceived reading difficulty* of struggling readers?



## **6.2 Effects of FORI on reading achievement of struggling readers**

The information supplied by class teachers and learning support teachers on children's reading ability was crucial in selecting participants. Student selection for inclusion in the intervention was primarily based on teacher observation regarding children's motivation for reading and informal reading assessment procedures carried out in the course of identifying children for learning support. The informal reading assessments used in the selection procedure were reinforced by results on standardised tests conducted in each school at the beginning of First Class. In order to avoid potential test familiarisation or possible bias, it was decided not to use any of these standardised measures in assessing children's reading achievement for the purposes of the current study. Research also cautions against using any individual test as the sole basis for diagnoses or instructional decisions in literacy (Wiederholt & Bryant, 2012). Hence, it was decided to use quantitative measures in the form of standardised reading assessment instruments and criterion referenced tests to gain accurate information on children's reading achievement. Specifically, these assessments were used to establish baseline data on children's word reading efficiency and their oral reading fluency ability before the intervention and to measure the effects of the instruction on these reading factors after the study.

After careful consideration of the available options, the TOWRE-2 (Test of Word Reading Efficiency) and the GORT-5 (Gray Oral Reading Test) were selected as standardised measures to produce data on children's reading achievement. Both these reading assessments produce norm-referenced scores based on a large nationally sampled group (Wiederholt & Bryant, 2001; Torgesen, Wagner, & Rashotte, 1999). As the intervention was designed around fluency oriented instruction it was important to get accurate and current data on children's oral reading fluency ability. Accordingly, a Fluency Timed Reading Passage from *Leaning A-Z* (a criterion-referenced one-minute timed assessment of oral reading fluency) and the National Assessment of Educational Progress's (NAEP) Oral Reading Fluency Scale were chosen for this purpose. Details of how these measurements provided evidence of the effects of FORI on reading achievement are outlined in Appendix 34. The results of each assessment give us an insight into the changes in achievement in the context of children's word reading efficiency and their oral reading fluency over the course of the study.

It is important to note that the type of instruction involved in the intervention represented a departure from normal procedure by the participating learning support teachers. Prior to the study they had expressed reservations about the potential efficacy of the proposed instruction to ameliorate children's reading difficulties and were concerned about how any effects would be independently measured. While they understood the philosophy of the highly supportive fluency oriented reading instruction which underpinned the intervention, they were somewhat sceptical that this approach would deliver the same outcomes as their habitual and more traditional approach to teaching reading. These fears were somewhat allayed when it became clear that a significant element of the instruction for children involved word study, albeit in a different format and context, and that a robust and independent assessment of children's reading attainment would be carried out before and after the intervention.

The findings and analysis presented in the following sections are based primarily on the results of the independent quantitative measures carried out and address the first research question as described above.

### **6.2.1 Children's achievement prior to the intervention**

The following sections provide baseline data on children's reading achievement prior to the study. While results and analysis of each assessment are presented separately to identify measures of achievement in the various reading skills, an overall interpretation of the research findings in relation to the impact of FORI on reading achievement is included as a summative commentary at the end of the section.

#### ***6.2.1.1 Performance on Test of Word Reading Efficiency (TOWRE- 2)***

The TOWRE-2 measures an individual student's ability to pronounce printed words accurately and fluently. The assessment also measures a student's growth in sight word reading and word decoding from one assessment time to another and so was an ideal fit for the purpose of this study. The subtests of the TOWRE-2 identify children's sight word efficiency and phonemic decoding efficiency and produce five scores for comparison: a raw score, age and grade equivalency scores, percentile ranks, and scaled scores for each subtest. The authors of this reading assessment urged cautious interpretation of the age and grade equivalency scores since those

values were based on averages, interpolation, extrapolation, and smoothing (Torgesen, Wagner & Rashotte, 1999). Hence, they propose the Total Word Reading Efficiency Index (TWRE) as the most reliable score for reporting on achievement on the TOWRE-2. The calculation of the TWRE is based on the combined sight word efficiency and phonemic decoding efficiency subtest standard scores. Based on the recommendation of the authors, the TWRE was chosen as the primary statistic tool for analysis of the results and is used to report student achievement before and after the intervention.

The TWRE score attained by students is matched with corresponding descriptive terms ranging from ‘very poor’ to ‘very superior’. Each of these terms is associated with a level of performance as identified by the TWRE scaled score. For example, scaled scores ranging from 90 to 110 are considered to fall within the ‘average’ range, whereas scores between 80 and 89 are considered ‘below average’. The term ‘poor’ is associated with scores between 70 and 79 and ‘very poor’ for any scores below 70 (see Table 6.1 for a full key to descriptive terms). Descriptive terms are identical for scores on the TOWRE-2 and the GORT-5 and were used only in verbal communication to parents in the course of the study. They are included in results here for illustrative purposes rather than comparative analysis.

Table 6.1: Descriptive Terms for scores on TOWRE-2 (TWRE) & Gort-5 (ORI)

<b>TWRE &amp; ORI</b>	<b>Descriptive term</b>
>130	Very superior
121 - 130	Superior
111 - 120	Above average
90 - 110	Average
80 - 89	Below average
70 - 79	Poor
<70	Very poor

All children were assessed on Form A of the TOWRE-2 immediately before the FORI instruction commenced. The results presented in Table 6.2 identify the TWRE score for each student along with the corresponding descriptive term. The overall mean score and the standard deviation among scores for the total group is also included. The pre-intervention results presented in Table 6.2 indicate that the reading

ability of the group involved in this study was below average with the overall mean ( $\bar{x} = 86$ ) significantly lower than the normed sample ( $\bar{x} = 100$ ). Results for individual students show that the majority of students scored below average ( $< 90$ ) with three students recorded as ‘poor’ ( $< 80$ ) and one student ‘very poor’ ( $< 70$ ). Given that a TWRE score of 90-110 is considered average (see Table 6.1) and constitutes 49.51 percent of the normed sample (Torgesen, Wagner, & Rashotte, 1999) the individual scores confirmed that this group of children were experiencing significant reading difficulties on the areas assessed by TOWRE-2.

Table 6.2: Results of TOWRE-2 (Pre-intervention)

<b>TOWRE-2 (TWRE)</b>								
<b>Pre-Intervention</b>								
<b>Belle School</b>			<b>Ben School</b>			<b>Bon School</b>		
<b>Student Code</b>	Total Word Reading Efficiency Index	Descriptive Term	<b>Student Code</b>	Total Word Reading Efficiency Index	Descriptive Term	<b>Student Code</b>	Total Word Reading Efficiency Index	Descriptive Term
<b>SA1</b>	104	Average	<b>SB1</b>	90	Average	<b>SC1</b>	83	< Average
<b>SA2</b>	89	< Average	<b>SB2</b>	76	Poor	<b>SC2</b>	85	< Average
<b>SA3</b>	84	< Average	<b>SB3</b>	82	< Average	<b>SC3</b>	76	Poor
<b>SA4</b>	93	Average	<b>SB4</b>	101	Average	<b>SC4</b>	67	V. Poor
<b>SA5</b>	97	Average	<b>SB5</b>	86	< Average	<b>SC5</b>	73	Poor
<b>MEAN</b>	93.4		<b>MEAN</b>	87		<b>MEAN</b>	76.8	
<b>OVERALL MEAN</b>			86 (< aver)	<b>MEAN (NORMED SAMPLE)</b>			100	
<b>OVERALL ST DEV (<math>\sigma</math>)</b>			10.4					

As the TWRE index is a cumulative score based on scaled scores for sight word efficiency and phonemic decoding efficiency, an interrogation of the results attained on individual subtests was warranted. This would indicate if the reading impairment was predominantly due to difficulties in one skill over another. Comparison of scaled scores revealed a very strong correlation ( $r = 0.84$ ) between the subtests and so confirmed a balanced overall reading attainment result. However, analysis of scores on isolated elements of the assessment did identify particular difficulties for some individual students (SA3, SA4, SA5, SC2, SC4) on the Phonemic Decoding Efficiency subtest. This subtest assesses the reader’s competence in applying

graphophonemic knowledge in decoding words and stresses the ability to fully analyse each word to produce the correct pronunciation. The poor performance by this small subset of students in this area was consistent with the findings of their learning support teacher when selecting them for their reading programmes.

The word reading efficiency results as reported by the TWRE index not only indicated an overall low achievement rate among students but also identified the range of ability among the participating students ( $\sigma = 10.4$ ). In some instances students performed within the average range of ability on the TOWRE assessment (e.g. SA1, SA4, SA5, SB1, SB4). However, the overall achievement profile of these students as identified by the other assessments carried out and school records of reading achievement warranted their inclusion in the intervention. Although not relevant to the particular focus at this phase of the study, it was also noted that there was a difference between student attainments across the three sites as revealed by the mean TWRE score for individual schools (see Table 6.2).

#### ***6.2.1.2 Performance on Gray Oral Reading Tests (GORT-5)***

The GORT-5 is a comprehensive assessment of children's oral reading skills measuring four key areas: rate, accuracy, fluency and comprehension. Raw scores are recorded for these four areas as well as a sum of scaled scores which is used to determine the student's Oral Reading Index (ORI). The reading rate score is determined by the number of seconds it takes the student to read aloud the passage while the accuracy score is derived from the number of words the student correctly pronounces during the reading. The rate and accuracy scores are combined to determine the overall fluency score. The comprehension score is the number of correct responses the student has to the questions about the passage. Finally, the ORI is a composite score determined by combining the student's fluency and comprehension scaled scores. Wiederholt & Bryant (2012) recommend the ORI score as the most reliable GORT-5 measure of a student's overall oral reading ability. Hence this composite score is used to report on student reading achievement in the current study. Similar to the TOWRE test, the ORI composite score is matched with descriptive terms ranging from 'very poor' to 'very superior' (Table 6.1).

Results from the GORT-5 test administered prior to the intervention indicated that children had significant difficulties in oral reading ability. The majority of students again scored below average ( $< 90$ ) on the ORI, with 50 percent

of children in the ‘poor’ or ‘very poor’ category (see Table 6.3). As the pre-intervention results indicated, the overall mean score ( $\bar{x} = 75$ ) placed the group involved in this study in the ‘poor’ category and well below average in comparison with the normed sample ( $\bar{x} = 75$ ). Similar to the TOWRE-2, an ORI score of 90-110 is average and constitutes 49.51percent of the normed sample (Wiederholt & Bryant, 2012). The GORT-5 test also provides norms and mean ORI scores for a range of selected subgroups for more specific comparison purposes. Norms for children with reading problems are included as one such subgroup. The mean ORI score of 75 achieved by the intervention participants in comparison to the age-adjusted mean score of 81 for children with reading problems provided further confirmation of their oral reading difficulties.

Table 6.3: Results of GORT-5 (Pre-intervention)

<b>GORT-5 (ORI)</b>								
Pre-Intervention								
Belle School			Ben School			Bon School		
Student Code	Oral Reading Index	Descriptive Term	Student Code	Oral Reading Index	Descriptive Term	Student Code	Oral Reading Index	Descriptive Term
SA1	86	< Average	SB1	68	V. Poor	SC1	81	< Average
SA2	94	Average	SB2	81	< Average	SC2	76	Poor
SA3	81	< Average	SB3	52	V. Poor	SC3	70	Poor
SA4	94	Average	SB4	94	Average	SC4	40	V. Poor
SA5	89	< Average	SB5	52	V. Poor	SC5	70	Poor
<b>MEAN</b>	88.8		<b>MEAN</b>	69.4		<b>MEAN</b>	67.4	
<b>σ</b>	5.5		<b>σ</b>	18.3		<b>σ</b>	15.9	
<b>OVERALL MEAN (<math>\bar{x}</math>)</b>					75 (poor)			
<b>OVERALL ST DEV (<math>\sigma</math>)</b>					16.7			
<b>MEAN (NORMED SAMPLE)</b>					100			
<b>MEAN (READING PROBLEM NORMED SAMPLE)</b>					81			

Notwithstanding the overall low performance among students, there was still a considerable range of ability among the cohort as indicated by the standard deviation of all scaled scores ( $\sigma = 16.7$ ). Analysis of the individual elements of the GORT-5 assessment revealed a strong correlation between scores on the fluency and

comprehension subtests ( $r = .69$ ), with a marginal bias in favour of the fluency scores. This bias was not unexpected given the influence of fluency on comprehension in reading (Schwanenflugel *et al.*, 2006).

Given that the two standardised tests (TOWRE-2 and GORT-5) were assessing different elements of children's oral reading ability, a measure was warranted of how strongly the scores on each test are related. A comparison of the scores (TWRE and ORI) for all children is presented in Figure 6.1 and indicates a strong correlation ( $r = .65$ ) between both tests.

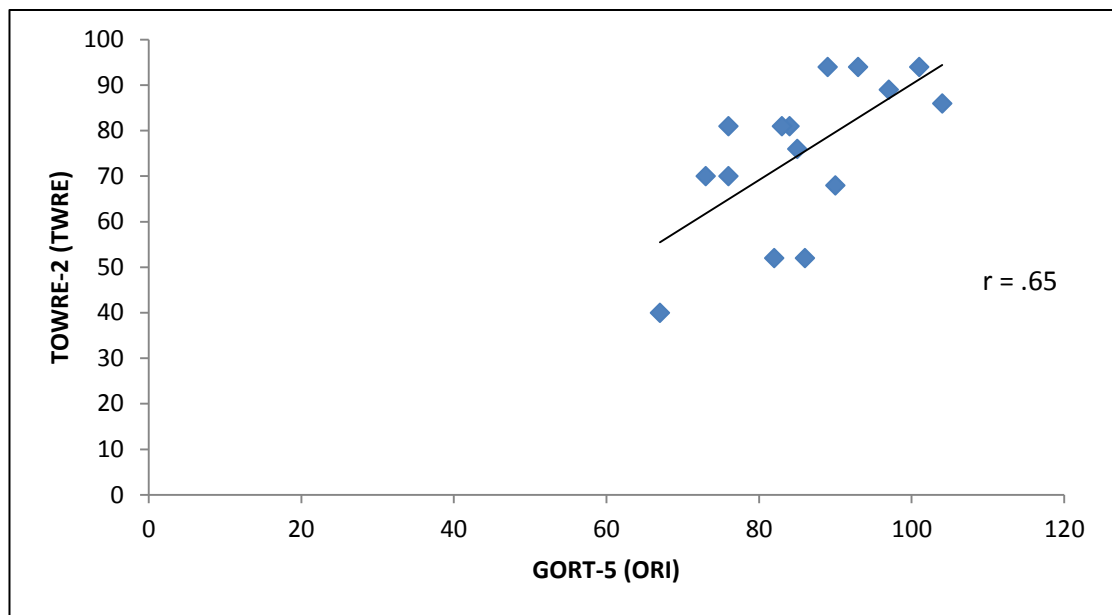


Figure 6.1: Correlation between TOWRE-2 and GORT-5 (Pre-intervention)

### ***6.2.1.3 Performance on the Fluency Timed Reading Passage (Learning A-Z)***

One of the issues discussed with the teachers in the focus group interviews in the initial phase of the study was their definition and interpretation of oral reading fluency. It was found that teachers typically placed a strong emphasis on rate and accuracy as essential components of reading fluency with less reference to the expressive nature of reading. Based on this interpretation, teachers considered children's poor oral reading rate and accuracy as strong contributors to their reading difficulties (see Table 5.3). Hence, it was prudent to conduct an examination of children's oral reading fluency ability that assessed both of these components.

In order to assess their reading rate and accuracy, students were asked to read a previously unseen levelled passage in one minute to measure the number of words read and the level of accuracy of the words read. To establish a student's rate of reading, the total number of words read (TWR) in a minute was recorded. A student's accuracy score was calculated by subtracting from the TWR score the number of words skipped, read incorrectly, or requiring assistance. The resulting total is referred to in this analysis as words read correctly per minute (WCPM).

The passage for this assessment was selected from *Learning A-Z*, a subscription-based website that offers criterion-referenced one-minute timed assessments of oral reading fluency. The Fluency Timed Reading Passage chosen had a total word count of 86 words and was regarded as appropriate for independent reading by children in Grade 2 (see Appendix 28). The results of this criterion-referenced test presented in Table 6.4 show totals for the words read in one minute (TWR) and the words read correctly in the same time (WCPM).

Table 6.4: Results of One Minute Timed Assessment of Oral Reading

<b>One Minute Timed Assessment of Oral Reading</b>								
Pre-Intervention								
Belle School			Ben School			Bon School		
Student Code	Total Words Read (TWR)	Words Correct Per Minute (WCPM)	Student Code	Total Words Read (TWR)	Words Correct Per Minute (WCPM)	Student Code	Total Words Read (TWR)	Words Correct Per Minute (WCPM)
SA1	30	18	SB1	25	17	SC1	30	15
SA2	27	16	SB2	18	12	SC2	20	9
SA3	30	19	SB3	19	12	SC3	22	13
SA4	32	24	SB4	35	29	SC4	17	4
SA5	33	20	SB5	17	8	SC5	24	14
MEAN	30.4	19.4	MEAN	22.8	15.6	MEAN	22.6	11
OVERALL MEAN (TWR)				25				
OVERALL MEAN (WCPM)				15				

Norms for words read correctly in one minute for children of the same age as the research participants are presented in Table 6.5. This table identifies the oral reading fluency rates (WCPM) of students in Grade 2 (equivalent to First Class) for various times in the school year based on an extensive study conducted by Hasbrouck &



Tindal (2006). In qualifying these norms Hasbrouck and Tindal recommend that a score falling within 10 words above or below the 50<sup>th</sup> percentile should be interpreted as within the normal, expected, and appropriate range for a student for that grade level at that time of year. Based on these norms the ‘average’ band of ability is interpreted as any score between 41 and 61 WCPM for students in First Class at the beginning of the school year.

As can be seen from the data in Table 6.4, the intervention participants did not perform within the average range of ability on this assessment. The overall mean score for WCPM ( $\bar{x}$  =15) was equivalent to performances between the 10<sup>th</sup> and the 25<sup>th</sup> percentile as per norms in Table 6.5. Research on curriculum base measurements for assessing reading fluency recommends that students scoring 10 or more words below the norms of the 50<sup>th</sup> percentile as per Hasbrouck and Tindal’s Scale ‘need a fluency-building program’ (McKenna & Dougherty Stahl, 2009, p.152).

Table 6.5: Norms for One Minute Timed Assessment of Oral Reading

<b>2006 Hasbrouck &amp; Tindal Oral Reading Fluency Data</b>				
Grade	Percentile	WCPM* Beginning of school year	WCPM* Middle of school year	WCPM* End of School Year
2 (equivalent to First Class)	90	106	125	142
	75	79	100	117
	50	51	72	89
	25	25	42	61
	10	11	18	31
*WCPM =Words Correct Per Minute				

The TWR and WCPM scores provide comprehensive and different information about the individual reader and were valuable in establishing baseline data for oral reading fluency ability. However, a reliable comparison to independent norms was also desirable for pre- and post-intervention comparison. To achieve this, the WCPM score for each student on the pre-intervention test was calculated as a percentage of the standardised norm for the beginning of the school year (Hasbrouck & Tindal, 2006). These scores reveal that the average WCPM score among students was just 30 percent of the norm for First Class at beginning of school year. All but one student (SB4) achieved less than 50percent of that norm (see Table 6.6).

The overall mean score of 25 total words read per minute (TWR) is also an indication of children’s reading ability. Unlike the WCPM score, the TWR total counts all words attempted by the child including words supplied by the assessor and words that are enunciated but incorrectly decoded. Because of the variable and subjective nature of this practice, there are no norms available for comparison. However, some deductions can be made based on the overall average of total words read ( $\bar{x} = 25$ ). Given that the TWR total always exceeds the WPCPM score, we can deduce that the children were reading at a rate significantly below the norm for this age group. Field notes recorded during the administration of this assessment indicate that students had significant difficulty reading words that they had not previously encountered. Very often a prolonged pause to view the word was followed by an attempt to sound out words from left to right with few examples of reading ahead to get assistance from context.

Table 6.6: WCPM as a percentage of standardised norms (pre-intervention)

<b>One minute ORF Assessment</b>		
Student	WCPM Pre-intervention	WCPM as % of norm for First Class at <b>beginning</b> of school year *
<b>SA1</b>	18	35.29
<b>SA2</b>	16	31.37
<b>SA3</b>	19	37.25
<b>SA4</b>	24	47.06
<b>SA5</b>	20	39.22
<b>SB1</b>	17	33.33
<b>SB2</b>	12	23.53
<b>SB3</b>	12	23.53
<b>SB4</b>	29	56.86
<b>SB5</b>	8	15.69
<b>SC1</b>	15	29.41
<b>SC2</b>	9	17.65
<b>SC3</b>	13	25.49
<b>SC4</b>	4	7.84
<b>SC5</b>	14	27.45
<b>MEAN</b>	15.33	30.07

\*norm = 51 (Hasbrouck & Tindal, 2006)

#### ***6.2.1.4 Performance on the NAEP Oral Reading Fluency Scale***

Research indicates that many studies measuring oral reading fluency focus on rate and accuracy exclusively, most likely because these are the most easily identifiable elements of fluent reading (Kuhn & Stahl, 2003; Rasinski, Homan, & Biggs, 2009). However, the prosodic elements of fluent reading such as pausing, phrasing and reading with intonation, though more difficult to recognise and assess, are also integral to sounding like a fluent reader. The FORI instruction for struggling readers in this study featured discrete oral reading fluency strategies such as Readers Theatre, slide and glide phrasing, and audio-assisted reading (see Appendix 14), which were designed to develop prosodic elements of reading. Hence, it was important to assess the impact the intervention had on this aspect of fluent reading.

Because the use of appropriate expression and intonation in reading is somewhat subjective, it is more difficult to assess than reading rate and accuracy. Fortunately, several scales used to measure fluent reading include prosodic and expressive reading elements (Miller & Groff, 2008). One such scale is the National Assessment of Educational Progress (NAEP) Oral Reading Fluency Scale (White, 1995). This scale was used before and after the intervention to provide a broad generalisation of children's oral reading fluency performance based on their attributes of phrasing and their level of expression. Detail of this scale is presented in Table 3.3.

All participating children were recorded reading a sample of text prior to the intervention. A prerequisite in selecting the passage for this assessment was that the children would be able to read at independent level to ensure prosody was the primary focus of assessment (Rasinski, 2004b). Decoding errors make the determination of reading prosody almost impossible and represent a pre-prosodic stage of reading development (Schwanenflugel, Hamilton, Kuhn, Wisenbaker, & Stahl, 2004). In each instance the class teacher selected the text as it was considered that they were best positioned to make an informed decision on choosing a highly decodable text for individual students. Interestingly, this requirement proved problematic in the case of one student (SC4) who struggled to read connected text at a level that would demonstrate prosodic reading. The learning support teacher resolved to expose this child to repeated reading of a familiar levelled text prior to

the assessment to ensure word identification was not a barrier and that a grading on reading prosody could be achieved.

Having a digital recording of all student reading samples meant that an accurate assessment could be made by listening carefully to the readings repeatedly and deciding a rating according to the NAEP rubric. In order to assign a rating from 1-4, the following elements of oral reading were considered: (i) the grouping of words including appropriate pauses; (ii) perceptible rise and fall in pitch; (iii) the reader’s ability to follow the syntax and sentence structure of the text; and (iv) the general expressiveness of the oral reading. McKenna & Dougherty Stahl (2009) express caution about the subjective nature of this type of assessment and recommend that a second party should also listen to the samples to ensure ‘interrater reliability’ (p. 149). In this case a colleague, with vast experience in reading assessment, collaborated on the ratings to help determine a reliable grading.

An examination of these results (see Table 6.7) reveals that 14 out of 15 children were assigned a grading of Level 1 on the NAEP scale, with the remaining child (SB4) assigned a grading of Level 2. Children’s reading samples were typified by word-by-word reading with little perceptible intonation and a struggle to preserve meaningful syntax. In the rare occasions that two-word or three-word phrases occurred, they were preceded or followed by inappropriately prolonged pauses. Research on reading achievement suggests that this level of performance is below average for children at this stage of schooling. Children in First Class are typically expected to have progressed beyond word-by-word staccato type reading to two-word phrases. They are also expected to have achieved some degree of expression when reading text at an independent reading level (Kuhn & Schwanenflugel, 2008).

Table 6.7: Level of prosody in children’s reading prior to the intervention

<b>NAEP Oral Reading Fluency Level</b>					
Pre-Intervention					
Belle School		Ben School		Bon School	
<b>Student Code</b>	Prosodic Level (1-4)	<b>Student Code</b>	Prosodic Level (1-4)	<b>Student Code</b>	Prosodic Level (1-4)
<b>SA1</b>	1	<b>SB1</b>	1	<b>SC1</b>	1
<b>SA2</b>	1	<b>SB2</b>	1	<b>SC2</b>	1
<b>SA3</b>	1	<b>SB3</b>	1	<b>SC3</b>	1
<b>SA4</b>	1	<b>SB4</b>	2	<b>SC4</b>	1
<b>SA5</b>	1	<b>SB5</b>	1	<b>SC5</b>	1

### **6.2.2 Summary of children's reading performance (Pre-intervention)**

Students selected to participate in this study were rated by their teachers as struggling readers based on standardised test results and the teacher's own professional observations. Results presented here confirm that this cohort of children was functioning well below average across a range of reading assessments. Scores on the two standardised assessments administered before the intervention indicated that children were experiencing difficulties with sight word efficiency, phonemic decoding efficiency (TOWRE-2) and with their reading rate and accuracy (GORT-5). While it is recognised the ultimate aim of all reading encounters is to understand what is read, in some instances the level of independent reading of the participants was so low that it precluded a score for comprehension. Hence, the scores from a subset of the GORT-5 which indicated that children had difficulties with comprehension were only reported in the context of an overall score for oral reading ability.

The criterion referenced tests were included in this study as a consequence of particular concerns expressed by teachers in the first phase of the study in relation to the oral reading fluency of children in their learning support programmes. The results of the One Minute Timed Assessment of Oral Reading confirmed that the reading rate and accuracy of these students was well below the norm for children at the beginning of First Class as indicated by TWR and WCPM scores respectively. The final assessment administered prior to the intervention (NAEP Oral Reading Fluency Scale) assessed the prosodic elements of children's reading. Once again results confirmed that the children involved in the study were performing at a very basic level (Level 1) in this regard. By way of summary all results of the reading assessments carried out prior to the intervention along with descriptive terms where appropriate are included in Table 6.8. It should be noted that learning support teachers were asked to carry out informal reading assessment of children's reading performance over the course of the intervention. Notes based on their observations and in particular in relation to progress in word reading efficiency and oral reading fluency were recorded in their reflective journals. This information informed the interpretation of the findings in relation to reading achievement at the end of the study.

The following section examines the reading achievement of children after the intervention when measured by the same range of assessments. To facilitate direct comparison as per the test-teach-test model (Wiederholt & Bryant, 2012) and to identify measures of progress in the various reading skills, results and analysis of these post-intervention assessments are presented on an individual basis.

Table 6.8: Summary of reading assessment prior to the intervention

	Student Code	TOWRE-2 (TWRE) Pre-Intervention		GORT-5 (ORI) Pre-Intervention		One Minute Reading Fluency Assessment Pre-Intervention		NAEP ORF Level Pre-Intervention
		Total Word Reading Efficiency Index	Descript. Term	Oral Reading Index	Descript. Term	Total Words Read	Words Correct Per Minute	Prosodic Level (1-4)
Belle School	SA1	104	Average	86	< Average	30	18	1
	SA2	89	< Average	94	Average	27	16	1
	SA3	84	< Average	81	< Average	30	19	1
	SA4	93	Average	94	Average	32	24	1
	SA5	97	Average	89	< Average	33	20	1
Ben School	SB1	90	Average	68	V. Poor	25	17	1
	SB2	76	Poor	81	< Average	18	12	1
	SB3	82	< Average	52	V. Poor	19	12	1
	SB4	101	Average	94	Average	35	29	2
	SB5	86	< Average	52	V. Poor	17	8	1
Bon School	SC1	83	< Average	81	< Average	30	15	1
	SC2	85	< Average	76	Poor	20	9	1
	SC3	76	Poor	70	Poor	22	13	1
	SC4	67	V. Poor	40	V. Poor	17	4	1
	SC5	73	Poor	70	Poor	24	14	1
	<b>Overall MEAN</b>	$\bar{x} = 86$		$\bar{x} = 75$		$\bar{x} = 25$	$\bar{x} = 15$	

### 6.2.3 Summary of children's reading achievement (Post-intervention)

The overall changes in reading achievement after the FORI intervention are presented in this section, with the full schedule of testing as administered before and after the intervention summarised in Appendix 34. Children's achievement in word reading efficiency is measured in the context of results in the TOWRE-2 with attainment in oral reading fluency measured by their performance on the GORT-5 (Gray Oral Reading Test). Progress on specific fluency related skills such as reading

rate, reading accuracy and reading prosody are measured by performances on the Timed Assessment of Oral Reading and the NAEP Oral Reading Fluency Assessment. In all instances, results from assessments after the intervention are presented and examined in the context of children's reading achievement prior to the intervention. Finally, a statement of the statistical analysis of reading achievement results for all four assessments is presented as part of the interpretation of the research findings.

#### ***6.2.3.1 Children's reading achievement - word reading efficiency (TOWRE-2)***

A parallel form of the TOWRE-2 (Form B) was administered to all children immediately after the intervention as a measure of the growth in overall word reading efficiency. For comparison purposes, the outcome of this assessment is presented in Table 6.9 alongside results from the pre-intervention assessment (Form A). The descriptive terms for achievement post-intervention reveal that some children remained in the same category (n=6) while others moved to a higher category (n=8). Examination of these terms from the post-intervention assessment shows that 14 out of 15 students were described as being average or below average on word reading efficiency. On first inspection this appears to reflect a modest level of achievement in word reading efficiency. However, when one considers that these descriptive terms are based on scores calculated using age equivalent factors, it is reasonable to assume that they indicate progress. The exception was one student (SC4) whose results were rated in the descriptive terms as 'very poor' for both assessments. This student, who is a member of a minority ethnic group, performed particularly poorly on the phonemic decoding subtest of TOWRE-2 and consequently had significant difficulty in reading previously unseen words. Despite having little support from home, she participated fully in the intervention and demonstrated enhanced motivation for reading on completion of the instructional period. However, it was clear that the nature of fluency oriented instruction, while engaging her in the reading activities, did not address her fundamental phonemic skills deficit.

The progress of the full cohort of students became more apparent when scores for the sight word and phonemic decoding subtests were calculated and the scaled composite score (TWRE) for each student was derived. These TWRE scores are presented in Table 6.9 and are a clear indication of progress when compared with

results from before the intervention. The change in achievement from pre-intervention to post-intervention is calculated as a percentage gain (or loss) between both TWRE scores and is also featured in this table. The average score for both assessments shows an increase of just over five percent for the overall cohort with just one student (SA5) faring worse in the post-assessment. It is noteworthy that this student performed well on all oral fluency assessments. The overall mean score for the full cohort of participants is calculated to facilitate paired-samples t-tests on pre- and post-intervention scores achieved by the students. The results of these t-tests are outlined later in the chapter when the statistical significance of all reading achievement results is presented.

Table 6.9: Summary of reading achievement (TOWRE-2)

<b>TOWRE-2</b>					
<b>Pre-Intervention (Form A)</b>			<b>Post-Intervention (Form B)</b>		
Student	TWRE	Descriptive Term	TWRE	Descriptive Term	% increase in TWRE
SA1	104	Average	112	> Average	7.69
SA2	89	< Average	94	Average	5.62
SA3	84	< Average	84	< Average	0.00
SA4	93	Average	93	Average	0.00
SA5	97	Average	96	Average	-1.03
SB1	90	Average	98	Average	8.89
SB2	76	Poor	84	< Average	10.53
SB3	82	< Average	90	Average	9.76
SB4	101	Average	103	Average	1.98
SB5	86	< Average	93	Average	8.14
SC1	83	< Average	90	Average	8.43
SC2	85	< Average	85	< Average	0.00
SC3	76	Poor	81	< Average	6.58
SC4	67	V. Poor	67	V. Poor	0.00
SC5	73	Poor	81	< Average	10.96
<b>Overall Mean</b>	$\bar{x} = 85.7$		$\bar{x} = 90.1$		$\bar{x} = 5.05$



### 6.2.3.2 Children's reading achievement - oral reading fluency ability (GORT-5)

Similar to the TOWRE-2, a parallel form (Form B) of GORT-5 was administered to children after the intervention as a measure of the growth in overall reading fluency and comprehension. Outcomes for pre- and post-intervention assessment are presented in Table 6.10 in the form of composite Oral Reading Index (ORI) scores. This table also features descriptive terms, overall mean scores, and scores calculated to indicate the percentage change in achievement over the period of the study. Once again the descriptive terms show that some children remained in the same category (n=9) while others moved to a higher category (n=7).

Table 6.10: Summary of reading achievement (GORT-5)

<b>GORT-5</b>					
<b>Pre-Intervention (Form A)</b>			<b>Post-Intervention (Form B)</b>		
Student	Oral Reading Index	Descriptive Term	Oral Reading Index	Descriptive Term	% increase in ORI
SA1	86	< Aver	94	Aver	9.30
SA2	94	Aver	92	Aver	-2.13
SA3	81	< Aver	84	< Aver	3.70
SA4	94	Aver	94	Aver	0.00
SA5	89	< Aver	92	Aver	3.37
SB1	68	V. Poor	73	Poor	7.35
SB2	81	< Aver	94	Aver	16.05
SB3	52	V. Poor	73	Poor	40.38
SB4	94	Aver	97	Aver	3.19
SB5	52	V. Poor	86	< Aver	65.38
SC1	81	< Aver	89	< Aver	9.88
SC2	76	Poor	76	Poor	0.00
SC3	70	Poor	73	Poor	4.29
SC4	40	V. Poor	65	V. Poor	62.50
SC5	70	Poor	78	Poor	11.43
$\bar{x}$	<b>75.2</b>		<b>84.0</b>		<b>11.70%</b>

It should be noted that in some instances the ORI scores of those students who remained in the same category indicated significant improvement in oral reading fluency. For example students SC4 and SC5 remained in the same descriptive category from pre- to post-intervention but increased their ORI score by 62.5 percent

and 11.4 percent respectively, albeit from a particularly poor starting point. Conversely, another student's scores (SA2) demonstrated how the opposite effect was possible. This student remained in the same descriptive category (average) despite achieving 2.3 percent less in the post-intervention ORI. This figure, though apparently minuscule in isolation, was particularly notable as the same student had performed impressively on the TOWRE-2 assessment (TWRE increased by 5.6 percent from pre- to post-intervention). Closer examination of the subtests for this student identified a positive performance on sight word efficiency (TOWRE-2) and oral reading fluency as a combination of rate and accuracy (GORT-5) but a particularly low raw score on the comprehension subtest (GORT-5). This prompted an examination of the scaled scores for the composite fluency component (rate and accuracy) and the scores for the comprehension subtest of the GORT-5 for each student. It transpired that the students scored higher on the fluency subtest by an average multiple factor of 2.5:1. While this may be a cause of concern in relation to the level of understanding that children demonstrated in these assessments, their overall improvement as indicated by the ORI scores ( $\bar{x} = 75$  on pre-test;  $\bar{x} = 84$  on post-test) was a positive indication of the effect of the fluency oriented reading instruction on overall reading fluency ability.

### ***6.2.3.3 Children's reading achievement - rate and accuracy***

The Fluency Timed Reading Passage used prior to the intervention was once again used to assess achievement in oral reading fluency rate and accuracy (see Appendix 28). Children were required to read from the same levelled passage to measure the total words read in one minute (TWR) and the words read correctly in one minute (WCPM). The results of the TWR on the post-intervention assessment are presented in Table 6.11, alongside corresponding scores from before the intervention. The totals for TWR after the intervention averaged at 53 words per minute (rounded) for all children. This was a significant improvement in the total words read and represented an average increase of 27 words per minute. While this total includes every word attempted, whether correct or incorrect, it does reflect positively on children's readiness to continue to read ahead even when confronted with unfamiliar text. It also demonstrates their ability to move through the passage at an improved rate. Prior to the intervention the mean total words read by children in the fluency passage was 25 words per minute with the standard deviation ( $\sigma = 6.20$ ) indicating

that scores among the participants were relatively tightly dispersed. This low variation in scores can be reasonably attributed to the participants' generally poor performance when reading the unseen passage. Learning support teachers posited that this was due to the fact that the text contained many words the students would find difficult to decode and also featured return sweeps (sentences going from the end of one line to the beginning of another) which the children would not have previously encountered.

Table 6.11: Increase in TWR (Timed Assessment of Oral Reading)

<b>One Minute Timed Assessment of Oral Reading</b>			
Total Words Read (TWR)			
Student	Total Words Read (TWR) Pre-Intervention	Total Words Read (TWR) Post-Intervention	Increase in TWR
SA1	30	46	16
SA2	27	43	16
SA3	30	43	13
SA4	32	54	22
SA5	33	58	25
SB1	25	55	30
SB2	18	60	42
SB3	19	38	19
SB4	35	86	51
SB5	17	41	24
SC1	30	60	30
SC2	20	50	30
SC3	22	54	32
SC4	17	31	14
SC5	24	69	45
$\bar{x}$	<b>25.27</b>	<b>52.53</b>	<b>27.26</b>
$\sigma$	<b>6.20</b>	<b>13.58</b>	

Notwithstanding these low TWR scores, it was not unreasonable to assume that the range of scores would be more dispersed on the post-intervention assessment, as children responded differently to the instruction. The results as presented in Table 6.11 confirm this assumption, with a standard deviation of 13.58 recorded among TWR scores. When the data for the total words read for both pre- and post-intervention assessment is plotted in relation to linear trendlines (see dotted lines in Figure 6.2), we can see the variation of scores.

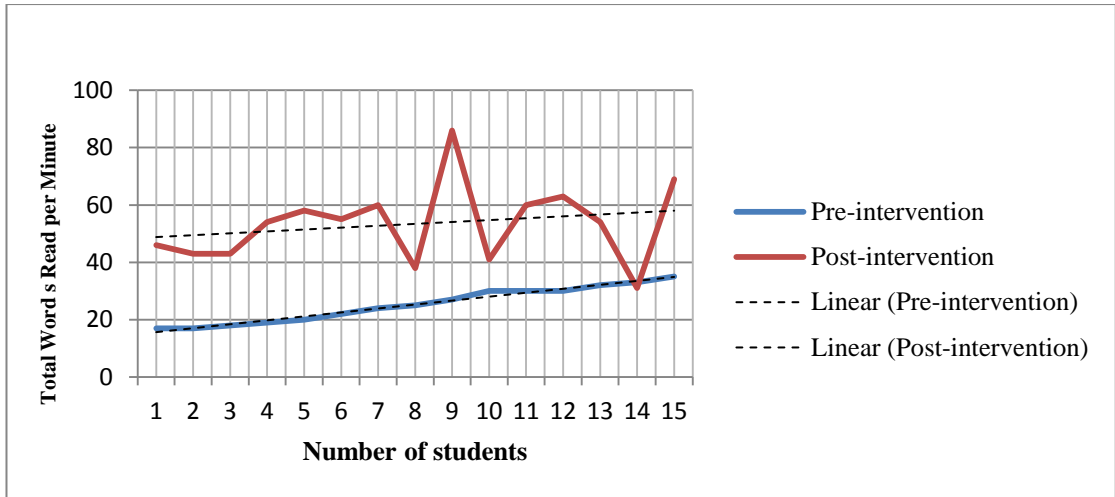


Figure 6.2: Variation in TWR (Pre- and Post-intervention)

Information on children’s progress with regard to the *accuracy* of their reading was deduced by calculating WCPM scores on the Timed Assessment of Oral Reading after the intervention. These scores, derived from the TWR scores, are presented in Table 6.12, with information on the changes in WCPM for individual children.

Table 6.12: Increase in WCPM (Timed Assessment of Oral Reading)

<b>One Minute Timed Assessment of Oral Reading</b>			
Words Correct Per Minute (WCPM)			
Student	WCPM Pre-Intervention	WCPM Post-Intervention	Increase in WCPM
SA1	18	41	23
SA2	16	38	22
SA3	19	45	26
SA4	24	50	26
SA5	20	53	33
SB1	17	45	28
SB2	12	56	44
SB3	12	35	23
SB4	29	80	51
SB5	8	35	27
SC1	15	56	41
SC2	9	35	26
SC3	13	50	37
SC4	4	14	10
SC5	14	65	51
$\bar{x}$	<b>15.33</b>	<b>46.53</b>	<b>31.2</b>
$\sigma$	<b>6.32</b>	<b>15.29</b>	

Over the course of the study, children increased their WCPM by an average of 31 words per minute. Prior to the intervention, children read on average a total of 15 WCPM, with a standard deviation of just 6.32 among these scores. The low dispersion among scores in the pre-intervention assessment is consistent with totals well below the norm for children at the beginning of First Class (Hasbrouck & Tindal, 2006) and can be attributed to a universally poor performance among participants in terms of accurate reading. A visual representation of the WCPM scores pre- and post-intervention (see Figure 6.3) reveals not only an increase in words read per minute for each child but also a more dispersed profile of scores after the instructional period.

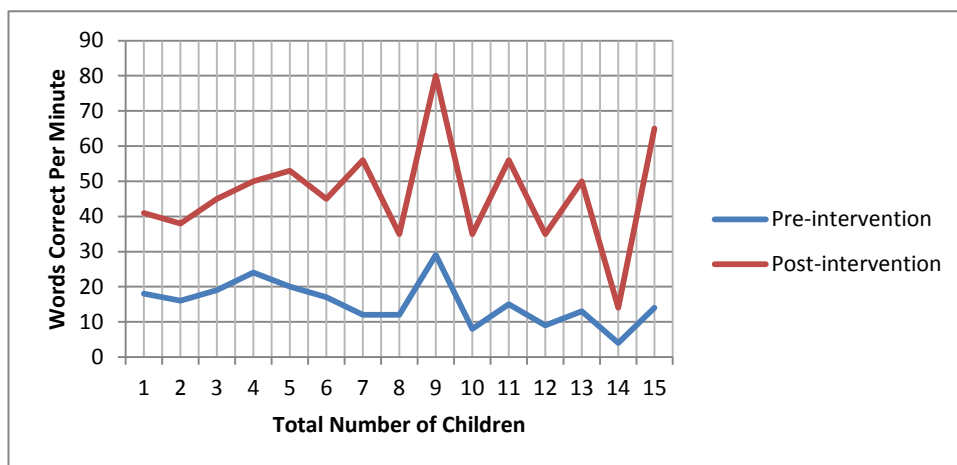


Figure 6.3: Variation in WCPM (Pre- and Post-intervention)

Data presented earlier in this chapter (Table 6.6) confirmed that children performed well below normal when WCPM scores were compared to norms for children in First Class at the beginning of the school year. When calculations for WPCM scores were made after the intervention, a similar comparison was made with norms as per Hasbrouck and Tindal's Scale (see Table 6.5). As children were now midway through First Class, WCPM norms for the middle of the school year were used to generate comparative figures. The mean WCPM score of 47 (rounded) not only represented a three-fold increase in words read correctly in one minute, but also aligned more favourably with norms than the pre-intervention comparison. Individual WCPM scores as a percentage of mid-year norms are presented in Table 6.13.

Table 6.13: WCPM as a percentage of standardised norms (post-intervention)

<b>One minute ORF Assessment</b>		
Student	WCPM Post-intervention	WCPM as % of norm for First Class at <b>middle</b> of school year *
SA1	41	56.94
SA2	38	52.78
SA3	45	62.5
SA4	50	69.44
SA5	53	73.61
SB1	45	62.5
SB2	56	77.78
SB3	35	48.61
SB4	80	111.11
SB5	35	48.61
SC1	56	77.78
SC2	35	48.61
SC3	50	69.44
SC4	14	19.44
SC5	65	90.28
<b>MEAN</b>	46.53	64.63

\*norm = 72 (Hasbrouck & Tindal, 2006)

Research by McKenna & Dougherty Stahl (2009) on curriculum-based measurements identifies that the normal and appropriate range of WCPM for this stage of the school year falls within 10 words above or below the 50<sup>th</sup> percentile, which in this case is 72 WCPM. Based on these recommendations the average band of ability would be interpreted as any score between 62 WCPM and 82 WCPM. While the results indicate that only two students attained scores in this normal range, a more accurate measure of the overall progress can be gleaned from the WCPM scores as a percentage of the norms. Prior to the intervention only one student attained a score that was equivalent or better than 50 percent of the norm. When WCPM scores were compared to the norm after instruction, all but four students attained scores that were above 50 percent of the norm.

#### **6.2.3.4 Children's reading achievement - prosody**

After the intervention all children were once again recorded reading a sample of text pitched at independent reading level. Given the inclusion in the study of a range of instructional activities that were designed to improve prosody and intonation, it was

expected that some progress would be made in these areas. In each unit of instruction over the course of the intervention students had practised expressive reading through activities such as echo reading, antiphonal reading and cumulative choral reading. The introduction of direct speech by adapting texts to a format for Readers Theatre also facilitated the development of prosodic reading and created an opportunity for children to perform for an audience at the completion of each unit of work. In the context of the Gradual Release of Responsibility Model (Pearson & Gallagher, 1983), a high level of support and modelling was provided by the learning support teachers for these activities, which were specifically designed to improve children's ability to vary their pitch and tone. Audio-assisted reading and modelled reading were also employed to introduce the children to the general expressiveness in oral reading. Similar to the assessment procedures before the intervention, a second party listened to the recording of the reading and assisted in grading the samples.

Table 6.14: Level of prosody in children's reading post-intervention

<b>NAEP Oral Reading Fluency Level</b>			
<b>Student</b>	<b>Prosodic Level (1-4) Pre-Intervention</b>	<b>Prosodic Level (1-4) Post-Intervention</b>	<b>Change in ORF Level</b>
<b>SA1</b>	1	2	+1
<b>SA2</b>	1	3	+2
<b>SA3</b>	1	2	+1
<b>SA4</b>	1	2	+1
<b>SA5</b>	1	3	+2
<b>SB1</b>	1	2	+1
<b>SB2</b>	1	3	+2
<b>SB3</b>	1	2	+1
<b>SB4</b>	2	4	+2
<b>SB5</b>	1	2	+1
<b>SC1</b>	1	3	+2
<b>SC2</b>	1	3	+2
<b>SC3</b>	1	2	+1
<b>SC4</b>	1	1	--
<b>SC5</b>	1	3	+2

Not surprisingly, there was a marked improvement in expressive reading on the post-intervention assessment. Analysis of notes taken during the assessment process indicate that the children typically read in chunks or phrases beyond individual word calling and observed the basic rules of punctuation including direct

speech marks. Results on the Oral Reading Fluency Level Assessment as presented in Table 6.14 confirm that all but one child increased their ORF prosodic level by at least one grade.

#### 6.2.4 Statistical analysis of reading achievement results

The first research question addressed in this chapter sought to identify the effects of FORI on the reading achievement of struggling readers. The null hypothesis was employed to examine this research question. In this case the null hypothesis ( $H_0$ ) addressing the question can be stated as follows:

‘The daily implementation of fluency oriented reading instruction with struggling readers in First Class will have no effect on their word reading efficiency or their oral reading fluency development.’

To evaluate this hypothesis and answer the research question, a statistical analysis was made between the overall pre-intervention and post-intervention mean scores of the TWRE (Towre-2), the ORI (GORT-5), and TWR & WCPM (One Minute Fluency Test). Four paired-samples t-tests were conducted to compare pre- and post-intervention scores achieved by pupils on the four discrete areas of assessment (see Table 6.15). In all tests, the paired t-test was used to calculate the difference within each before-and-after pair of measurements, to determine the mean of these changes and crucially to report whether this mean of the differences is statistically significant.

Table 6.15: Comparison of pupils’ pre- and post-intervention results on four reading tests (paired-samples t-test)

	Pre-intervention		Post-intervention		df	t	p
	M	SD	M	SD			
Total Word Reading Efficiency Index (TOWRE-2)	85.7	10.4	90.1	10.6	14	-4.54	.000
Oral Reading Index (GORT-5)	75.2	16.7	84.0	10.2	14	-3.31	.005
Total Words Read (One Minute)	25.3	6.2	53.4	13.8	14	-8.87	.000
Words Correct Per Minute (WCPM)	15.3	6.3	46.5	15.3	14	-10.49	.000



Results on the t-tests reveal that there was a significant difference in pupils' scores for all four tests (Sig. 2-Tailed value in all tests is less than .05). Specifically, the results show that students had made statistically significant gains in all measures and had higher standardised test scores for reading after the intervention. This evidence rejected the null hypothesis ( $H_0$ ).

### **6.2.5 Interpretation of findings in relation to reading achievement**

In this chapter the findings on children's reading achievement have been presented in the form of assessments administered before and after the intervention. The results imply that using FORI contributes to student reading achievement and that the instructional strategies employed in the intervention had a significant effect on increasing oral reading fluency ability. These findings are now analysed in light of other research conducted on the development of reading fluency. The interpretation specifically focuses on the effect the FORI method had on word reading efficiency and oral reading fluency.

The FORI method purports to give struggling readers the opportunity to increase their word reading efficiency through repeated reading of the same text in various formats (Kuhn *et al.*, 2006; Stahl & Heubach, 2005; Stahl, Heubach, & Cramond, 1997). An important feature of FORI is that reading activities are conducted predominantly in the context of connected text. The overall mean gain of five percent for students on the TOWRE-2 suggests that the reading intervention did impact favourably on word reading efficiency. However, even though this change was statistically significant for the cohort as a whole ( $p = .000$ ), there remained some doubt as to the intervention's efficacy with individual students who had been found to lack even rudimentary letter-sound knowledge in the pre-intervention assessment. It should be noted that the FORI method had no impact on the word reading efficiency for these students (see Table 6.16). This is consistent with previous research findings by Schwanenflugel *et al.* (2009), who found a 'total lack of effectiveness of the FORI method for developing word reading efficiency' (p.333). While it is imperative for teachers of struggling readers to choose instructional strategies that assist in progressing children from decoding words to automatic recognition of words and phrases, it seems that FORI is not always effective in addressing the former.

Table 6.16: Impact of FORI on word reading efficiency of selected students

Student	Total Word Reading Efficiency Index	Total Word Reading Efficiency Index	% increase in TWRE
	Pre-intervention	Post-intervention	
SA3	84	84	0.00%
SA4	93	93	0.00%
SA5	97	96	-1.03%
SC2	85	85	0.00%
SC4	67	67	0.00%

From the indices above, it appears the instructional strategies included in the intervention did not address the fundamental difficulties in both sight word reading and phonemic decoding ability experienced by these students. This suggests that struggling readers, who have difficulty with basic decoding skills, may require a complementary programme on phonics and word recognition if they are to reap the full benefits from the FORI method.

Interestingly, results on the Fluency Timed Reading Passage over the course of the study present contradictory evidence of students' growth in word reading efficiency. Post-intervention data on this assessment indicate that, on average, scores increased by 31 WCPM (see Table 6.12) for the full cohort, with the average score for students featured in Table 6.16 increasing by 24 WCPM. The difference between scores on the WCPM test and on the TOWRE-2 for the readers who struggled most may be explained by two factors. Firstly, children had read the levelled passage once before, prior to the intervention (even if this was ten weeks previously), and so were somewhat familiar with the vocabulary. Secondly, and possibly more importantly, while both assessments measure elements of word reading efficiency, they differ in one crucial aspect. The subtests of the TOWRE-2 assess an individual's ability to phonemically decode and orally pronounce both real words and non-words in isolation outside the context of normal text, whereas the WCPM assessment is conducted on a passage of context-rich connected text.

While research on early reading acknowledges the importance of acquiring accuracy and speed in using phonemic decoding skills for young readers (Lieberman, Shankweiler & Liberman, 1989; NRP, 2000), it also stresses the role of context as an aid to word identification when reading unfamiliar text (Allington & McGill-Franzen, 2004; Tunmer & Chapman, 1995). When students try to sound out

unfamiliar words, often they cannot arrive at the fully correct pronunciation unless they can use context to suggest a real word that sounds something like their decoding effort and makes sense in the context (Share & Stanovich, 1995). If phonemic and contextual cues are used together, the reader is much more likely to read correctly than if either cue is used by itself.

One explanation for the stronger performance by students on WPCM may lie in the type of reading instruction conducted over the course of the intervention. The FORI method looks to embed reading activities in connected text where possible. To accomplish this, learning support teachers facilitated choral, echo and partner reading of texts throughout the intervention and introduced strategies that helped students to read whole phrases rather than isolated words when operating outside of connected texts. As well as developing a more fluent approach to reading, these activities gave students multiple strategies they might use when reading unfamiliar text. Evidence from an interview with one learning support teacher after the intervention reinforces this stance:

It was amazing to see how my group came on in relation to reading the levelled books that I normally use in reading recovery. They read and re-read to make sure it made sense, they were looking at the pictures for clues, they always tried to put a few words together even if it meant pausing briefly before reading the full sentence or even the phrase. I mean even their decoding was better because they were using more information. I am convinced that the phrase reading activities and the timed reading games were a huge help for this. They loved the slide and glide phrase activity and you could see how it helped them to read in chunks rather than individual words. (LSC1/RF/3)

The FORI method involved numerous oral readings of the same text, which research suggests is required to develop oral reading fluency skills (Allington, 2001). The GORT-5 test was conducted as one measure of the growth in oral reading fluency over the course of the intervention. The ORI score on the GORT-5 has been identified by the test's authors (Wiederholt & Bryant, 2012) as the most reliable score of a student's overall reading ability. Furthermore, they noted that an ORI gain of nine points between Form A and Form B in test-teach-test situations indicates that a reading intervention is effective. The results of this assessment in the current study revealed that the students scored higher on the post-test for overall reading ability

(ORI) than they did prior to the intervention (see Table 6.10). The group mean standard score for this measure increased by nine points over the course of the intervention (pre-intervention  $\bar{x} = 75$ ; post-intervention  $\bar{x} = 86$ ), indicating that the intervention was effective in developing oral reading fluency (Wiederholt & Bryant, 2012). This was reinforced by a statistically significant outcome ( $p = .005$ ) when students' pre- and post-intervention results were compared on a paired-sample t-test.

The data from The Fluency Timed Reading Passage assessment was further evidence that FORI method had a positive impact on the oral reading fluency ability of students. Deno & Marston (2006) note that the number of words read aloud from a text in one minute is among the most reliable measures of rate and accuracy with respect to reading fluency. Students had performed well below normal for their age and grade on this assessment prior to the intervention. Their reading was described as 'hesitant, stop-go and consistent with the word calling type of reading as described by interviewees in the first phase of the study' (FN p.8). The FORI method features many instructional activities such as word dash and timed repeated reading that are designed to increase the rate of reading, and others that focus on reading in chunks or phrases, e.g. slide & glide and phrase grids (see Appendix 13). The FORI method also allows struggling readers to take passages home to read multiple times during the week to encourage further practice. The aim here is to develop mastery of the selected passage. All students availed of this opportunity to read to their parents at least once during the week. Consistent with expectations, this added instruction had a positive effect on the children's reading rate and accuracy. Their total word count read in one minute (TWR) increased by an average of over 100 percent and their accuracy on the same passage increased by an average of over 200 percent. Learning support teachers readily attributed this success to the various forms of reading practice which involved repeated reading of the same texts.

Interestingly, before the study commenced, these same teachers had expressed concern that the students would be repeatedly reading a relatively small number of texts during the intervention. More than one teacher had expressed the view that children would 'get bored with the texts' and 'learn them off by heart' (LSC1/RF1; LSA1/RF2). Post-intervention interviews probed this issue and analysis of these transcripts painted a very different picture. The learning support teachers reported that repeated reading was a 'surprisingly effective way of using less resources in an efficient and cost effective manner' (LSB1/RF8) and that 'it allowed

students to read in chunks and with more fluency' (LSC1/RF8). The teachers also observed that by using short, easily decodable texts that children were familiar with, they were free to work on very specific aspects of reading in an intensive and fast-paced way. Fast-paced instruction in basic skills has been found to be a feature of the instruction of exemplary teachers of literacy (Samuels & Farstrup, 2011; Snow, Burns & Griffen, 1998; Taylor *et al.*, 2002) and its value in the context of repeated reading was acknowledged by one teacher:

It was easy to plan many activities based on the same text when you knew that the children were comfortable with reading it. I found that I could really fly through the activities with the children cos they knew what to expect. I would never have spent so much time on the same text but the FORI activities really opened my eyes to the value of repeatedly reading the same text to develop other skills that I'd never usually get done. Like one day I allowed the children to read the exact same text on ipads and they absolutely loved it. (LSA1/RF8)

Equally, classroom teachers were supportive of the idea of repeated reading as it helped parents to support their child's reading at home:

Very often the parents aren't confident in reading with their child at home but I found that they were signing the home reading log every evening... I think the children were putting them under pressure to listen to them reading because they knew that they could read the story from all the practice during our sessions. (LSB1/RF8)

These findings support the idea that effective reading instruction can include repeated reading of the same text to develop oral reading fluency (Kuhn, 2005; Stahl, Kuhn, & Pickle, 2006; Rasinski, 2003).

The foregoing approach is typical of most studies that regard reading rate and accuracy as the central measures of oral reading fluency. The present study relied on the simple definition of reading fluency as reading rate and accuracy (words read correctly per minute) but also considered students' prosody as another dimension of oral reading fluency. The findings here suggest that the FORI method was effective for developing prosody and automaticity with results for all but one student indicating an improvement in reading intonation and expression as measured by the NAEP Oral Reading Fluency assessment. The almost universal improvement among participants in prosodic reading can be explained by a number of reasons. Firstly, the

choice of passages enabled students to read with a degree of automaticity. Once words are processed fluently and automatically, resources become available for children to engage in the additional processing required for prosodic oral reading (Schwanenflugel *et al.*, 2004). The texts used to assess this reading fluency component were at each student's independent reading level, so any deficit in word reading efficiency did not impact on the performance. Secondly, the FORI method included activities that feature phrase-cued text passages. Studies have shown that using phrased-cued texts can facilitate reading performance as it helps students focus on the phrasing and chunking of texts (Kuhn & Stahl, 2000; Rasinski, 1994). A phrase-cued text is a written passage that is divided according to natural pauses that occur in and between sentences. The phrase pauses help students whose reading lacks prosody. Teachers reported very positively on the use of this strategy during post-intervention interviews:

The children really did well in using expression and varying their pitch when we used the marks to identify the natural phrases and pauses in the text. It was like they knew that they had to read these bits in one unit and with a change of voice. I had to laugh one morning when I was chatting to XXXX's Mam and she described her reading as 'real posh'. I felt we were getting somewhere then. (LSC1/RF/5)

While the recordings of students' reading before and after the intervention provided testimony to the growth of prosodic reading among the group, a word of caution is warranted on basing the improvement exclusively on the NAEP scales. These scales, however useful they may be on a practical level, are not quantitative measurements of the prosodic aspects of reading and may not 'enable us to disentangle the relative contributions of decoding speed and accuracy from prosodic aspects of fluent reading' (Schwanenflugel *et al.*, 2004, p.3).

Another way to interpret these findings is that they demonstrate that a variety of instructional reading strategies can be used effectively to improve student reading achievement. The findings outlined here also suggest that activities to develop oral reading fluency should be included as an integral element of these strategies. This is consistent with the report of the Early Reading Expert Panel (2003), which recommended effective that reading instruction should include the development of a variety of interdependent reading skills. Specifically the report stated that 'no single skill in this complex interaction is sufficient on its own, and the teacher must be

careful not to overemphasise one skill at the expense of others' (Early Reading Expert Panel, 2003, p.22).

The findings here suggest that the FORI method may be less effective at developing word reading efficiency than overall reading fluency ability. However, the study also suggests that FORI provides students with a little more time to develop discrete oral reading fluency skills, which are seen as significant factors in the future achievement (or lack of achievement) of struggling readers (Miller & Schwanenflugel, 2006). Further research will have to be conducted in order to provide findings beyond this point. In concentrating exclusively on fluency oriented instructional activities, the study was able to replicate the findings of previous research on the FORI method and extend the previous research on the effects of repeated reading instruction on reading achievement (Stahl et al., 1997; Stahl & Heubach, 2005).

### **6.3 Effects of FORI on motivation for reading**

The findings and analysis of the data on the effects of FORI on the motivation for reading was a recursive process involving 'a constant shuttling back and forth' to examine both qualitative and quantitative data concurrently (MacLure, 2003, p.43). The chief research informants for this element of the study were learning support teachers, class teachers, parents and children from all three research sites. Using a concurrent triangulation strategy, quantitative data gathered from surveys with teachers and children, before and after the intervention, was triangulated with qualitative data obtained from interviews conducted with learning support teachers, class teachers, parents and children. An added dimension for further examining the effects of FORI on the motivation for reading was the inclusion of focus group interviews with teachers, parents and children six months after the intervention. Analysis of the data from these interviews is included here with the qualitative data gleaned immediately after the intervention. This data was supplemented by researcher's field notes and observations documented in journals which were completed by learning support teachers over the course of the study. The information for each set of participants was coded in order to identify the source of the data and to ensure that quotes could be traced back to the original transcript where applicable (see Table 6.17 for details of coding). A summary of the research methods employed

to gather data from the various informants is presented in Table 6.17 in the context of the following research questions:

1. What are the effects of FORI on the *reading self-efficacy* of struggling readers?
2. What are the effects of FORI on the *reading orientation* of struggling readers?
3. What are the effects of FORI on the *perceived reading difficulty* of struggling readers?

The research findings are presented under several broad headings providing information on the motivation for reading of children as defined by three motivational constructs: reading self-efficacy, reading orientation and perceived reading difficulty. This data is presented in the form of a chorus of voices, each representing the various research informants. The analysis is thus conducted in the context of a nexus of information gleaned from these voices (see Figure 6.4).

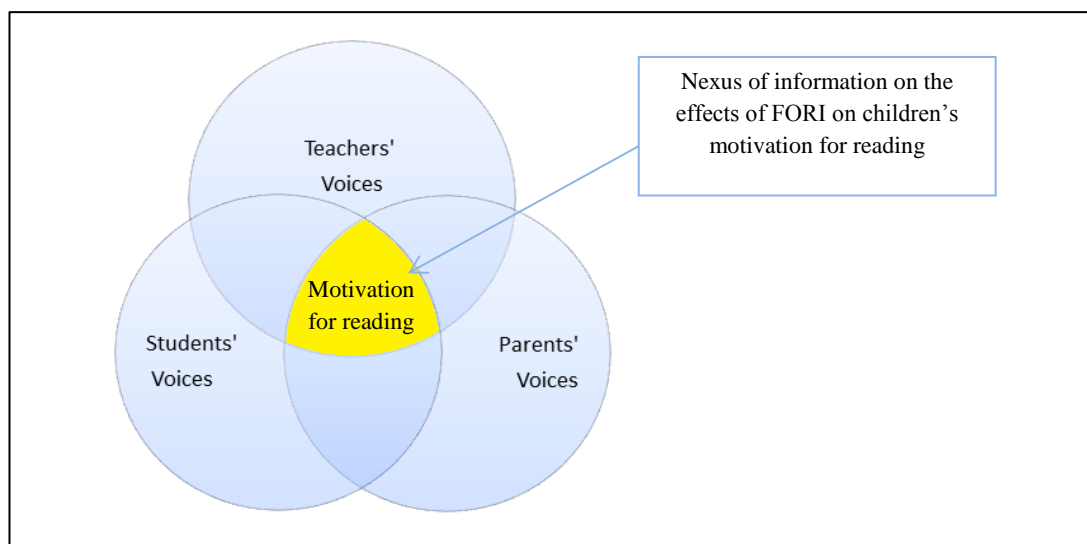


Figure 6.4: A chorus of research voices

The voice of the teachers is represented by their responses to the Young Reader Motivation to Read–Teacher Rating (T-YRMR) questionnaire, by information gathered in the course of semi-structured interviews and by observations and comments included in their reflective journals. The voice of the participating students is represented by their responses to the Young Reader Motivation Questionnaire-Student Form (S-YRMQ), by the data obtained from the conversational interviews conducted in conjunction with the administration of the surveys, and from the focus group interviews six months after the intervention.



Table 6.17: PHASE 2 Data Source (Motivation)

RESEARCH QUESTION	MOTIVATION CONSTRUCTS	EVIDENCE					
		Teachers' Voice [Learning Support & Class Teachers]		Students' Voice School A, B & C (n=15)		Parents' Voice	Researcher
		QUAN	QUAL	QUAN	QUAL	QUAL	QUAL
Effects of Fluency Oriented Reading Instruction on the Motivation for Reading	<i>Self-efficacy</i>	Perceptions of students efficacy for reading [5 items]	Individual semi-structured interviews Reflective Journal	Student efficacy for reading [6 items]	Individual conversational interviews*	Individual and semi-structured focus group interviews	Field Notes
	<i>Reading Orientation</i>	Perceptions of students reading orientation [9 items]	Individual semi-structured interviews Reflective Journal	Student Orientation to Reading [10 items]	Individual conversational interviews*	Individual and semi-structured focus group interviews	
	<i>Perceived Difficulty in Reading</i>	Perceptions of student difficulty in reading [6 items]	Individual semi-structured interviews Reflective Journal	Student perception of difficulty in reading [6 items]	Individual conversational interviews*	Individual and semi-structured focus group interviews	
CODES FOR ANALYSIS	<b>Learning Support Teachers:</b> LSA1; LSB1; LSC1 <b>Class teachers:</b> CTA1; CTA2; CTB1; CTB2; CTC1 <b>Students:</b> SA1; SA2; SA3; SA4; SA5; SB1; SB2; SB3; SB4; SB5; SC1; SC2; SC3; SC4; SC5 <b>Parents (individual):</b> PA1; PA2; PA3; PA4; PA5; PB1; PB2; PB3; PB4; PB5; PC1; PC2; PC3; PC4; PC5 <b>Parents (focus group):</b> PFGA; PFGB; PFGC <b>Researcher:</b> FN						

\*Conducted in conjunction with administering the questionnaire

The information gleaned from individual and semi-structured focus group interviews and from the home reading logs represents the voice of the parents in the study. While in some instances evidence is drawn from the responses, achievement and behaviour of individual children and occasionally comparisons are made between individual research sites, the analysis here typically addresses the intervention participants as a single cohort. In the following sections the findings pertaining to the motivation for reading of students before and after the intervention are analysed and discussed.

### **6.3.1 Quantitative measures of motivation for reading**

The motivation for reading of all participating students was assessed before and after the reading intervention using questionnaires administered to teachers and children. These surveys were used in conjunction with data gathered from interviews with all research informants to establish baseline data on children's motivation for reading before the intervention and to measure the effects of the instruction post-intervention. The Young Reader Motivation Questionnaire (YRMQ) sought information on students' motivation for reading using 22 items as described in Table 6.17 (see Appendix 21 for individual items). The teacher ratings questionnaire paralleled the student form and featured 20 questions worded to reflect the teacher's perception of their students' motivation for reading (see Appendix 20). This questionnaire was completed by both class teachers and learning support teachers before and after the intervention. Details of the scoring rubric for analysing each survey are presented in the following sections.

#### ***6.3.1.1 Scoring the Motivation for Reading Survey (Student Form)***

The 22 multiple choice questions in the student survey were organised in three sections to reflect the three constructs of reading motivation being assessed in this study. The first section featured six items probing the young reader's perception of their own efficacy for reading. The second section consisted of ten questions to assess the students' reading orientation and interest in reading while six items, designed to assess students' perception of their own reading difficulty, were included in section three. All items were presented in a multiple choice format with the set of potential answers for individual survey questions ranging from two to four possible

responses. In order to quantify the level of motivation for each item a percentage score was assigned to the nature of a response dependent on the number of answers to individual questions that were offered to students. For example in the case of the sections assessing reading self-efficacy and reading orientation, zero percent (0%) was assigned to the most negative response with one hundred percent (100%) representing the optimum positive answer. Items in the third section that assessed students' perceived reading difficulty were phrased in such a manner that if a child answered 'yes' or 'always' it represented a high level of difficulty and percentages were assigned accordingly. Examples of percentages assigned to individual responses across the full range of multiple choice questions can be seen in Figure 6.5.

Q 1 (iii)	Do you think you read well?	1 No [0%]	2 Yes [100%]		
Q 2 (v)	How would you feel if someone gave you a book for a present?	1 Disappointed [0%]	2 Sort of happy [50%]	3 Happy [100%]	
Q 3 (vi)	Learning to read is	1 Really easy [0%]	2 Sort of easy [33%]	3 Sort of hard [67%]	4 Really hard [100%]

Figure 6.5: Coding for Motivation for Reading Survey (Student Form)

For analysis purposes, and to triangulate the findings from the surveys with qualitative data, an overall reading motivation percentage score for each construct was derived. This was achieved by scoring the individual student response on each item and then calculating the average percentage score for all students in each construct. The pre-intervention motivation scores for the students in one research site (Ben School) across all three constructs are presented in Table 6.18 as an example. The percentages included in this table represent the student self-rating responses only, with the reading efficacy percentage score for one student (SB4) highlighted for illustrative purposes. The figure of 22 percent for this student represents an

average score for this construct derived from responses to the six items featured in the section on reading efficacy.

Table 6.18: Example of Student Self-Rating scores (Pre- intervention)

Motivation for Reading (Ben School)			
Student Self-Rating %			
	Reading Efficacy %	Reading Orientation %	Perceived Difficulty in Reading %
SB1	62	30	72
SB2	47	70	70
SB3	72	50	53
SB4	22	55	75
SB5	58	40	61
SC1	58	85	78

The responses of this student (SB4) to questions on efficacy for reading, administered before the intervention, are presented in Figure 6.6 along with earned percentage scores.

1. EFFICACY FOR READING			% Score
(i)	Can you work out really hard words by yourself when you read? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 No, never [0%]</div> <div style="text-align: center;">2 Sometimes [50%]</div> <div style="text-align: center;">3 Yes, always [100%]</div> </div>		0
(ii)	Are you good at remembering words you have seen before? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 No, never [0%]</div> <div style="text-align: center;">2 Sometimes [50%]</div> <div style="text-align: center;">3 Yes, always [100%]</div> </div>		50
(iii)	Do you think you read well? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 Yes [100%]</div> <div style="text-align: center;">2 No [0%]</div> </div>		0
(iv)	Can you work out really hard words in a story even if there are no pictures? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 No, never [0%]</div> <div style="text-align: center;">2 Sometimes [50%]</div> <div style="text-align: center;">3 Yes, always [100%]</div> </div>		0
(v)	How do you feel when you read out loud to someone? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 Happy [100%]</div> <div style="text-align: center;">2 Embarrassed [67%]</div> <div style="text-align: center;">3 OK [33%]</div> <div style="text-align: center;">4 Sad [0%]</div> </div>		33
(vi)	What kind of reader are you? <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">1 I am a very good reader [100%]</div> <div style="text-align: center;">2 I am an OK reader [50%]</div> <div style="text-align: center;">3 I am NOT a very good reader [0%]</div> </div>		50
Mean Self Efficacy % for student (SB4)			133/6 = 22%

Figure 6.6: Example of scoring of quantitative measures (Student SB4: Reading Efficacy)

### 6.3.1.2 Scoring the Motivation for Reading Survey (Teacher Form)

The teachers' perceptions of the motivation for reading of the children in the intervention were assessed using the teacher form of the Young Reader Motivation to Read–Teacher Rating (T-YRMR). The twenty statements in this form were organised in three sections to reflect the same three constructs of reading motivation being assessed in the study. Section one consisted of five statements seeking teachers' perceptions of student efficacy for reading. Section two featured nine statements examining teachers' perceptions of student reading orientation and section three sought the perceptions of teachers in relation to students' difficulties with reading. Teachers were asked to rate the likelihood of a particular behaviour occurring and were given a selection of four potential answers: (i) *No, never*, (ii) *No, not usually*, (iii) *Yes, sometimes*, or (iv) *Yes, always*.

The optimum positive response (*Yes, always*) was assigned 100%, with scaled scores down to 0% for the most negative response. In instances where the statements were phrased in the negative form, e.g. '*the student avoids participation in reading activities*', 100% was assigned to the "*No, never*" response with the scoring scaled down to 0% for the "*Yes, always*" response. Examples of this scoring rubric can be seen in Figure 6.7.

1. PERCEPTIONS OF STUDENT EFFICACY FOR READING This student.....	No, never	No, not usually	Yes, sometimes	Yes, always
(i) thinks he/she can work out hard words by himself/herself when he/she reads	<input type="radio"/> [0%]	<input type="radio"/> [33%]	<input type="radio"/> [67%]	<input type="radio"/> [100%]
2. PERCEPTIONS OF STUDENT READING ORIENTATION This student.....	No, never	No, not usually	Yes, sometimes	Yes, always
(vi) avoids participating in reading activities	<input type="radio"/> [100%]	<input type="radio"/> [67%]	<input type="radio"/> [33%]	<input type="radio"/> [0%]

Figure 6.7: Example of scoring rubric -Young Reader Motivation to Read (Teacher Rating)

The responses of the learning support teacher from the Bon School in rating one of the students (SC5) on perceived efficacy for reading are included in Figure 6.8 as an illustration of how percentages scores for each motivational construct were calculated.

1. PERCEPTIONS OF STUDENT EFFICACY This student.....		No, never	No, not usually	Yes, sometimes	Yes, always	% Score
(i)	thinks he/she can work out hard words by himself/herself when he/she reads	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> [67%]	<input type="radio"/>	<b>67</b>
(ii)	thinks he/she is good at remembering words	<input type="radio"/>	<input checked="" type="radio"/> [33%]	<input type="radio"/>	<input type="radio"/>	<b>33</b>
(iii)	thinks he/she can work out sounds in words	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> [67%]	<input type="radio"/>	<b>67</b>
(iv)	thinks he/she can read well	<input checked="" type="radio"/> [0%]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<b>0</b>
(v)	thinks he/she can work out hard words in a story even if there are no pictures	<input checked="" type="radio"/> [0%]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<b>0</b>
<b>Teacher Rating Score (Student Self Efficacy)</b>						<b>167/5 = 33.4%</b>

Figure 6.8: Example of Teacher Rating for Student Self Efficacy for Reading (SC5)

The results of both teacher and students surveys of reading motivation are reported and analysed in conjunction with qualitative data from the interviews conducted with all research informants. While the overall effects of the intervention are interpreted in the broader context of reading motivation, the analysis and discussion presented here directly addresses the research questions and therefore is presented in three discrete sections. In the first section, the findings on the effects of FORI in relation students' efficacy for reading are presented, analysed and discussed with the findings on the effects of FORI on the reading orientation and perceived reading difficulty of struggling readers analysed in subsequent sections.

The discussion in each case draws on data from the voices of all research informants. The results of the surveys and interviews conducted with teachers and children are interwoven with qualitative data gleaned from interviews with parents to interrogate the effects of FORI on students' motivation for reading. In each section the baseline data identifying students' reading motivation before the intervention is presented, and thereafter the findings of the effects of FORI in the context of each motivational construct are analysed and discussed.

### 6.3.2 Student efficacy for reading

The findings and analysis presented in this section address the following research question: What are the effects of FORI on the *reading self-efficacy* of struggling readers?

### 6.3.2.1 Efficacy for reading (pre- intervention)

Wigfield and Guthrie (1997a) have proposed that an influential aspect of students' motivation to read is reading self-efficacy. They define self-efficacy in this context as a person's belief that he or she can be successful in reading. Thus, efficacious readers believe they are capable of performing reading activities and are willing to attempt more challenging texts (Guthrie, Coddington & Wigfield, 2009). This understanding underpins the analysis and discussion of the effects of FORI on reading self-efficacy hereafter.

Teachers selected students to participate in the study based on their low motivation for reading as observed in class and on recommendations of class teachers who had taught them previously. The data from the surveys administered before the intervention confirmed that these students had a low level of reading self-efficacy. The ratings by teachers on the efficacy for reading subscale as presented in Table 6.19 indicates an individual reading efficacy score of less than 50 percent for three-fifths of the students. The overall mean rating for the full cohort by teachers was further confirmation of low self-efficacy for reading among these students ( $\bar{x}$  = 43% for learning support teachers;  $\bar{x}$  = 45% for class teachers).

Table 6.19: Percentage rating for reading efficacy (pre-intervention)

<b>Motivation for Reading Percentage Rating: <i>Reading Efficacy</i></b>			
Student	Learning Support Teacher Rating %	Class Teacher Rating %	Student Self-report Rating %
<b>SA1</b>	67	54	75
<b>SA2</b>	40	40	67
<b>SA3</b>	54	40	64
<b>SA4</b>	67	67	67
<b>SA5</b>	60	70	45
<b>SB1</b>	54	47	62
<b>SB2</b>	47	47	47
<b>SB3</b>	40	33	72
<b>SB4</b>	47	54	22
<b>SB5</b>	47	54	58
<b>SC1</b>	13	33	58
<b>SC2</b>	26	47	56
<b>SC3</b>	33	40	53
<b>SC4</b>	13	20	28
<b>SC5</b>	33	33	53
<b>Mean (rounded)</b>	$\bar{x}$ = 43%	$\bar{x}$ = 45%	$\bar{x}$ = 55%

As the same questionnaire was completed independently for each student by learning support teachers and class teachers, a valuable validity check on the instrument was possible. Initial inspection of the scores reveals that, with the exception of one student (SC2), learning support teachers and class teachers reported very similar ratings for individual children on reading efficacy. Closer statistical analysis carried out on the ratings reveal a close clustering of scores along the linear trendline, indicating a positive correlation ( $r = 0.79$ ) between responses (see Figure 5.9).

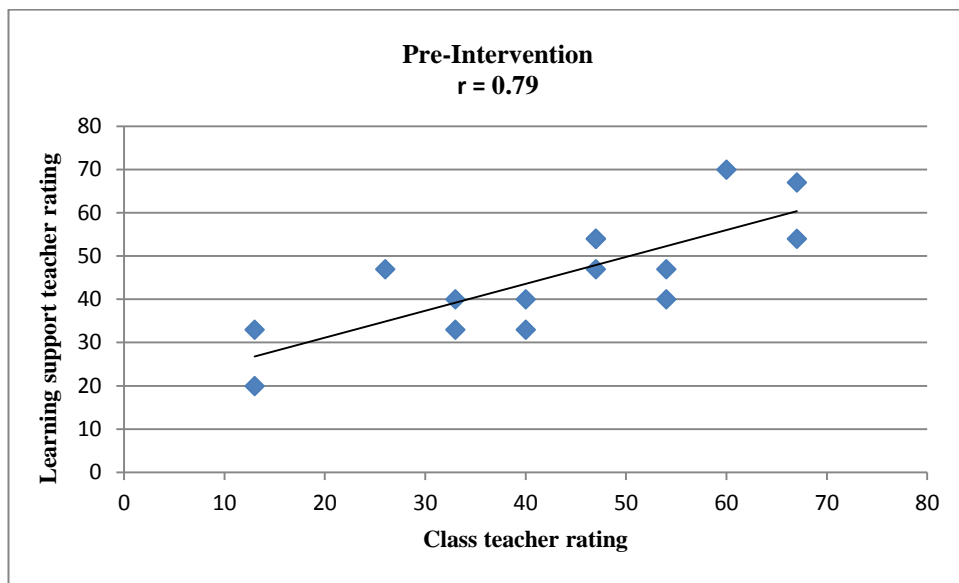


Figure 6.9: Correlation between teacher ratings of student reading self-efficacy

Analysis of this correlational evidence revealed an interesting trend among ratings by teachers of individual items in the survey. One item (Q1, iii, Appendix 20) on the teacher questionnaire sought their perception of student efficacy for working out the sounds in words, while another (Q1, iv) asked if teachers thought that children perceived themselves as good readers. On average, across all students, teachers assigned an efficacy rating of 58% for the item on working out sounds in words, with a rating of just 22 percent on their perceptions of whether children rated themselves as good readers. When asked to elaborate teachers offered an insight into the rationale for these ratings:

Children are well used to sounding out words because of the work they do in Jolly Phonics in class and we also have weekly tests in senior infants on their letter sounds. They love the jingles and songs that go



with each letter and I'd say that they really believe that they are good at working out sounds. (CTB2/SE/6)

...they definitely would say that they are good at working out sounds. We put a lot of emphasis on phonics and we use the PAT programme with the children who are referred for learning support in First Class. (LSB1/SE/3)

Children in my group don't see themselves as good readers because they have already noticed that other children in class are doing better at reading. They give up easily and often just say that can't read. (LSA1/SE/2)

It was curious that teachers would perceive students to have a positive outlook of their efficacy for one reading component and at the same time hold a comparatively low estimation of their students' self-efficacy for reading. These comments not only revealed teachers' perceptions of student efficacy in these areas but also indicated a bias towards a certain skills approach to teaching reading.

Data gathered and analysed from interviews with teachers and parents before the intervention was triangulated with quantitative information to gain a more comprehensive picture of students' efficacy for reading. Emerging themes from the analysis of comments made by the chorus of research voices indicate that students typically did not have any confidence on their ability to read:

The one thing that is very obvious when I get a new group for learning support in First Class is the low self-belief that the children have in their ability to read even the simplest texts. They seem to be conditioned to sound out every word as if it was a separate activity... maybe we are to blame for this by focusing on letter sounds so much in infants but they don't seem to have any confidence in reading. (LSA1/SE/3)

XXXX doesn't think she is a good reader. I see her with her cousins of the same age and they are readin (sic) books and she won't even pick one up. I don't think it's the way she doesn't like reading ...she actually says that she can't read and thinks she's no good at it. (PC3/SE/1)

I notice that even if the children know most of the words in a text they still don't believe that they can succeed in reading. It is as if they are used to failing and expect to make mistakes and once they hit a problem they give up. (LSC1/SE/2)

Jason in my class reads loads of books and he knows all the words. I can't read all the words in my book...but my Mam helps me.  
(SA5/SE/1)

Sometimes I can't read the books in my class cos there are all hard words in there. I like reading when me Ma does it but I can't.  
(SB4/SE/1)

The latter comment is reflective of research on self-efficacy which finds that individuals are unlikely to persevere when difficulties arise or to engage in an activity for which they possess sufficient skills to be successful (Bandura, Barbaranelli, Caprara & Pastorelli, 2001). While the predominant view among teachers was that students typically had a low self-concept of themselves as readers, one interviewee posited a somewhat different take on the low efficacy for reading among students. In her experience, students' poor reading self-efficacy is due 'as much to their academic failure as it is to their lack of motivation' (CTB2/SE/1). This is in keeping with other research findings that the process of losing motivation begins when students first doubt their intellectual ability (McGrady, Lerner & Boscardin, 2001). Notwithstanding the conflicting reasons for the rating on the efficacy subscale by teachers, there was accord that these students could not be regarded as efficacious readers.

It was noteworthy that students' self-reported ratings of reading efficacy were higher than their teachers' ratings by over 10 percent on average ( $\bar{x} = 55.13\%$ , see Table 6.19). However, it has been well established by research that self-report measures are not always reliable and valid, especially with young children (Furlong & Smith, 1994). Young children have a difficult time making assessments of their own abilities and feelings, which requires a solid understanding of one's self-concept (Furlong & Smith, 1994; Harter, 1983). They tend to be overly optimistic and are more likely to respond in a socially desirable way to please the adults administering the test (Lepola, 2004). This effect was apparent during the administration of the survey when, in some instances, children readily opted for a positive response in an effort to gain favour. In order to address this phenomenon, cartoon characters were used as mediators of the questions (see Appendix 22) and so minimised the tendency to please the tester. Notwithstanding this measure, it was noteworthy that two-fifths of the students self-rated over 60 percent for reading self-efficacy.

In this regard the conversations with parents were a source of triangulation for these self-report ratings, as the interviews were broadly structured on the YRMQ (see Appendix 25 for schedule). When asked how their child perceived themselves as a reader, parents were consistent with their responses:

My XXXX knows he can't read so he avoids it all times. His younger sister in Ms XXXX class is only five and she is always looking at books but he has no interest. Sometimes he will look at the pictures in a book but when I try to get him to read he just closes it. (PB2/SE/1)

She just doesn't think that she can finish the page so she won't even attempt to read it. (PA2/SE/2)

I'm not sure if XXXX actually thinks that she is a bad reader or anything like that. It's just that she doesn't think that she can read all the words and so she doesn't read any. (PC3/SE/2)

These comments are consistent with earlier research which suggests that efficacy expectations specifically relate to whether an individual believes they can execute certain behaviours to achieve a particular outcome (Eccles & Wigfield, 2002). The findings here, drawn from the voices of all informants, suggest that children had a low level of self-efficacy for reading before the FORI intervention was introduced. The next section looks at the efficacy for reading of the students after the intervention.

### ***6.3.2.2 Efficacy for reading after the intervention***

The data from post-intervention surveys and interviews was analysed to directly examine the effects of FORI on the reading efficacy of the participating students. A comparison of the results from the surveys carried out pre- and post-intervention with teachers and children is presented in Table 6.20, with the percentage increase in the rating for reading efficacy for each student identified.

The data shows an average increase in reading efficacy for students as rated by learning support teachers ( $\bar{x} \uparrow 40\%$ ), class teachers ( $\bar{x} \uparrow 25\%$ ), and students ( $\bar{x} \uparrow 28\%$ ). The table also includes a column, highlighted in yellow, which indicates the average increase in reading self-efficacy for each student as calculated from the three surveys. An overall mean increase of 31 percent is indicative of the effect of the intervention on efficacy for reading as rated by all research informants.

Table 6.20: Percentage rating for reading efficacy (pre- and post-intervention)

Student	Learning Supp. Teacher Rating %			Class Teacher Rating %			Student Self-report Rating %			Aver. % increase across raters
	Pre-interv.	Post-interv.	% increase	Pre-interv.	Post-interv.	% increase	Pre-interv.	Post-interv.	% increase	
SA1	67	100	33	54	54	0	75	100	25	19
SA2	40	67	27	40	54	14	67	64	-3	13
SA3	54	67	13	40	33	-7	64	70	6	4
SA4	67	67	0	67	74	7	67	75	8	5
SA5	60	67	7	70	80	10	45	100	55	24
SB1	54	93	39	47	100	53	62	89	27	40
SB2	47	93	46	47	67	20	47	83	36	34
SB3	40	93	53	33	100	67	72	86	14	45
SB4	47	93	46	54	74	20	22	72	50	39
SB5	47	93	46	54	100	46	58	89	31	41
SC1	13	100	87	33	74	41	58	100	42	57
SC2	26	93	67	47	60	13	56	100	44	41
SC3	33	93	60	40	67	27	53	78	25	37
SC4	13	40	27	20	27	7	28	42	14	16
SC5	33	80	47	33	87	54	53	92	39	47
Mean	$\bar{x} = 43$	$\bar{x} = 83$	$\bar{x} = 40$	$\bar{x} = 45$	$\bar{x} = 70$	$\bar{x} = 25$	$\bar{x} = 55$	$\bar{x} = 83$	$\bar{x} = 28$	$\bar{x} = 31\%$

Interrogation of scores for individual students reveals some particularly high percentage increases as rated by one learning support teacher (e.g. SC1, SC2, SC3). The initial low rating assigned to these students before the intervention is one explanation for the dramatic increase in the motivation rating for these particular students, with the following comment from a post-intervention interview providing further illumination:

Before the intervention started I had conversations with the class teacher and XXXX, last year's teacher, about those two children in particular. We all agreed that their self-efficacy as readers was very low and we also identified the fact that they struggled to master the very basic reading skills as a huge contributing factor. Over the course of the intervention you could see the eagerness to read gradually increasing with both children and it was wonderful to see their self-concept as readers explode. XXXX went into the principal one morning and literally announced that she was a good reader. (LSC1/SE/1)

The reference to mastering the basic skills here has resonance in the research on self-efficacy. Bandura (1997) notes that one of the most powerful sources of self-efficacy

is mastery experience. This occurs when a child evaluates his or her own competence after learning and believes their efforts have been successful. The major assertion generated from the data analysis after the intervention was that all children had an increased belief in their ability to read well and that the daunting task of reading challenging texts was no longer insurmountable. Given that reading self-efficacy was empirically defined in this study as students' beliefs regarding ability and proficiency in reading tasks (Chapman & Tunmer, 1995) this finding has particular significance in answering the research question posed at the beginning of section 6.3.2.

In addition to students' growing belief in their ability to read due to mastering the basic skills, all teachers noted an increase in confidence among students in relation to reading. Students now read without fear of failure. This confidence in their ability as readers was attributed in some instances to the nature of the FORI activities, as exemplified by the comment of one learning support teacher:

When they are asked to read there is no fear of making a mistake. They just got on with it and if they couldn't read a word they weren't worried and didn't clam up. I absolutely put this down to the FORI method. They saw most of the activities as playing games. Because the activities used so much of the same vocabulary and we did so much repeated reading the children got really proficient at reading the texts and you could see the self-belief growing each week. (LSA1/SE/4).

This is consistent with research by Bandura (1995, p3), who points out 'successes build a robust belief in one's personal efficacy. Failures undermine it, especially if failures occur before a sense of efficacy is firmly established'. Further evidence of the effects of FORI on reading self-efficacy can be found in the remarks of another learning support teacher:

The way that we conducted the lessons for each unit had a real effect on the children's confidence and self-concept around reading. I mean even the weakest readers in my group experienced success in every lesson. Of course they still struggled on individual words and needed a lot of support but I found the real key was the gradual release of responsibility. If a child couldn't do the activity or read the text you just took one step back and modelled the reading or the game. This was a huge relief to me as a teacher and a great benefit to the struggling reader. Before this

intervention I would have been slow to adopt this approach ... it would almost feel like I wasn't really teaching. (LSB1/SE/7)

This reflection strikes right to the core of what FORI attempts to achieve in the context of motivation for reading. Modelling is an important means of promoting learning and self-efficacy (Schunk, 2003). A central tenet of FORI is that teachers are models for each reading activity, with a gradual relinquishing of responsibility to the child as he or she improves.

Another key feature of self-efficacy for students is the willingness to participate more readily, work harder, and persevere longer in the face of difficulties (Bandura, 1997). Thus, efficacious readers tend to be eager participants in reading activities and do not shy away from attempting more difficult texts (Guthrie, Coddington & Wigfield, 2009). Various research informants support this finding. Over the course of the intervention learning support teachers observed in their reflective journals that students were regularly applying themselves to reading tasks assigned during FORI lessons and were keen to read more challenging texts:

‘children showing great application during lessons in school and home reading log has been filled in every night to date’ (LSA1/RJ)

‘XXXX and XXXX asked for books to take home today after the class. When I offered them some of the readers that we use in the FORI programme that they were familiar with they wanted some of the other harder books from Reading Recovery’. (LSB1/RJ)

Parents of children in the study group made similar observations, noting that their child was now actively engaged in reading at home and showing real determination when confronted by difficult text:

I never seen (sic) her actually picking up a book at home and trying to read it before and we have to read to her every night. She loves that she can read the books that she brings home and wants to read them for everyone that comes to the house. (PFGB/SE)

When XXXX used to come across a word she didn't know in reading she used to just stop and wouldn't read anymore. Now she puts a line under it like Ms. XX tells her and reads on. When she's finished she writes out the words with the lines under them and brings them into

school to her teacher. It's really good because now she will try and read stories that she hasn't even seen before. (PFGC/SE)

The foregoing findings and analysis suggest that the FORI method, as implemented in the current study, has a positive effect on the reading self-efficacy of struggling readers. The qualitative data representing the voices of all research informants reinforces the quantitative data as presented in tabular form in Table 6.20. This data is represented in summative form in Figure 6.10 to illustrate the impact of the intervention on the efficacy for reading as reported by teachers and students.

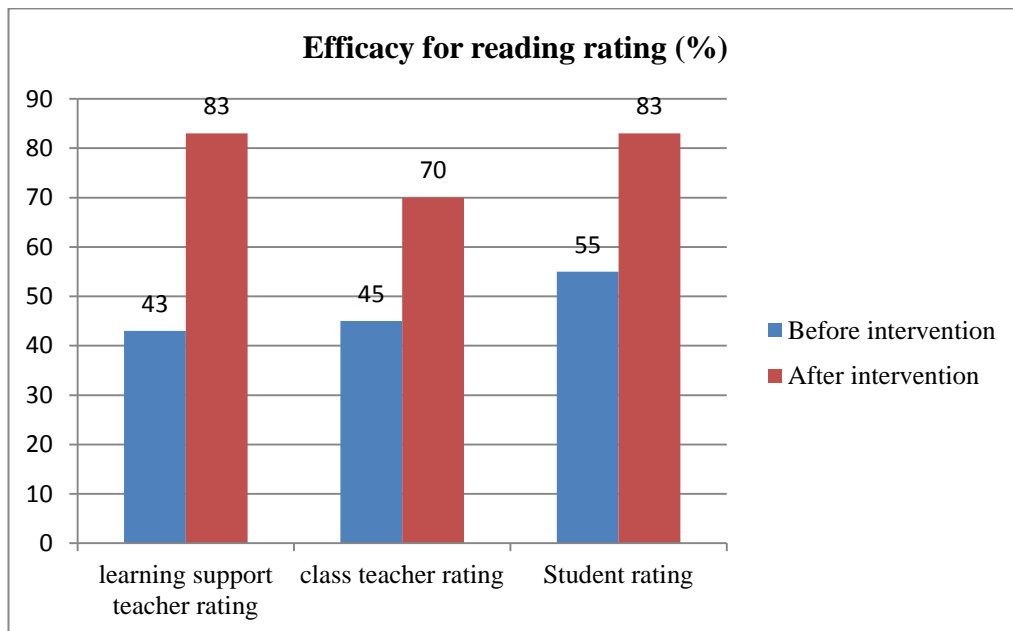


Figure 6.10: Impact of FORI on student efficacy for reading

### 6.3.3 Student Reading Orientation

The findings and analysis presented in this section address the second motivational research question: What are the effects of FORI on the *reading orientation* of struggling readers?

#### 6.3.3.1 Orientation of students towards reading (pre- intervention)

Based on previous research by Wigfield and Guthrie (1997), the orientation of students towards reading in the context of this study relates predominantly to their

interest and engagement in reading and their attitude toward reading. Several other studies that include these factors as indicators of reading motivation also align them with intrinsic motivation (Baker and Wigfield, 1999; Guthrie *et al.*, 2006; Wigfield *et al.*, 2004). The reading orientation subscale on the surveys for both teachers and children features items that directly address these indicators, which are analysed here in the light of previous research on reading orientation.

The inclusion of student self-report ratings in this study for assessing reading orientation is innovative in reading motivation research. This construct has traditionally been assessed using teacher ratings only (Lepola, 2004; Lepola, Salonen & Vaurus, 2000). Hence, for validity purposes, these self-report ratings are analysed in conjunction with data from teachers and parents where appropriate.

Ratings by learning support and classroom teachers of students' reading orientation are presented in Table 6.21 along with the self-reported ratings of the students. Perusal of the scores recorded by each set of teachers confirms that students had a low level of orientation towards reading before the intervention. The overall average percentage rating as perceived by learning support teachers was 34%, with a similar rating recorded by class teachers ( $\bar{x} = 35\%$ ). Just one teacher rated a student (SA4) with an average score of greater than 50 percent on the reading orientation subscale.

Table 6.21: Percentage rating for reading orientation (pre -intervention)

Student	Learning Support Teacher Rating %	Class Teacher Rating %	Student Self-report Rating %
SA1	33	37	40
SA2	37	33	50
SA3	37	37	50
SA4	56	45	60
SA5	37	37	25
SB1	41	37	30
SB2	37	37	70
SB3	37	41	50
SB4	37	37	55
SB5	45	33	40
SC1	22	33	85
SC2	4	22	30
SC3	37	33	55
SC4	15	29	40
SC5	37	37	60
<b>Mean (rounded)</b>	$\bar{x} = 34\%$	$\bar{x} = 35\%$	$\bar{x} = 49\%$



While the self-reported scores of students for reading orientation were higher than those of their teachers, the overall average rating for this cohort ( $\bar{x} = 49\%$ ) was still low. Once again, it is important to interpret this finding in the light of previous research which cautions that self-report measures are not always reliable and valid with young children (Furlong & Smith, 1994). Any significant discrepancy between ratings by teachers and self-report ratings for an individual child (e.g. SC1) were noted and further interrogated in the corresponding interviews.

As with the ratings on reading self-efficacy, the positive correlation coefficient ( $r = 0.85$ ) between the ratings of individual students by each group of teachers is a strong validity indicator for this measure (see Figure 6.11). Further confirmation of the consistency of scoring among learning support and class teachers is evident in their ratings of two individual items on the reading orientation subscale. Both groups of teachers indicated an identical level of reading orientation among students on items seeking their perceptions of students' participation in reading ( $\bar{x} = 22\%$ ) and students' enthusiasm for reading ( $\bar{x} = 24.2\%$ ).

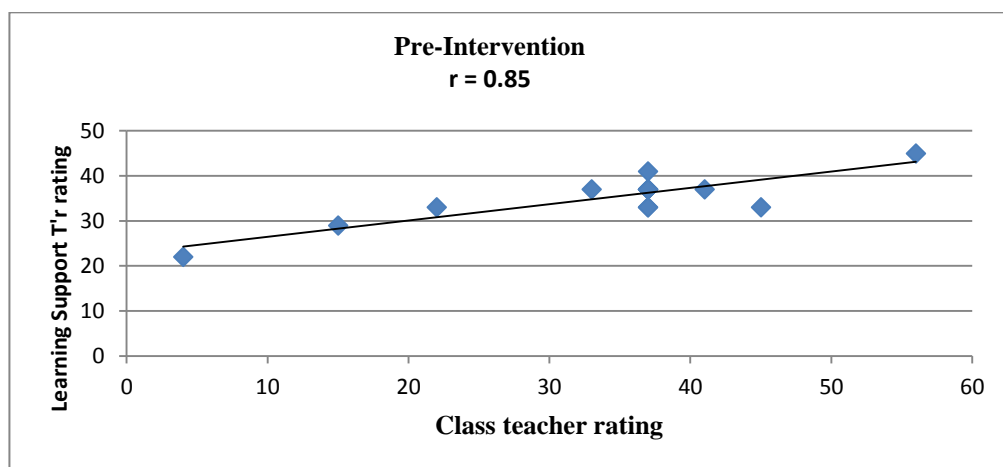


Figure 6.11: Correlation between teacher ratings of student reading orientation

A level of triangulation between student ratings and teacher ratings was also possible in the case of identical items that featured in both surveys. Notwithstanding the overall differences in average rating for reading orientation, direct comparison between identical items on both surveys indicated a high level of consistency between the data from teachers and students. For example, teachers were asked to rate the degree to which their students think that it is fun to read books on a scale of a) *no, never*, (b) *no, not usually*, (c) *yes, sometimes* or (d) *yes, always* (Appendix 20,

Q2, ii). Children were asked to indicate if it was fun to read books on a frequency of (a) *no, never* (b) *sometimes* or (c) *yes, always* (Appendix 21, Q2, i). The inclusion of a single middle category - 'sometimes' - for children in place of the '*no, not usually*' and '*yes, sometimes*' terms was based on findings from the initial piloting of the questionnaire. During this process it was clear that young children had difficulty in discerning between the nuances of these categories so appropriate percentage weightings were applied to both items to ensure a measure of consistency and reliable comparability. Examination of the average ratings by teachers and students for these items revealed an identical score ( $\bar{x} = 33.33\%$ ), confirming a convergence of opinion regarding this indicator of reading orientation. Another item assessing reading orientation probed the frequency with which children took books home from school (see Appendix 20, Q2, v and Appendix 21, Q2, vi). Average ratings by learning support teachers ( $\bar{x} = 24\%$ ), class teachers ( $\bar{x} = 28\%$ ), and students ( $\bar{x} = 33\%$ ) represented a low level of interest in this activity and a consistent response across informants.

The analysis of data gleaned from qualitative interviews with teachers, children and parents before the intervention also indicated a low level of reading orientation among students, thus reinforcing the overall findings from the questionnaires. Data from conversational interviews with children conducted in conjunction with the surveys elaborated on their interest in, and attitude to reading. These interviews presented opportunities to phrase and rephrase questions to establish an accurate account of the students' interest in reading (Wilson and Powell, 2001). When information from these interviews and from interviews with parents was triangulated with data from the questionnaires, a more comprehensive analysis was feasible. A constant theme emerging was that students tended to avoid situations where they would be required to read or where opportunities to read on their own volition were presented. The following comments are indicative of students' attitudes towards reading in this regard:

I don't really like reading books in my class because there are lots of hard words in there. Some books have pictures and I like them sometimes but I always want to play with the Lego. (SA5/RO)

My brother reads loads of books and has them in our room and he's always reading them in bed. I just play with my toys and then I go to bed. (SB2/RO)

Once we all went to Raheny library cos my cousin was getting a prize for Art and we were in the big room with all the books.....it was boring cos we had to wait there ages and just look at books. (SC3/RO)

We have to do reading every morning with Ms. XX when we come to school. If you come in late sometimes you don't have to read. (SC2/RO)

These comments reinforce the findings from the teachers' survey on students' participation in reading activities and are consistent with research that suggests that students who avoid reading often report negatively on reading processes and are likely to dislike books and find reading boring (Dahlen, Martin, Ragan, & Kuhlman, 2004). Other comments made by teachers and children in the course of pre-intervention interviews confirm that the students had a low level of interest in reading and did not consider it an important activity:

It seems to me that these children struggle so much with reading that they do not really like doing it as a chosen activity. I suppose you can hardly blame them. If I was really poor at something I probably wouldn't be that interested in doing it either. (LSA1/RO/1)

I notice that the struggling readers in my class, the ones that attend Ms XX for reading rarely go to the library corner for a book at free time. I find that when I read a picture book for the class that most children want to flick through it and read it too afterwards but not the strugglers. They just don't seem to see it as something that they choose to do on their own. (CTC1/RO/1)

I don't read books at home but my brother always does. He likes reading so he always reads books. (SB2/RO/1)

This element of choice or prioritisation is highlighted as an indicator of reading motivation in recent research. Although reading is required for many school tasks and activities, there are other times, both inside and outside the classroom, when children might ask themselves 'am I going to read or do something else?' (Guthrie, Wigfield & You, 2012, p. 6012).

Interviews with parents provided valuable insight into students' interest in reading outside of school. Transcripts from individual conversational interviews with students were analysed and compared with responses from their parents to cross-validate data and to capture different dimensions of the same phenomenon (Miles & Huberman, 1994). A consistent finding emerging from these interviews was the low level of engagement with books by these struggling readers at home. The following excerpt from a focus-group interview with the parents in one school (PFGB) before the intervention is representative of the responses across all three research sites:

- R: We talked with your children last week about reading and in particular their engagement with reading at home. Do you find that your child likes to read at home?
- P1: My XXXX does his reading that she gets for homework but that's all. He wouldn't really be interested in reading anything else even though we have plenty of books in the house.
- P2: Same with XXXX. I can never get him to read on his own. Say it's a wet day all he wants to do is play on his Gameboy. He'd go out and spin on his bike before he'd read a book.
- P3: XXXX would sit with me if I read to him but he wouldn't read by himself. I get his older sister to do the reading with him but he has no interest.
- R: If they were given a choice for free time play are they likely to read a book or do something else?
- P2: Definitely not read a book.
- P4: Maybe if I told him he had to read a book he might but he wouldn't choose to do it on his own
- P5: Even recently I told XXXX that we weren't going to his uncle's unless he cleaned his room. He was complaining that much I said to him to just go upstairs and read a book. When I went up later he was tidying the room instead of reading the book. He just has no interest.

The symptoms described here in relation to reading orientation resonate with research by Baker and Wigfield (1999), which identifies avoidance as an aspect of reading orientation which contrasts with intrinsic motivation.

The evidence from all research voices presented here suggests that the students participating in this study were not oriented towards reading before the intervention. The low level of reading orientation as reported is negatively correlated with reading achievement (Wigfield & Guthrie, 1997; Meece & Miller, 2001) and is consistent with attainment levels for these students on pre-intervention reading tests.

### 6.3.3.2 Reading orientation of students (post-intervention)

The findings from the post-intervention surveys reveal the resoundingly positive impact that the FORI intervention had on students' reading orientation as rated by learning support teachers, class teachers and students. The results from all surveys are presented in Table 6.22 with pre- and post-intervention data side by side for comparison purposes. The percentage increase in the reading orientation for each student, as rated by teachers and students, is highlighted with the overall mean rating for the cohort indicated in all cases. A correlation coefficient of 0.69 for ratings by both sets of teachers indicated a convergence of views on the effects of the intervention on individual students. The figures highlighted in yellow (Column D) indicate the average increase in reading orientation for each student as calculated from all three surveys. An overall mean increase of 36 percent reported here represents a positive effect of the intervention on reading orientation.

Table 6.22: Percentage rating for reading orientation (pre- and post-intervention)

Student	A			B			C			D
	Learning Supp. Teacher Rating %			Class Teacher Rating %			Student Self-report Rating %			
	Pre-interv.	Post-interv.	% increase	Pre-interv.	Post-interv.	% increase	Pre-interv.	Post-interv.	% increase	
SA1	33	82	49	37	45	8	40	70	30	29
SA2	37	78	41	33	48	15	50	80	30	29
SA3	37	89	52	37	41	4	50	55	5	20
SA4	56	82	26	45	74	29	60	70	10	22
SA5	37	52	15	37	63	26	25	40	15	19
SB1	41	96	55	37	89	52	30	60	30	46
SB2	37	100	63	37	74	37	70	75	5	35
SB3	37	96	59	41	89	48	50	75	25	44
SB4	37	96	59	37	86	49	55	80	25	44
SB5	45	96	51	33	89	56	40	55	15	41
SC1	22	100	78	33	100	67	85	90	5	50
SC2	4	78	74	22	63	41	30	75	45	53
SC3	37	100	63	33	85	52	55	80	25	47
SC4	15	45	30	29	45	16	40	35	-5	14
SC5	37	100	63	37	100	63	60	90	30	52
Mean	$\bar{x} = 34$	$\bar{x} = 86$	$\bar{x} = 52$	$\bar{x} = 35$	$\bar{x} = 73$	$\bar{x} = 38$	$\bar{x} = 49$	$\bar{x} = 69$	$\bar{x} = 20$	$\bar{x} = 36\%$

The ratings of the learning support teachers on this subscale are particularly noteworthy (see Column A). All but two students from the total cohort were rated in

the top quartile (> 75%) in the post-intervention survey of reading orientation, with more than half assigned a rating of over 90 percent. This represents an overall mean increase among students of 52 percent as rated by the learning support teachers who were closest to the process as chief implementers of the FORI intervention. The following excerpt from a post-intervention interview with one of these teachers is illuminating in the context of these ratings.

R: The reading orientation ratings for some of your students increased dramatically from pre- to post-intervention. Can you tell me more about this?

LSC1: Well I suppose, firstly, the rating I gave three of the group before the intervention was very low so there was plenty room for improvement. As I said before, these children were selected for the intervention because of their lack of motivation for reading and particularly their low level of interest. They would rarely ever read unless you asked them to and would never ask to bring books home. At free play time it was unlikely that they would ever choose a book as their activity even when we had the star system going for the most books read in a week.

R: And what happened that changed your opinion?

LSC1: Oh my God it was amazing to see the transformation as the intervention went on. They loved the games we played each day and were really competitive. At first you could see that they were driven by the fact that they would get a small prize if they reached their target and they also wanted to get a chance of winning the Scooby Doo medal on Friday. But then you could see that they were just interested in reading in its own right.

R: How did this manifest itself?

LSC1: In many ways really ... I know that they had to bring the FORI books home every night but they also asked to bring other books as well. One child XXXX was so motivated to improve her time on the word dash that she wrote all the words down in her copy to practice them at home. I mean that would never happen. We also started each session with a few minutes where children could choose any activity as a warm up. As the intervention went on it was fascinating to see them choosing to 'play' the FORI reading activities more and more.

R: That's a real sign of reading orientation surely

LSC1: And the amount they were reading was another dramatic change. It was funny because it wasn't as if they suddenly became excellent readers. It was that they enjoyed reading and as a result they read more. I also noticed overall students' eagerness to read gradually increased over the duration of the intervention period and their attention span increased.

The reference here to the increase in the amount of reading by students is representative of findings from all three research sites and is significant in the light of research on intrinsic motivation and reading. The amount that children read influences further growth in reading (Baker, Dreher & Guthrie, 2000; Stanovich, West, Cunningham, Cipielewski & Siddiqui, 1996) and it is documented that students who are intrinsically motivated spend up to three times more time reading than students who have low intrinsic motivation for reading (Wigfield & Guthrie, 1997). This is because intrinsically motivated students are more likely to *choose* to read (Guthrie & Wigfield 2000).

In the post-intervention interviews with parents there was equally convincing evidence that students were spending more time reading. The parents spoke animatedly about how their children read by choice more frequently in their leisure time:

...she hasn't stopped reading since she started in the programme with Ms XX. Before she would do anything but read but now we joined the library and all and she takes home three or four books every day. (PC1/RO/T)

As you know RTE came to the school to make a programme for the 'Family Project' series and they picked my XXXX because she told them the story of her reading with you and Ms. XX. They loved the story of her not having any interest in reading a few months ago and now reading every day. (PC3/RO/T)

I would say that XXXX is reading three times more than he ever did. He loves books and won't go to sleep now without reading something in bed. (PB2/RO/T)

...it's not only that she chooses to read but it's also the amount of time she spends at the reading. She even was playing the reading games you do with her with the egg-timer when she had her friends over for a sleepover. (PC5/RO/T)

You remember how I told you that she had no interest in reading and she'd be afraid to do the words like and afraid to get them wrong. But she's sittin down now with the Strictly Come Dancing booklet and all and even on the toy show when it came to the book part she was like 'oh yeah I think I might get some books for Christmas' so she's much more interested in books. (PB1/RO/T)

These comments can be considered as indicators of an increase in intrinsic motivation for reading in so far as they describe students' orientation towards reading activities and their tendency to seek opportunities to read in leisure time as well as in school (Sweet, Guthrie & Ng, 1998). The comments are also in stark contrast with the views of parents at the outset of the study, when they felt their children were demotivated to read and typically avoided most reading opportunities.

One of the fundamental pillars of the FORI programme is the inclusion of literacy activities that engage young children and might therefore 'smuggle' them into the reading habit. In this study, activities such as word dashes, phrase grids and timed reading charts and resources like toobaloos and whisperphones (see Appendix 17) were used to generate students' interest in reading and make relevant to their lives. Analysis of data from interviews with teachers after the intervention, along with evidence presented in their reflective journals, indicates that this effect was achieved. Teachers attributed the relevance of the selected texts and associated activities as contributory factors to the increase in reading orientation among children:

It was so important that the books we used captured the imagination of the children. They could all relate to themes like 'time for bed' and 'what's for dinner' and the activities around these texts. (LSA1/RO/R)

'Children loved the 'Dr. Jen' book over the last two weeks. Easy to make it relevant to them as every one of them had experience of someone in the family being sick at some time. Noticed this week for the first time that children seemed self-motivated to read. One even forgot to take home her prize.' (LSC1/RO/RJ)

Much of the reading we normally do is based on the reading recovery readers or the levelled readers and they aren't always relevant to the children and their experience. With FORI we were able to make each text and each activity relevant to the children because we were the designers. A good example of this was the work we did with the scrap books and the text innovation. (LSB1/RO/R)

If you make something relevant for children there is a good chance that they will want to participate. FORI was all about getting children interested in reading and making sure each activity was relevant. You could see the children were interested in the activities from very early on because even the weakest were experiencing success. (LSC1/RO/R)



This stance is backed up by a substantial body of research on reading motivation which suggests that if reading material is made interesting and relevant for students, they are more likely to become engaged and competent readers (Baker, Dreher & Guthrie, 2000; Guthrie, McRae and Lutz-Klauda, 2007; Skinner, Kindermann & Furrer, 2009; Vansteenkiste, Lens & Deci, 2006; Wigfield *et al.*, 2008; Wigfield & Guthrie, 2010). Thus, by including relevant and interesting activities and resources in their instruction, the teachers in this study cultivated intrinsic motivation and fostered a positive orientation toward reading (Guthrie & Coddington, 2009).

Many reading initiatives fail because the role of parents as a critical component of the literacy process is overlooked by the school environment (Sonnenschein, Baker, Serpell, & Schmidt, 2000). Parents play a central role in determining a student's success at school (Tracey & Young, 2002) and have a particularly important role in orienting children towards reading (Baker, Serpell, & Sonnenschein, 1995). As part of the FORI intervention teachers met with parents and provided specific advice on what to read with their children, how much to read, how long to read, how to respond to mistakes, and how to keep the experience enjoyable (Ollila & Mayfield, 1992). Teachers were unanimous in acknowledging the important and enhanced role that parents played in the improvement in reading orientation among students over the course of the current study. They reported that the parents' role in the FORI programme was 'invaluable in motivating the young struggling readers' (LSA1/RO/P) and 'paid rich dividends when it came to rating children's orientation for reading' (LSC1/RO/P). The home reading log was identified as a useful means for maintaining daily contact with parents. Teachers also reported that children's enthusiasm for reading the FORI texts at home 'forced the parents to be involved' (LSB1/RO/P). The recognition of the role of parents in enhancing the reading orientation of their children is a key finding given the misgivings reported by teachers in Phase One of the study in relation to the ability of parents to help with their struggling reader at home.

The voice of the students also provided an insight into the effects of FORI on their orientation towards reading. While the overall mean rating by the students on their questionnaire was marginally lower than that of the teachers (see Table 6.22), an examination of individual items on the subscale indicated where students demonstrated a reluctance to reveal an orientation towards reading. The overall average score for the item probing whether students would prefer a new game or a

new book as a present ( $\bar{x} = 27\%$ ) and for the item asking children how they would feel if they received a book as a birthday present ( $\bar{x} = 40\%$ ), had a tempering effect on their ratings for reading orientation. This was not entirely unexpected given the age of the children and their innate love of toys and games.

An interesting antidote to this finding was presented by a student in the course of the study. At the end of each week students were rewarded with a prize for their efforts during the preceding week. Initially this process fed into the students' external motivation and the children had a choice of prizes consisting of items such as pencils, erasers, notebooks and simple gifts like bouncy balls and trinkets. As the intervention progressed, literacy related prizes (e.g. picture books, word games, novelettes) were introduced as alternative rewards. While students had indicated a preference for games over books in the survey, this trend was reversed for the majority of students over the course of the study. A watershed moment for one group occurred in the fifth week of the intervention when a student chose a picture book as the reward for her efforts that week. Because her peers had chosen the non-literacy items as prizes up to this point, her selection of a book as a reward attracted some taunting comments. Undaunted, she tucked her book under her arm and announced 'well you can't read a bouncy ball tonight' (FN/RO/3). This was a portent of the change in reading orientation that transpired over the remaining weeks of the intervention.

The notable exception to this trend was one student (SC4) who self-rated as decreasing in her reading orientation as per the post-intervention survey. This student, who had also experienced significant difficulties in mastering the basic reading skills, continued to have a relatively poor self-concept as a reader. While her overall motivation for reading did improve it was largely dependent on extrinsic rewards to engage with reading activities. Outside of the reward system, she was unlikely to engage in the reading process or to regard it as an important or useful activity. This dependency on external motives for achievement has been negatively correlated with students' reading orientation (Miller & Meece, 1997) and suggests that FORI was not as effective in improving reading motivation when it did not impact on reading achievement.

The conversational interviews conducted with students after the intervention and the focus group interviews six months later provided further elucidation of their responses to the reading orientation subscale. It was interesting to note that the

conversational interviews held after the intervention lasted, on average, ten minutes longer than those carried out at the beginning of the study. Students had a lot more to say in the interviews immediately after the study and were animated in their responses. The majority of children reported that they now read for fun every day at home and that they took books home from school:

I love reading the books we do in school with Ms XX. I teach them to me little brother an' all and he can't even read. (SB2/RO/2)

When Kayla and CJ come to my house we bring our books with us to read and my cousin Josh reads the same books in his school and we read them with him too. My brother reads very hard books and I can read some of the words in them. (SC3/RO/3)

I read every night when I go to bed. Sometimes me Mam reads for me but I always read in anyways. My favourite book is called Tikki Tikki Tembo. I read that every night. (SB1/RO/1)

I take books home from school to read cos we don't have much books at home. I'm getting loads of books from Santa as a surprise. (SA1/RO/1)

These comments marked a significant change in reading orientation from before the intervention, when there was evidence that children did not see reading as a fun activity and were likely to avoid opportunities to read when presented with a choice of free time activity. The impact of FORI on reading orientation as reported by teachers and students is summarised below in Figure 6.10.

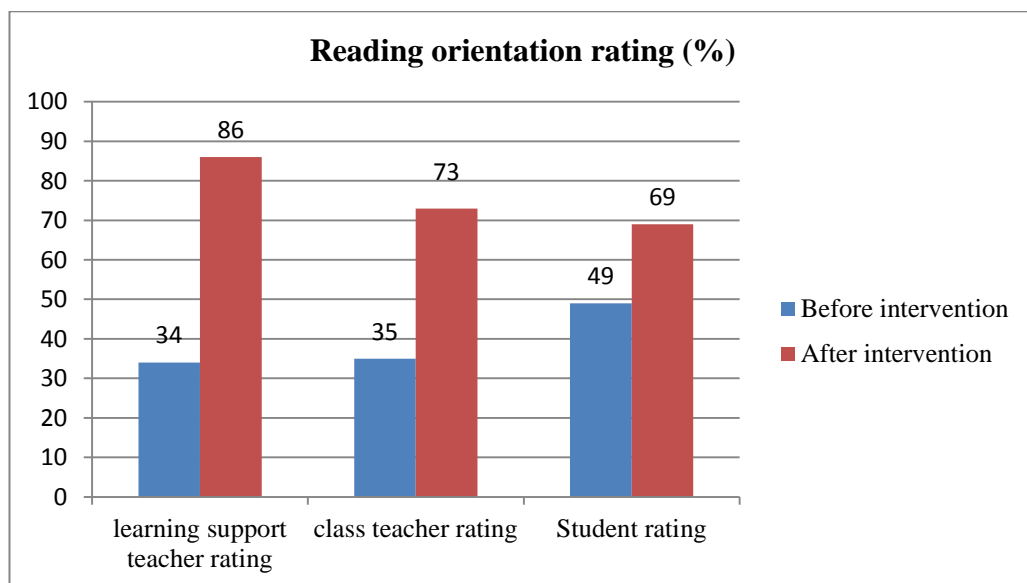


Figure 6.12: Impact of FORI on student reading orientation

### 6.3.4 Student perceived reading difficulty

The findings and analysis presented in this section address the following research question: What are the effects of FORI on the *perceived reading difficulty* of struggling readers?

#### 6.3.4.1 Perceived reading difficulty of students (pre-intervention)

The third motivational construct selected for this study provided the context for examining the extent to which students perceived reading tasks as challenging or problematic. This investigation was conducted in the light of previous research which illustrated that when students believe that reading is difficult, they are likely to have negative attitudes toward reading, which in turn can lead to reading avoidance (Chapman & Tunmer, 1995; Seifert & O'Keefe, 2001). The perceptions of reading difficulty subscale on the student survey probed the extent to which the child thought that reading was a difficult task. For the teachers, student reading difficulty was defined as the belief that 'reading activities are hard or problematic' for the child (Chapman & Tunmer, 1995, p.154). The results of both surveys indicate a high percentage of perceived reading difficulty as reported at the outset of the study by teachers and students (see Table 6.23).

Table 6.23: Percentage rating for perceived reading difficulty (pre-intervention)

Motivation for Reading Percentage Rating: <i>Perceived Reading Difficulty</i>			
Student	Learning Support Teacher Rating (%)	Class Teacher Rating (%)	Student Self-report Rating (%)
SA1	73	84	67
SA2	84	78	67
SA3	78	84	45
SA4	73	84	62
SA5	73	73	67
SB1	62	67	72
SB2	84	67	70
SB3	73	67	53
SB4	56	62	75
SB5	67	67	61
SC1	100	100	78
SC2	100	100	61
SC3	84	89	61
SC4	95	100	92
SC5	89	84	83
<b>Mean (rounded)</b>	$\bar{x} = 79\%$	$\bar{x} = 80\%$	$\bar{x} = 68\%$

Given the low level of reading attainment by students before the intervention, it was not surprising that they perceived reading tasks to be difficult (Seifert & O'Keefe, 2001). All but one student (SA3) self-rated above 50 percent on perceived reading difficulty with the overall average rating for the full cohort at 68%. An examination of the responses to individual items on the subscale reveals that this overall rating could have been even higher were it not for the interpretation of one question by some students. The first item on the subscale sought students' perception on whether it was hard for them to read out loud in class. A high percentage of students (73%) responded that this was never the case, which was incongruous with the responses to all other items on the subscale. It emerged during the conversational interviews that students interpreted this item as the physical ability to raise their voice in reading rather than to read aloud in front of their peers. When the latter scenario was further and more specifically probed during the interviews, students typically conceded to having difficulty with this task. This was an example of the challenge identified by Chapman & Tunmer (1995) in wording questions that are 'not unduly influenced by psycholinguistic factors associated with young children's level of cognitive development' (p.155). It also served as a cautionary note to ensure that all responses by children were probed fully during the qualitative process.

Interestingly, some of the students who had self-rated comparatively high on the reading self-efficacy subscale before the intervention also rated high on their perceptions of the difficulty of reading (see Table 6.24). This finding, though apparently contradictory on first perusal, is not unique. Previous research has identified that some emergent readers have the ability to perceive reading as being difficult for them, while at the same time holding self-efficacy beliefs about their ability as readers (Eccles, Wigfield, Harold, & Blumenfeld, 1993; Wigfield *et al.*, 1997).

Table 6.24: Comparison of student self-report ratings (pre -intervention)

Student	Reading self-efficacy rating (%)	Perceived reading difficulty rating (%)
SA1	75	67
SA2	67	67
SA4	67	62
SB1	62	72

Evidence from Coddington & Guthrie (2009, p.228) suggests that even at an early age, readers are able to say ‘*I believe that I can read this book*’ (a statement of self-efficacy), as well as ‘*I believe that this book will be difficult for me to read*’ (a statement of perceived difficulty). An interrogation of the transcripts of the conversational interviews with these students confirms this phenomenon. A representative sample of the dichotomy among student responses in this regard is presented in Table 6.25.

Table 6.25: Representative comments on reading efficacy and reading difficulty

Student	Representative comments on reading self-efficacy	Representative comments on perceived reading difficulty
SA1	‘I can read all the books in. XX’s class’	‘I never seen this book before. I don’t think I can read it’
SA2	‘I like reading to my young sister and brother’	‘The books in my teachers class are too hard for me to read’
SA4	‘I am good at going up the word chart in Ms. XX’s class cos I remember all the words’	‘Reading books is hard sometimes. I like books with lots of pictures an’ all. One of the books in my class has no words.’

These comments are consistent with research by Nicholls and Miller (1984), who observed that young children can hold positive perceptions of ability while also feeling that tasks are difficult. They found that it is not until approximately eight years of age that children develop the more logically consistent view that experiencing ongoing difficulty is inconsistent with positive self-perceptions of ability and competence.

Ratings by learning support and classroom teachers on this motivational construct also indicate a high level of perceived reading difficulty among students. The rating by class teachers of students on this subscale ( $\bar{x} = 80\%$ ) is particularly noteworthy given their everyday opportunities to observe children’s attitude to reading as it occurs across subjects in the course of a school day (Wigfield *et al.*, 2004). The following observation by one teacher, who had five intervention students in her class, was representative of the comments by teachers in all three research sites:

The children in my class who struggle with reading are aware of their difficulties. Even though every effort is made to include them in all aspects of literacy lessons it is painfully obvious that they are not drawn to reading. We do the power hour in collaboration with the resource teachers and of course XX. During this time all children have lots of

opportunities to read books of their own choice. You can see that the strugglers shy away from reading during this time. It's funny because they love listening to stories and may even tell you that they like reading but the reality is they see reading as a difficult task that they are not likely to be able to do. I think you could safely say that they avoid reading where possible. (CTC3/RD/4)

This finding is reflected in several studies which have illustrated that when students believe that reading is difficult, they are likely to have negative attitudes toward it and are likely to avoid it (Chapman and Tunmer, 1995; Coddington & Guthrie, 2009; Wigfield & Guthrie, 1997b). The finding is also supported by observations made by learning support teachers in relation to students who attend their reading programmes:

Obviously when children come to my room they know that they are going to be reading and they always participate in our activities. But you can see it's not their thing. I suppose if you are not good at something it's not surprising that you would be less than positive about it. (LSC1/PRD/1)

Our policy is to withdraw a mixed ability group from class for reading to avoid negative connotations of going to the reading room. This works well because we have positive role models in the group but it also highlights the negative attitude of the weakest students towards reading in comparison to others. (LSB1/PRD/2)

They typically start out positive but as the term goes on you can see the negative attitude creeping in ... maybe it's got to do with the type of instruction ... I mean when they don't know the basics it becomes a bit of a drudgery you know but you have to get them started. You can see that they would gravitate towards other activities and avoid reading. (LSA1/PRD/1)

These comments and the previous observations by class teachers indicate a level of accord between both sets of teachers with regard to the perceived reading difficulty of students. Correlational data of their ratings presented in Figure 6.13 reveals a close alignment between scoring for individual students ( $r = 0.84$ ) and is an indicator of the validity of the survey instrument.

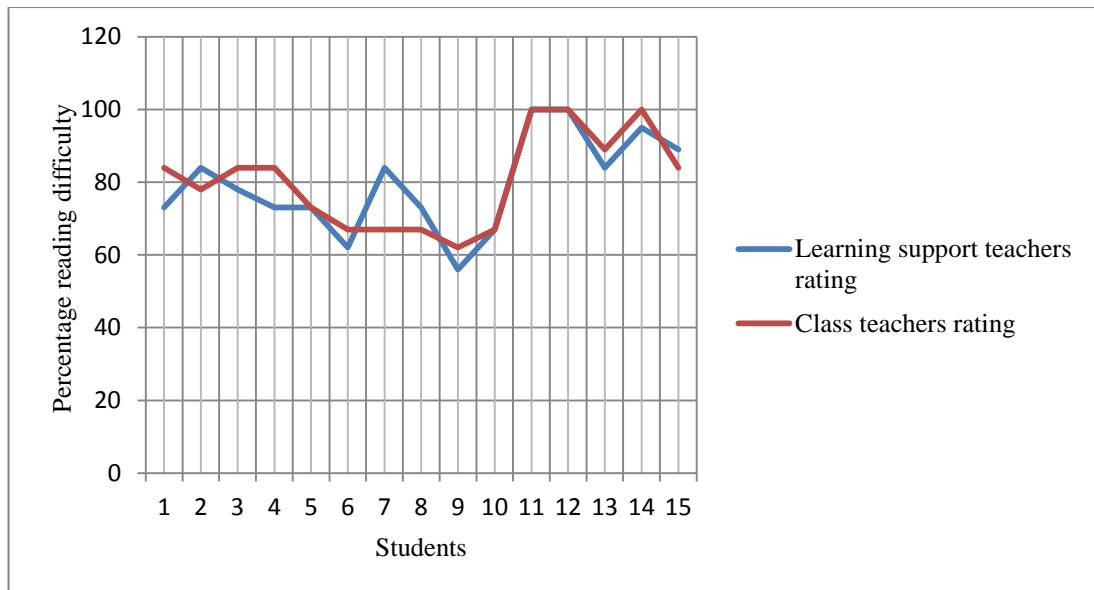


Figure 6.13: Comparison of teacher ratings of perceived reading difficulty (pre-intervention)

An emerging theme from the interviews with teachers was that children’s perceived difficulty with reading was compounded by the fact that they were increasingly aware of their reading ability in comparison to their peers. Three of the class teachers interviewed had previously taught the intervention students in infant classes and reported that this effect was more obvious as they progressed through the grades:

When I had XXXX and XXXX in infants you could see that they were a little behind the class in reading but they were blissfully unaware and enjoyed shared reading and story time. As they went through senior infants you could see the gap widening and heads going down when asked to read. (CTA2/RD/1)

I think it’s sad that children who start off like all the other children in school with enthusiasm and curiosity can have such a negative outlook on reading by the time they are at the end of Senior Infants. (CTB2/RD/2)

Such a finding is similar to the results of numerous studies that have indicated that many of young children's initial perceptions of reading gradually become more consistent with actual achievement during the first few years of school (e.g., Entwistle & Hayduk, 1978; Nicholls, 1979b; Stipek, 1996).



The perception by students that reading was problematic also had an impact on their self-confidence as testified by the remarks of some teachers:

One of the most challenging things that you have to deal with is when children start losing confidence because they realise that reading is a problem for them. (CTB1/RD/2)

I find that if you don't address children's negative disposition towards reading you won't make progress with the skills. It's like pushing a wheelbarrow full of bricks up a muddy hill trying to teach a child to read if they believe that they can't do it before you even start. If they lack confidence to even give it a go it's tough. (CTA2/RD/2)

Their own self-concept of themselves as readers plays a negative role on their motivation to read .... This wasn't always the case with these children. (CTB1/RD/2)

These comments find resonance in research on reading self-concepts and their relationship with reading achievement. Most children start off with optimism and interest in learning to read. Those who experience difficulties quickly develop a concept of the self as a poor reader, and their motivation for reading declines (Baker, Sonnenschein, & Switkin, 2001).

Interestingly, findings from interviews with parents before the intervention indicated more diversity in their perceptions of children's reading difficulties. While many of them agreed that children were not oriented towards reading they were less convinced that their children perceived reading as difficult:

I think he's just not interested in reading. If he tried he'd probably be alright. He doesn't be bothered with books. (PB3/PRD/1)

She doesn't like reading that's for sure and she won't even read for her homework ... I'd say she's probably too interested in playing with her dolls... I don't know if she thinks it's hard at all. (PA3/PRD/2)

However, research would posit that liking reading and feeling competent in it does not necessarily mean that young children perceive reading to be easy (Coddington & Guthrie, 2009). The weight of evidence presented here from teachers, from self-reports by students and from researcher field notes would suggest that students typically had a high level of perceived reading difficulty at the outset of the study.

### 6.3.4.2 Perceived reading difficulty of students (post- intervention)

As part of the investigation into the effects of FORI on the motivation for reading, this study was interested in establishing if the instructional strategies used would impact on the perceived reading difficulty of students. Results from quantitative measures employed after the intervention indicate that perceptions of reading difficulty as self-reported by students were significantly reduced. An overall mean rating for perceived reading difficulty of just 29 percent represented an average decrease of 39% per student over the period of the intervention (see Table 6.26). It is important to remember that, in the data analysis for this construct, a reduced percentage rating represents a positive effect of the intervention.

Table 6.26: Percentage rating for perceived reading difficulty (pre- and post-intervention)

Student	Learning Supp. Teacher Rating %			Class Teacher Rating %			Student Self-report Rating %			Mean % increase across raters
	Pre-interv.	Post-interv.	% decrease	Pre-interv.	Post-interv.	% decrease	Pre-interv.	Post-interv.	% decrease	
SA1	73	34	-39	84	66	-18	67	7	-60	-39
SA2	84	61	-23	78	44	-34	67	47	-20	-26
SA3	78	67	-11	84	78	-6	45	31	-14	-10
SA4	73	50	-23	84	50	-34	62	22	-40	-32
SA5	73	61	-12	73	45	-28	67	14	-53	-31
SB1	62	22	-40	67	33	-34	72	17	-55	-43
SB2	84	28	-56	67	33	-34	70	8	-62	-51
SB3	73	22	-51	67	33	-34	53	33	-20	-35
SB4	56	17	-39	62	22	-40	75	14	-61	-47
SB5	67	28	-39	67	33	-34	61	45	-16	-30
SC1	100	33	-67	100	33	-67	78	22	-56	-63
SC2	100	17	-83	100	33	-67	61	50	-11	-54
SC3	84	6	-78	89	45	-44	61	46	-15	-46
SC4	95	95	0	100	95	-5	92	50	-42	-16
SC5	89	6	-83	84	28	-56	83	25	-58	-66
Mean	$\bar{x} = 79$	$\bar{x} = 36$	$\bar{x} = -43$	$\bar{x} = 80$	$\bar{x} = 45$	$\bar{x} = -35$	$\bar{x} = 68$	$\bar{x} = 29$	$\bar{x} = -39$	$\bar{x} = -39$

Examination of the ratings on individual items on the student subscale provided the impetus for further probing in the conversational interviews. The self-reported ratings for two items, representing the most significant reduction in perceived difficulty for students, are featured in Table 6.27. These items were identified in previous research as reliable indicators of young readers' perception of reading difficulties (Mazzoni, Gambrell & Korkeamaki, 1999). As is evident from the comparison between pre- and post-intervention ratings, students altered their

perception of reading difficulty notably over the course of the intervention. At the outset of the study just over two-thirds of students (67%) indicated that they always make lots of mistakes in reading, with almost three-quarters of students (74%) disclosing that they always require extra help in reading. These ratings were significantly different on the post-intervention survey, with only a small percentage of students (6%) indicating that they make lots of mistakes in reading and four-fifths of students (80%) declaring that they never need extra help in reading. The results suggest that the FORI strategies impacted positively on students in the context of this construct of motivation. Information gleaned from conversational interviews with students based on these items confirmed a sea change in their perception of reading as a problematic task.

Table 6.27: Comparison of two items on perception of difficulty in reading survey (YRMQ)

	Do you make lots of mistakes in reading?			Do you need to get some extra help in reading?		
	No, never	Sometimes	Yes, always	No, never	Sometimes	Yes, always
<b>Pre-intervention</b>	6%	27%	67%	13%	13%	74%
<b>Post-intervention</b>	60%	34%	6%	80%	20%	0%

Table 6.28: Extract from conversational interview on perceived reading difficulties

<b>Interview with SC1 (September, First Class)</b>	<b>Interview with SC1 (December, First Class)</b>
<p><i>When you are reading in your class do you ever make mistakes?</i></p> <p>Yes sometimes. Well nearly always. The books in my class have hard words in there. I try to read them.</p> <p><i>Do you?</i></p> <p>Yes and I try to sound them out but sometimes I can't. I know some words in my Religion book but that's all.</p> <p><i>What do you do when you can't read a word?</i></p> <p>I just ask my teacher and she tells me or sometimes I write it on my board with the marker.</p> <p><i>Why do you think you make mistakes in reading?</i></p> <p>Cos I'm not good at my letters an'all... but I know Winchilla and Burger books</p> <p><i>Do you need to get some extra help in reading?</i></p> <p>Mmm, yea. That's why I go to Ms. XX class</p>	<p><i>So do you ever make mistakes when you're reading in your class?</i></p> <p>I know all the words in my books and I got a Scooby Doo medal two times. I don't know some words first and then I write them in my scrap book and I practice them with my toobaloo and then I know them. And I don't make mistakes on the iPad cos it tells you.</p> <p><i>Why do you use the toobaloo?</i></p> <p>Cos then I can hear my voice and I know I am reading right.</p> <p><i>And if you are reading a book with hard words do you make mistakes?</i></p> <p>Sometimes if they are hard and I don't know them I sound the letters. If the word is in the word dash or in the dice game I know them then cos we read them all the time. Ms. XX puts the hard words on lollipop sticks and then we find them and then we know them.</p> <p><i>And do you need to get some extra help in reading?</i></p> <p>I can read all my book in Ms XX's class and I get a prize every week. Sometimes I can't read the word but I draw a line under and then I can ask for help</p>

An extract from pre- and post-intervention interviews with one student (SC1) provides an illustration of the change in perception among students (see Table 6.28 above). Prior to the intervention this student had been assigned a rating of one hundred percent by both learning support teacher and class teacher on the perception of reading difficulty subscale. Ratings by both sets of teachers were reduced by an average of 67 percent after the intervention. Reference by the student to FORI resources in these interviews is important. A strong theme emerging from the transcripts of teacher interviews was the efficacy of the instructional resources for motivating children to participate in reading activities and for decreasing perceived reading difficulties:

They loved the resources that we used with the different activities. When we used the whisperphones and toobalooos for reading it was as if they forgot that they thought reading was difficult. (LSA1/PRD/res)

It's funny how they perceived reading to be more accessible when we were using the FORI activities. Like for XXXX and XXXX you could never get them to read because they had decided that it was 'too hard'. Yet when they came into the room they were looking for the iPad to look at the stories. The iPad was a big hit with them. (LSA1/PRD/res)

When we put the stories on the iPads and they could swipe the pages to read they were captured immediately. For children who would not open a book this was a new departure. One of them told me that she could read her story on the iPad 'cos it's easier and I can read my Da's phone too'. I think they were stimulated by aspects of the iPad such as the *next* and *previous* button that made sounds and noises, as well as highlighting of the text. I think they were more motivated to read using them but it transferred to the other activities because they no longer saw reading as a threat. (LSA1/PRD/res)

Allusion to the favourable impact of ebooks on students perceived reading difficulty is in harmony with recent research on motivation for reading. Ciampa (2012) found that using electronic storybooks with struggling readers increased their motivation for reading and contributed to a reduction in their learned helplessness in relation to reading. Her major findings were that students who perceived reading as difficult looked forward to reading after their interaction with electronic storybooks. The findings in this study suggest that ebooks along with other FORI methods and

resources appeared to make reading more attractive for struggling readers and therefore, had a positive influence on reducing their perceived reading difficulty.

Post-intervention ratings by teachers also registered a significant decrease in their perceptions of student difficulty with reading (see Table 6.26). At the outset of the study, learning support teachers and class teachers agreed that students perceived reading to be a problematic and difficult task. Both sets of teachers rated over half of the students in the top quartile (> 75%) for perceived difficulty. After the intervention, just two students, SA3 and SC4, were rated in this quartile. All students bar one (SC4) were rated as having decreased perceived reading difficulty and a more positive outlook on their reading ability. In the course of the interviews, teachers attributed this improvement to the instructional strategies employed during the intervention. For instance, in elaborating on their responses to the item rating the frequency with which students make mistakes when reading, teachers were in agreement that the repeated reading aspect of the intervention was a key factor in their more favourable ratings:

Very often students give the perception that they have little confidence in reading and that they think they're going to make a lot of mistakes. I think this is directly related to the texts that we expect them to read. It was fantastic with FORI that they were reading the same text over and over but in different formats, like you know when we did Readers Theatre or word dash or even reading pieces from their scrapbook entries. (LSC1/PRD/rr)

You could see that they were more confident in reading and that they weren't expecting to make mistakes because they were reading the same vocabulary in different formats over the week or two. This was great for the weakest readers. Every day they were starting from a position where they were familiar with the text. (LSA1/PRD/rr)

I wonder why I have never used repeated reading more as a strategy. I know when I was a class teacher there was pressure to move on and get more of the book completed which was daft really. In FORI it was just part of the instruction and you could see children saying 'I can do this'. (LSB1/PRD/rr)

The support for repeated reading was reiterated by all teachers but also included a qualifier from one learning support teacher:

I would not have been a huge fan of repeated reading of the same text as I feel the weakest readers need a wide range of texts to maintain their interest and motivation. The experience with FORI was an eye opener to what you could do with a single text, but it's crucial that you don't just read and reread the text. The wide variety of ways that we did repeated reading like antiphonal and echo reading and all the activities ... they made all the difference. Lots of work but well worth it. I don't think repeated reading would work as well without the resources. (LSA1/PRD/rr)

This comment, though supportive of repeated reading as a strategy to minimise mistakes, identified a potential limitation for replication of FORI in the regular classroom setting. The success of repeated reading as a strategy was due in part to the wide range of resources made available to each student. This was labour intensive for just five students in each group and would be a significant challenge to supply to a full class of students.

Another possible explanation for the decrease in perceived reading difficulty was the gradual release of responsibility model used in the course of the intervention. Some teachers attributed the more favourable ratings on this item to the advantages of using this model, with particular reference to the benefits of modelling reading:

When you take responsibility and model the reading for the child, you remove the fear of making a mistake. At first I wasn't totally convinced as I thought that they would just learn it off by heart but modelling the reading was so empowering. (LSA1/PRD/ror)

When you read for the children first, everybody experiences success at the same time. You could then release the responsibility at different rates with different children ... it was real differentiation in action I suppose. (LSB1/PRD/ror)

Modelling first was the key for me. It was so effective. I recorded myself reading the text fluently and then we would all read with the recording ... you know choral reading. Eventually even the weakest readers were reading with intonation. The way I looked at it was if I was teaching someone to bake a cake I would probably demonstrate first and then give assistance after that as I saw fit. (LSB1/PRD/ror)

Teachers were also positive in their post-intervention ratings on the subscale item that probed whether or not the student perceived that they needed extra help in reading. In the pre-intervention survey, learning support teachers had identified this as an area of concern with average ratings of 97 percent for the item. Class teachers had concurred and rated students 93 percent on the item. Teachers were in agreement that students needed extra help in reading and also determined that students themselves were aware of their need. On the post-intervention survey, teacher ratings decreased by an average of 43 percent for this item. Teachers were keen to qualify this rating in the course of the interviews. It was evident that they still believed that children needed extra help in reading, but they also were of the opinion that students were more confident in their ability and were less inclined to perceive that they needed assistance.

One teacher reported that because of the repetitive nature of the activities used in FORI in each unit, students were confident of procedures and ‘were well able to work through activities independently’ (LSB1/PRD/eh). Another explained that instruction was ‘not focused on mistakes or what the child didn’t know but rather on the positives and what the child could do’ (LSA1/PRD/eh). She went on to posit that ‘children felt that they didn’t need help in reading as much even though the reality was they were getting more assistance than ever but in a different way’. These comments supported the hypothesis that FORI had decreased the perception among students that reading was difficult or problematic. The comments also indicated that teachers, while aware of their role in helping struggling readers, also saw it as their responsibility to help them not to feel that they were dependent on extra help.

While findings in relation to the effects of FORI have been analysed and discussed for the most part in the context of the intervention participants as a single cohort, there are some noteworthy observations in the post-intervention ratings for individual students. Notwithstanding the average overall decrease of perceived reading difficulty among students, attention is drawn to the ratings of two particular students, SA3 and SC4. The decrease in ratings by teachers of perceived reading difficulty for both of these students was significantly less than the overall average. When the scores for these students were cross-referenced with their post-intervention reading achievement results a similar pattern was discovered, particularly with regard to their word reading efficiency. These findings suggest that the effects of FORI on students’ perceived reading difficulty is contingent on them improving their

ability to decode. This finding was strengthened by the comments of one class teacher who surmised that ‘reliance on the use of word identification strategies alone had a negative effect on their perceived difficulty in reading and contributed to poor self-esteem as a reader’ (CTB1/PRD/3).

Research by Seifert and O’Keefe (2001) found that students who perceived tasks to be difficult were more likely to be discouraged and not to engage in them. There was evidence of this phenomenon in students’ attitude to reading prior to the intervention. Teachers had identified task avoidance as a trait among readers in their programmes. A notable change in this regard emerged in the post-intervention data analysis. Parents and teachers reported on the new-found confidence of students in tackling reading, even when the text was unfamiliar and considered difficult:

XXXX is reading everything now. Every leaflet that comes through the door he thinks he can read it. It’s gas watching him picking out the words he knows. It’s just completely different from before this started. I’m so happy. (PFGB/PRD/1)

We went to the graveyard recently to visit his uncle’s grave and he spent the whole time walking around and pointing out words he knew. (PFGB/PRD/3)

XXXX keeps commenting on the books being easy. He is willing to attempt any reading he comes across and is confident in his own reading ability. This marks a huge turn around for him. (LSB1/PRD/2)

She won’t sit down for breakfast without havin to read the back of the cornflake boxes and the milk carton. We play games every morning now to see who can find words on the boxes. (PFGB/PRD/5)

The overwhelming feeling from parents was that children did not perceive reading to be a difficult task. It was also noteworthy that parents had much more to say about their child’s reading habits at home than previously. It was clear that the reading-at-home dimension of FORI had a positive impact on parents, involvement with their child’s reading. The literacy experiences that students had at home during the intervention were not underestimated and were significant in contributing to their orientation towards reading and increased efficacy (Evans, Shaw & Bell, 2000).

As previously stated, many of young children's initial perceptions of reading gradually become more consistent with their actual reading achievement (Entwistle & Hayduk, 1978). In the post-intervention discussions, teachers provided support for



this assumption by attributing the decrease in students' perceived reading difficulty and their resulting increase in confidence in reading to students' improved reading achievement.

The analysis and discussion presented here converge in suggesting that the FORI intervention had a positive influence on students' perceived difficulty with reading. A summary of this influence as by indicated all research informants is presented in Figure 6.14.

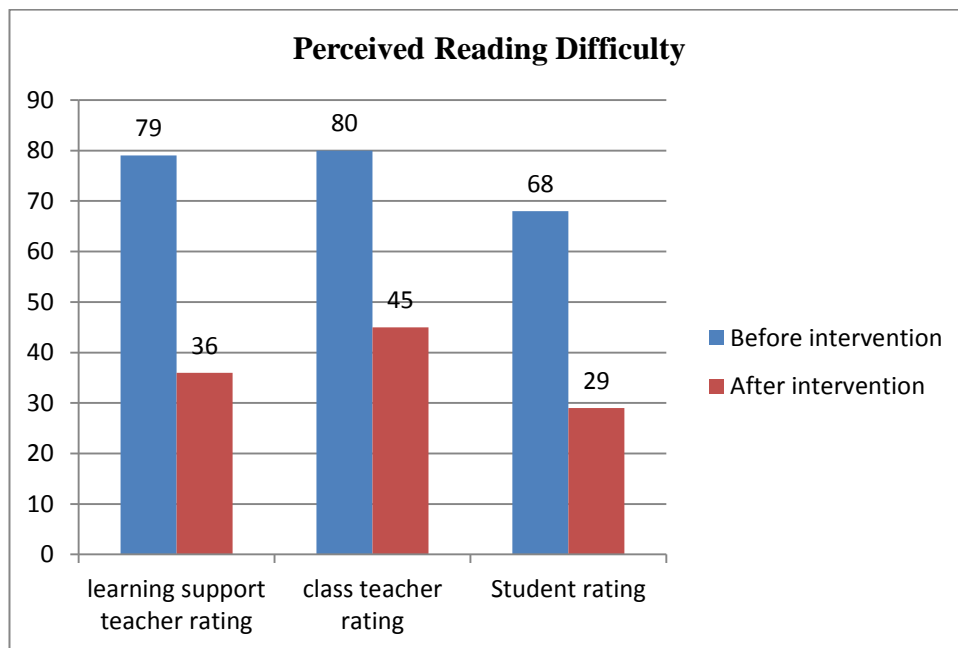


Figure 6.14: Impact of FORI on student perceived reading difficulty

### 6.3.5 Statistical analysis of reading motivation findings

Were there changes over time in the responses in relation to students' motivation for reading? In other words, did responses by teachers and students significantly differ from the time they were given the questionnaire before the intervention and again, after the intervention? Total questionnaire responses (pre- versus post-intervention) were compared through the Wilcoxon signed-rank test. This is a non-parametric statistical hypothesis test used when comparing two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ (i.e. it is a paired difference test). In testing the related samples for statistical significance it was necessary to compare results for all three research informants across the three constructs of motivation included in this study.

Hence, statistical information was required on nine discrete comparisons. Results indicated that children’s responses did change over time in significant and positive ways. All nine comparisons showed a significant difference for pre- and post-intervention (see Table 6.29). For example students’ responses on the post-intervention questionnaire in relation to their self-efficacy for reading ( $\bar{x} = 82.7$ ,  $\sigma = 16.3$ ) were significantly different from their responses on the questionnaire administered before the intervention ( $\bar{x} = 55.1$ ,  $\sigma = 14.92$ ),  $z = -3.4$ ,  $p < .001$ . This means that for all three groups, perceptions of students’ reading efficacy, reading orientation and perceived reading difficulty had improved after the intervention.

Table 6.29: Wilcoxon signed-rank test

	Measure	Z	p
Class teacher	Reading Self-Efficacy	-3.2	.002
	Reading Orientation	-3.4	.001
	Perceived Reading Difficulty	-3.4	.001
Learning-support teacher	Reading Self-Efficacy	-3.3	.001
	Reading Orientation	-3.4	.001
	Perceived Reading Difficulty	-3.3	.001
Student	Reading Self-Efficacy	-3.4	.001
	Reading Orientation	-3.3	.001
	Perceived Reading Difficulty	-3.4	.001

(Comparison of class teacher, learning-support teacher and pupil perceptions of reading efficacy, reading orientation, and reading difficulty pre- and post-intervention)

### 6.3.6 Summary of findings in relation to effects of FORI on reading motivation

The impact of FORI on the motivation for reading has been discussed and analysed here in the context of a chorus of research voices representing teachers, parents and students. Given the multidimensional view of reading motivation adopted for this study, the effects of the intervention were measured using three motivational constructs: reading efficacy, reading orientation and perceived reading difficulty. Assessment for reading motivation among students, prior to the intervention, was conducted using quantitative and qualitative measures as indicated. Low reading motivation levels identified among students at this stage were anticipated considering the rationale for student selection for the study.

The assessment of students' motivation for reading prior to the intervention, which identified ratings for across all three constructs, was important for the many reasons. Firstly, it tested the accuracy of the informal assessment of reading motivation carried out by teachers in selecting students for the study. This aspect was borne out when one student was not included in the intervention based on a high level of motivation for reading as diagnosed by the pre-intervention assessment. Secondly, it established baseline data on students' motivation for reading for comparison purposes after the intervention. Thirdly, it served to identify interrelationships among constructs that informed the data analysis process. Fourthly, it corroborated other research findings that struggling readers, in the early years of primary school, experience low motivation for reading (Morgan & Fuchs, 2007; Sideridis *et al.*, 2006; Wilson & Trainin, 2007). The findings from the pre-intervention assessments confirmed that students were poorly motivated to read as identified by their self-efficacy for reading, their orientation towards reading and their perceived difficulty with reading.

The impact of FORI on students' motivation for reading was assessed after the intervention using the same measures as employed at the outset of the study. These were supplemented by evidence gathered during the course of the intervention through reflective journals and field notes. Findings presented in this chapter indicate that there were significant changes in the motivation to read for struggling readers over the course of the intervention. While the data was collected, analysed and discussed separately in the context of reading efficacy, orientation and perceived difficulty, the findings also identified a synergy among these constructs. Analysis of the data from all research informants indicated that motivational behaviour, as interpreted by each construct individually, was also identifiable as a cohesive unit working together to propel students forward. For example, positive effects of FORI on students reading orientation, as defined by students' interest and engagement in reading, fed into students' self-efficacy for reading. This in turn had the effect of decreasing students' perceived difficulty in reading and increased their confidence in reading, which is the factor that directly improves achievement (Cambria, & Guthrie, 2010).

In this regard, findings indicate that the impact of the FORI intervention on decreasing student's perceived difficulty with reading was a key factor in establishing the relationship between constructs.

Pre-intervention assessment of motivation in relation to this construct indicated that students perceived reading to be a difficult task, had negative attitudes towards reading, and avoided opportunities to read both at school and at home. This was corroborated by data from the assessment of students on the other constructs and was found to impact negatively on students' orientation towards reading. Post-intervention assessment on this construct revealed a significant decrease in students' perceived reading difficulty as reported by teachers and parents which was supported by evidence from parents. This finding was attributed to the accessibility of reading for students through FORI activities such as choral reading and echo reading in conjunction with methodologies such as repeated reading. As one teacher commented in a review of the effects of FORI six months after the intervention:

It was like someone unlocked the doors of the reading kingdom for children, turned on the lights and invited them to the party ... and they came... and more importantly they stayed. (LSC1)

This finding is representative of the effects of the intervention on all constructs as described in the preceding sections.

It is significant that post-intervention motivational scores for students correlated strongly with their reading achievement results. Students who made least progress in reading achievement over the course of the intervention were also rated with modest improvement on their motivation for reading. One notable example was the case of a student who was a member of a minority ethnic group and had little support for reading activity outside of school. While there was a modest improvement in this child's reading self-efficacy she continued to exhibit low motivation in relation to reading orientation and perceived reading difficulty. Her modest improvement in reading motivation may well have been due to her continuous difficulties with mastering the basic skills of reading. Results of post-test reading assessment significantly correlated with assessments across all constructs of reading motivation. It was clear that working on a student's motivation for reading had limitations in the absence of success in reading achievement. This raised questions around the efficacy of fluency oriented reading instruction for children who had not mastered the basic skills. It would appear that for these children parallel instruction in basic reading skills such as phonics and word identification strategies would be required in order to reap the motivational benefits associated with FORI.

A summary of quantitative measures of these effects, as reported by teachers and students, are presented compositely in Figure 6.15.

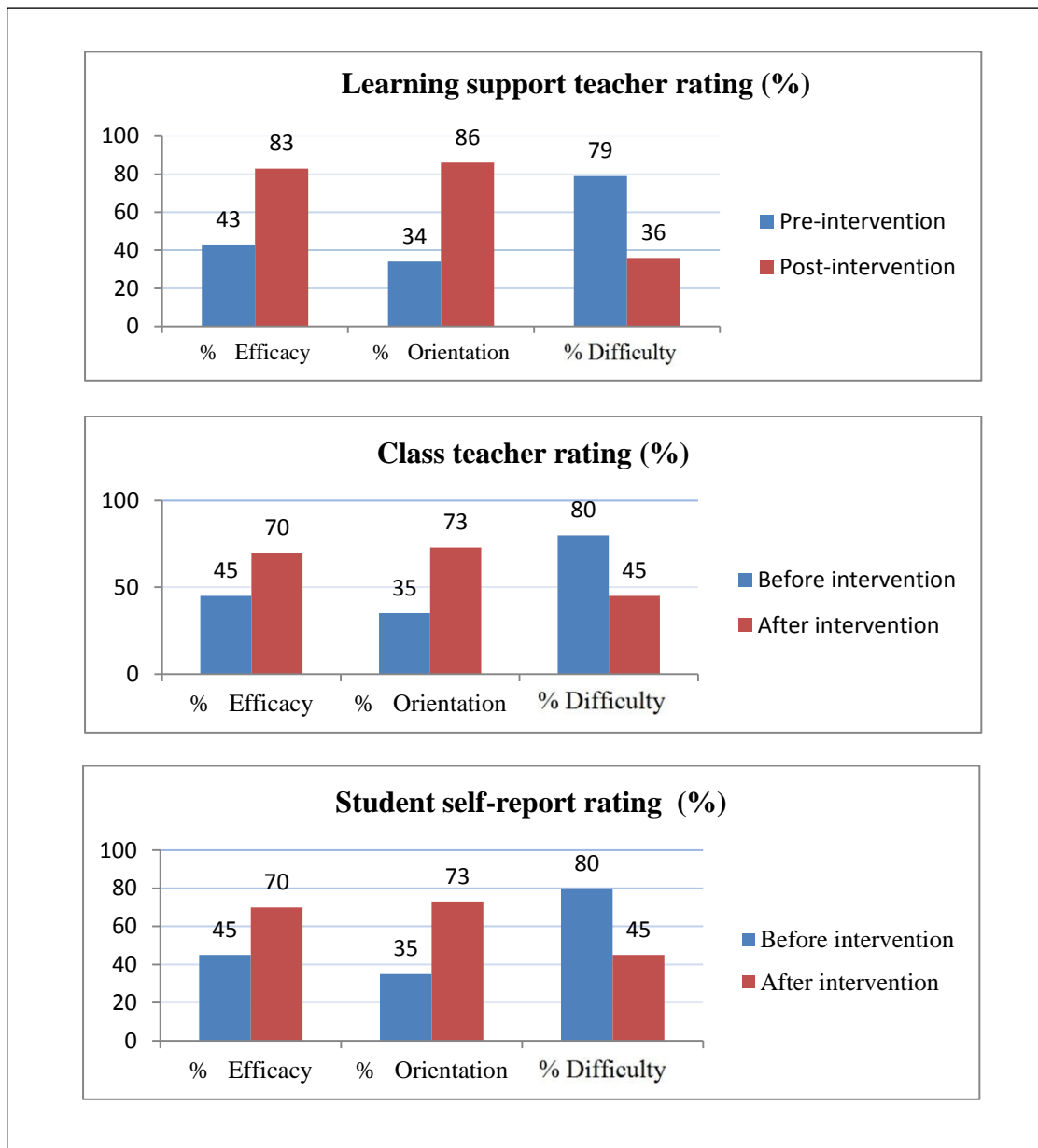


Figure 6.15: Impact of FORI on student motivation across three constructs

These findings, drawn from evidence of all research informants, are statistically significant across all constructs and theoretically corroborate the relationship between motivation for reading and fluency oriented instruction (Morrow & Asbury, 2003; Optiz, & Rasinski, 2008). This evidence strongly supports the hypothesis that fluency oriented reading instruction has a positive influence on the motivation for reading of struggling readers. These findings, in conjunction with evidence presented

earlier on the efficacy of FORI in developing oral reading fluency, also support the literature on the importance of students' reading achievement on their motivation to read (Guthrie & Humenick, 2004).

## 7 CONCLUSIONS AND RECOMMENDATIONS

### 7.1 Introduction

This chapter draws together key findings of the study and identifies recommendations emanating from the attendant analysis and discussion. It highlights the limitations of the research, outlines the contribution of the study to current knowledge, and identifies implications for practice in the field. The chapter closes with concluding comments on the study and suggestions for future research.

The prologue to this thesis describes the story of a young student, Jason, who struggled to learn to read in the early years of primary school. The initial approach taken to addressing his reading difficulties focused predominantly on teaching isolated skills and drills. This was predicated on the belief that his most urgent need was to crack the alphabet code and thereby get on the first step of the ladder to reading success. Despite the best efforts of his teacher and the wider school community, Jason appeared to have missed his opportunity to climb the reading ladder. His story was typical of many struggling readers from disadvantaged schools who do not respond to this traditional approach to reading instruction. However, when an approach integrating the cognitive, motivational and social aspects of reading was adopted, Jason did learn to read. This supportive reading instructional strategy involved a gradual release of responsibility from the teacher to the student with a view that Jason - and children like him - would ultimately read fluently and independently. The nature of the instruction was highly motivating and engaging and approximated the fluency oriented reading instruction as previously described by Stahl, Heubach & Cramond (1997). Jason's story, and many similar positive experiences of struggling readers being motivated to read by such methods, provided the impetus for this study.

The literature on reading achievement in Ireland indicates that there is an overrepresentation of struggling readers in schools serving areas of disadvantage, with almost one in three students at these schools having serious difficulty with reading or writing (DES, 2011). The first phase of this study set about identifying current practice of learning support teachers in relation to teaching these struggling readers and establishing the extent to which these teachers employ oral reading fluency strategies in their instruction. The perceptions and beliefs of learning support

teachers regarding the reading motivation of struggling readers in their programmes was also researched in this phase. Data was gathered by means of questionnaire and qualitative interviews concerning the mixed methods design of the study and the subsequent findings informed the second phase of the study. This phase of the study, which employs a concurrent triangulation strategy, investigated if fluency oriented reading instruction fostered motivation, interest in reading, and reading achievement among struggling readers in First Class. Although the study was conducted on a relatively small scale, its conclusions and recommendations have implications for teachers of struggling readers and for further research in this area.

## **7.2 Key findings**

The findings of the study can be grouped under two broad categories reflecting the phases of the study: the current practice of learning support teachers in relation to teaching struggling readers and the effects of the FORI intervention on reading achievement and motivation of struggling readers.

This study confirms the work of researchers who have found that teachers of struggling readers frequently place more emphasis on cognitive aspects of reading instruction, than on affective conditions that may motivate the reader (Duke, 2001; Eurydice, 2011). The findings here indicate that, in many instances, struggling readers are subjected to a slower pace of instruction with more attention paid to phonics and other word recognition strategies than to higher order, meaning-oriented and motivational instruction. While the emphasis on these cognitive aspects of reading and phonics in particular, is reflective of the literature on interventions for struggling readers (Allington, 2012; Guthrie & Wigfield, 2000), it may also point to a lack of awareness among teachers of the benefits of other motivating methods such as FORI.

The emphasis on a bottom-up approach to reading by learning support teachers, to the exclusion of other more motivational strategies, may be explained by factors disclosed over the course of this study. Firstly, the findings indicated that learning support teachers felt it was a priority to teach the basic cognitive skills of reading to struggling readers in First Class. Secondly, the omission of elements of the reading process such as phonics and reading vocabulary from the English Language Curriculum (NCCA, 1999a) created a void in these areas and resulted in



many commercial reading packages being embraced by schools. An example of this is the influence of programmes such as Jolly Phonics (Jolly Learning Publishers) and Phonological Awareness Training (PAT) on reading instruction in Irish primary schools. These are highly structured programmes that devote almost all of their instructional time to teaching literacy through explicit synthetic phonics instruction. While techniques such as these have been proven to be effective in accelerating decoding skill growth, they do not address the motivational and social aspects of reading as included in FORI.

The findings of this study indicate that teachers of struggling readers feel obligated to teach basic reading skills such as phonics and word identification strategies before addressing other essential components of reading. The prevalence of this school of thought, as verified during focus group interviews, suggests an assumption among some teachers that learning to read is a hierarchical process. While teaching phonics and word identification skills are necessary elements of reading instruction for struggling readers they are not sufficient on their own. Furthermore, rather than viewing oral reading fluency as a skill learned subsequent to acquiring basic skills, it can be more favourably regarded as a cohesive factor for many of the essential components of reading such as word identification, vocabulary, and comprehension (Pikulski & Chard, 2005).

Fluency oriented instructional strategies such as modelled reading, repeated reading, and Readers Theatre have been shown to be effective in both developing oral reading fluency and in teaching word identification skills (Allington, 2012). However, current practice suggests that these motivational methods are not typically employed by learning support teachers when teaching struggling readers. In addition, evidence from the surveys and ensuing interviews in Phase One of this study, suggests that developing oral reading fluency ability was not regarded as an attainable goal for struggling readers in First Class.

In general, learning support teachers appeared to be unaware of the efficacy of oral reading fluency instruction in intervening with struggling readers. The findings indicate that they rarely used highly supportive, fluency-oriented reading activities such as choral reading, echo reading, and timed repeated reading in their programmes. This raises issues regarding the nature of instruction that young children receive in learning support programmes, which may have an effect on their long-term interest, attitude and achievement in reading.

Findings also suggest that many teachers are not familiar with other oral reading fluency strategies, such as antiphonal reading, phrased-cue text practice and cumulative choral reading. In explaining the gap in knowledge in this area, teachers pointed out that reading fluency does not feature as a reading instructional strategy in the English Language Curriculum nor is it included among curriculum objectives for reading. Hence, it is not regarded as a priority when planning instructional programmes. These teachers further reported that fluency oriented reading strategies ‘were not covered in courses at college’ (LSA1; CTB2), or in continuing professional development courses on literacy (with the specific exception of training for Reading Recovery alluded to by one teacher). With regard to curriculum content, it is encouraging that the new Primary Language Curriculum to be enacted in 2017 features specific learning outcomes for oral reading fluency and self-correction under a new element in the reading strand entitled *Exploring and Using Language Fluency*.

Findings from the first phase of the study also reveal that teachers’ believe motivation is a critical factor for struggling readers in making progress in reading. Despite not typically using research-based motivational methods in their programmes, teachers do identify low motivation for reading as a contributing factor to the difficulties of struggling readers. Such findings provide an interesting backdrop when investigating the effects of FORI intervention on motivation for reading in the second phase of the study.

One major conclusion drawn from the second phase of the study is that by applying principles of motivation to their instructional programmes learning support teachers can increase the chances of successfully intervening with struggling readers. Findings indicate that fluency oriented reading instruction, involving a gradual release of responsibility from the teacher to the child, impacts positively on the motivation for reading and oral reading fluency levels of struggling readers. This is based on a comprehensive set of data generated by teachers, parents and students on the assessment of reading self-efficacy, reading orientation and perceived reading difficulty before and after the intervention.

It should be stated that the intervention did require a significant change in mind-set and practice for some teachers. The proposal that fluency orientated reading instruction was to underpin the intervention was initially met with some resistance. In some instances this was because teachers were unfamiliar with the particular methodology, while other instructors were dubious as to how the fundamental

difficulties of struggling readers might be addressed through reading fluency. As one teacher said ‘How can you expect them to run when they are barely able to crawl?’ (CTB2/FN). The inference here is that instruction in oral reading fluency was not viable without prior competence in decoding.

The key message, however, in explaining the instructional focus for the intervention was that FORI was not so much a destination as a journey wherein struggling readers would be highly supported at every juncture. The Gradual Release of Responsibility Model (Pearson & Gallagher, 1983) was introduced as a context for instruction and was embraced by learning support teachers over the course of the intervention representing a departure from their more traditional bottom-up practice. Also the intervention encouraged and reassured children, so was aptly analogised by a learning support teacher in a post intervention review:

Using FORI methods and gradually releasing the responsibility to children was like fitting the child’s bike with stabilisers while they learned to cycle. The fear of making a mistake was totally removed. (LSB1/PIR)

In the course of the intervention, struggling readers experienced success with reading from the outset, through instruction that ranged from the teacher modelling the reading process to assisting the student to read independently. Immediately, a high level of engagement among students in the reading process was evident. This engagement appeared to result from a confluence of several factors that can be identified as indicators of an increase in motivation for reading including the level of confidence with which students approached reading. This confidence set the stage for further enhancing students’ motivation for reading. Success begets success, and as students became more motivated to engage in the reading process, they subsequently read more frequently and were more successful in their efforts. Thus, a loop of motivation/success/motivation was created, which accounted for students’ high level of engagement with the FORI intervention.

A notable finding from the first phase of the study was the attitude of learning support teachers to repeated reading as an instructional strategy. Evidence from initial survey responses indicated that repeated reading was not typically used as a strategy by learning support teachers. Data from interviews conducted with teachers before the intervention, suggests some teachers believed it to be

synonymous with round robin and rote reading. Hence, their reticence in adopting repeated reading as a method for instructing struggling readers.

However, research on interventions designed to increase the reading achievement of struggling readers in the early grades indicates that repetition, alone or in combination with modelling, was the primary, instructional component associated with success (Kuhn & Stahl, 2003). This strategy was at the very heart of the FORI intervention and permeated each unit of instruction. Given the earlier misgivings of teachers, it was encouraging that a consistent theme emerging throughout the study was the lauding of repeated reading as a strategy for motivating children to read and improving their reading achievement. Findings indicate that repeated reading as a methodology was effective in improving the oral reading fluency (rate, accuracy and prosody) of struggling readers with particular success in improving their reading intonation and expression. However, it must also be pointed out that post-intervention assessment on word reading efficiency showed only modest improvements. This suggests that for some students a more structured approach to word identification than repeated would be required. Repeated reading also drew universal credit from teachers as a strategy for increasing students' motivation for reading. In particular, it was found that struggling readers were less likely to experience difficulties with decoding if they were exposed to the same text many times, resulting in a decrease in their perceived reading difficulty.

An emerging theme from data collected from the teachers in the initial phase of the study identified the absence of parental support as a significant impediment in addressing students' reading difficulties. This finding was supported by evidence from some learning support teachers at the outset of the study one of whom felt that parents 'were ill-equipped to tackle the reading difficulties of the weakest children' (LSB1/ps). In an effort to ensure that the role of parents was maximised in this study the perspective of reading motivation recognised the overlapping influences of teachers, parents and the students themselves. Continuing the metaphor of the child on a bicycle, teaching struggling readers without the support and active involvement of parents is akin to cycling with the brakes on. Parents play a critical role in the literacy development of their children. What they believe, say and do in regard to reading has a profound impact on their children's attitude and orientation towards reading (Baker, 2003). Hence, an important finding in this study was the positive role parents played in motivating their children to read. The manner in which they

responded to their children was identified by teachers as a critical factor in increasing motivation for reading among students.

As part of the FORI intervention parents were required to read with their child each night, and to sign a home reading log. They were also invited to attend 'reading with your child' sessions organised by teachers. This social aspect of reading was highlighted as playing a prominent role in motivating students to read in interviews with parents and teachers. The findings in the study have implications for the role that parents play in motivating struggling readers. They converge in suggesting that children who experience literacy-relevant activities at home, view reading more positively, engage in more leisure reading, and have higher motivation for reading.

Another interesting finding from the research data concerned the personal and professional development of teachers. As children became more motivated to read, teachers' confidence in the methods that they were using also grew. This was an important, and unanticipated, consequence of the FORI intervention. Teachers were no longer content for struggling readers to just master the basic skills; they also expected that children would become motivated readers who were engaged with the process. The improvement in the motivation for reading of students also served to enhance the self-esteem of teachers and their belief in their power to exert positive change. One learning support teachers in the study reported that she was empowered by the knowledge gained over the course of the intervention and that the experience had rekindled her own desire for learning. In fact since her involvement in this study she has used FORI as the focus for a dissertation on reading difficulties.

The findings relating to the effects of FORI on the motivation for reading also identified some limitations of its efficacy. It was found in the course of the intervention that students' motivation for reading was influenced very strongly by the degree to which they perceived reading to be difficult. Teachers reported that a student's confidence in his or her reading ability was often diminished when confronted with text that was too difficult. This was particularly relevant where students continued to have significant difficulties with decoding. Findings thus suggest that FORI strategies may not be effective for students who hold high levels of perceived difficulty in reading unless measures are taken to specifically improve their basic decoding skills. It was found that when students improved in this regard their perceived difficulty with reading was lessened and they were more likely to

regain confidence and to be oriented towards reading. Focusing on decreasing levels of perceived difficulty may help these students improve in reading more than focusing on increasing their interest in reading.

Finally, a return visit to the schools six months after the completion of the intervention points to some enduring effects of FORI on the motivation for reading of these children. Interviews conducted at this time with teachers, parents and children revealed a continued high level of engagement with reading among students. Reports by parents of their children incorporating reading in their out-of-school lives and an increase in time students spent reading on a weekly basis were indicators of orientation towards reading. Teachers commented on students' improved reading self-efficacy and the willingness of students to read increasingly difficult texts. In one school the principal noted a dramatic improvement in attendance among the intervention participants which she attributed to the increased parental involvement in the students' schooling as brought about by FORI. Further evidence of increased interest in reading included student reports of library visits, books for presents and even a TV appearance. One of the parents of an intervention student (SC3) had related her daughter's FORI experience while in the company of a television producer. Her FORI story subsequently became the subject of a television programme and was broadcast on the national airwaves. FORI had gone viral!

### **7.3 Recommendations**

1. Teachers should familiarise themselves with reading research on oral reading fluency as it may be critical in transforming the ways in which they teach their students to read. Without a thorough understanding of the importance of oral reading fluency, it is not likely that this component of reading instruction will be embraced as a critical element of instruction for struggling readers.
2. This study demonstrated that FORI could increase the oral reading fluency ability of struggling readers in some of the most challenging of circumstances. There is a need to invest in enhancing the expertise of teachers in all disadvantaged schools. Ideally, professional development for teachers should be provided on-site and sustained over a period of time. The current PDST model of working with teachers in schools would be appropriate in this regard.

In particular, these schools should be introduced to the benefits of fluency oriented reading instruction in relation to motivating struggling readers.

3. Findings presented here suggest that instruction in reading fluency should be a focus for all teachers and that the implementation of fluency oriented reading strategies should be included in all teacher education programmes. Pre-service teacher education literacy modules should also be updated to reflect the latest research strategies for teaching struggling readers.
4. While the current study has shown FORI to be effective in schools serving disadvantaged areas, this type of instruction has the potential to benefit struggling readers in all school settings. This also has implications for adapting FORI strategies for use in mainstream classrooms with alliterate children.
5. Struggling readers benefit from effective communication and collaboration between home and school. Formal school structures should be established for teachers to provide advice to parents to help them assist their children at home. In this regard teachers should not assume parents know how to help their children who are struggling to read. Incorporated in these structures should be measures focused on increasing home-reading activity and measures to involve parents as tutors for their children at school.
6. A new Language Curriculum is currently under way for junior classes in Irish primary schools. Professional development associated with the implementation of this revised curriculum should include advice on motivational reading methods for struggling readers. Given the recurrent patterns of the poor reading standards in some DEIS schools, there is an urgent need to explore alternative methods of reading instruction.

#### **7.4 Limitations**

Several limitations of this research warrant discussion. Firstly, while the initial phase of the study was conducted in fourteen schools, the scale of the intervention in the second phase was relatively small. It involved children from First Class in three schools and included three learning support teachers, five class teachers and fifteen students. A larger sample would be more sensitive to possible effect differences in reading motivation among students with particular reading difficulties.

Secondly, since the result of this study are based on a limited sample composed of children from schools designated as educationally disadvantaged, care should be taken in over-generalising results. Teachers and children in these intervention schools were operating under more challenging conditions than may be found in other less disadvantaged communities and so the findings from this study may not have the same implications in other schools.

A third limitation is the time frame of the study. Initially, it was intended that the intervention would be carried out over the full duration of the first term of the school year beginning with pre-intervention assessments in the initial weeks. However, some students, identified as candidates for the intervention before the summer, had left the schools while others who were proposed for inclusion were deemed unsuitable for various reasons (e.g. one struggling reader was assessed as being highly motivated for reading). Securing parental consent for replacement students took longer than expected, so the intervention did not commence until the beginning of October. It is possible that longer instructional time for the intervention would have yielded more significant gains in reading achievement for some children.

Fourthly, the study design did not include a no-treatment control group. This was due to ethical concerns regarding the provision of instruction to all struggling readers in First Class in the selected schools. Hence, a limitation of the study is that comparisons to a similar group of students who were not included in the intervention could not be made. This is particularly relevant when comparing pre- and post-intervention results of motivation for reading because without a control group we have no indication of the increase in motivation that would occur with a similar group of students who received no fluency oriented reading instruction.

Fifthly, the role of the researcher within the study may have had an effect. While every effort to avoid researcher influence was made by training three learning support teachers to deliver the intervention, I was present in the school each week to observe the students. This may have contributed to the motivation of teachers and children to participate so comprehensively in the intervention to its end.

Finally, the study was conducted intentionally with struggling readers in First Class because of the critical period this age represents in a student's reading development. Therefore we must be careful not to over-generalise the results to primary school students in more senior classes.



## **7.5 Implications for practice**

While a single study such as this one cannot provide exclusive guidelines on the ways to improve reading instruction for struggling readers, there are some practical implications for teachers that can be learned from this study. The results of the research indicate that reading instruction for young struggling readers needs to address more than just the development of specific reading skills. Instructional approaches that do not consider motivational strategies for reading, may miss out on the added influence that improving students' motivation for reading might have on their long term development as skilled readers. Hence, instruction for struggling readers should be designed in a way that addresses their motivation for reading while simultaneously developing core reading skills.

This study has found that there is a relationship between fluency oriented reading instruction and motivation for reading. Without recognition of this critical relationship, teachers and particularly learning support teachers may miss out on instructional methods that addresses students' reading deficits and that can enhance their enjoyment of reading.

There are also potential implications for the practice of classroom teachers in primary schools emanating from this study. Practitioners interested in maximising reading achievement among all students must include motivational components in their literacy teaching (Afflerbach and Cho 2011). The FORI strategies employed in this study are not exclusively designed for the learning support class. Techniques and activities such as choral reading, echo-reading, Readers Theatre and antiphonal reading are readily transferrable to the mainstream classroom. In this regard, the present study has demonstrated that promoting oral reading fluency among students is an imperative responsibility for all teachers of reading.

Similar to these implications for reading instruction in the regular classroom, the results of this study indicate that early reading interventions should also take into account the possible contribution that motivational variables could make in accelerating reading growth.

## 7.6 Future Research

Arising from the findings of this research, further research is warranted in the following areas:

1. Research has documented that primary schools include large numbers of alliterate students who are capable readers but choose not to read (Agee, 2005; Shapiro & Whitney, 1997). Given the positive influence of FORI in this study in increasing students' orientation towards reading and interest in reading, there is a need for further research studies that explore the effects of FORI on these students. In other words, enhancing reading motivation should be a concern not only for struggling readers but for all readers.
2. Additional research is also needed regarding a population that differs from the student population in this study. This study was conducted in schools comprised of children predominantly from disadvantaged backgrounds. Future research needs to be conducted with struggling readers in schools from non-DEIS backgrounds. These studies would need to include a no-treatment group so specific fluency-building procedures could be contrasted with a control group and contrasted against each other.
3. The present study was restricted to just fifteen students in three disadvantaged schools. It would also be beneficial for this study to be replicated with a larger sample of students across a range of school types. One participating teacher was particularly excited about the prospect of conducting this form of intervention with children whose first language was Irish.
4. There is also a need for longitudinal research that examines the impact of fluency oriented reading instruction on the motivation for reading of different types of readers at different points along the age continuum. Longitudinal studies of the impact of these procedures could clarify how long the intervention benefits can be maintained.
5. A follow-up study should be implemented to track the development of the children in the current study to ascertain if they continue to be motivated to read as they progress through primary school.

6. The current study should be replicated in other DEIS schools to see if the findings can be replicated. This piece of research would be a priority for the present researcher as many of the schools that participated in Phase One of the current study had volunteered for inclusion.

## **7.6 In conclusion**

This study was inspired by the many children I have witnessed surmounting their early reading difficulties, in the face of adversity, to become proficient and life-long readers. My experience has convinced me that a socio-cognitive interactive model of teaching reading is most effective in addressing the multifaceted nature of children's reading difficulties, particularly in the milieu of educational disadvantage. In this context, the current study set out to explore the effects of fluency oriented reading instruction on reading achievement and motivation among struggling readers in First Class in Irish primary schools. The findings suggest that reading difficulties for these emergent readers are far from insurmountable. However, the current practice of learning support teachers in teaching struggling readers is disproportionately focused on a bottom-up approach to reading instruction rather than on affective processes. In order for struggling readers to overcome skill deficiencies in reading and to be motivated to continue to read, it is imperative that any negative achievement-related self-beliefs are simultaneously addressed.

This thesis argues that, to achieve this, there needs to be a shift from a purely cognitive interpretation of reading instruction to a motivational and emotional co-determination of beginning reading skills. A conception of compensatory education for children with reading difficulties would thus embrace the engagement perspective while integrating cognitive, motivational, and social aspects of reading. The fluency oriented reading instruction employed in this study aligns with this conception and has been found to positively influence the motivation for reading of young struggling readers in this study.

An old nautical expression tells us that we cannot direct the wind, but we can adjust our sails. Often, young children who have failed to master the basic skills of reading find themselves struggling in the educational headwinds attendant with social disadvantage. The findings of this study suggest that one way that teachers can adjust their practice to improve outcomes for struggling readers is to motivate them through fluency oriented reading instruction.

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## **APPENDICES**

# APPENDIX 1

## PHASE 1: LETTER OF CONSENT (LEARNING SUPPORT TEACHERS)

Marino Institute of Education  
Griffith Avenue  
Dublin 9

A Chara,

I am writing to ask for your participation in a study of the work of Learning Support Teachers in DEIS Band 1&2 primary schools in the Dublin Northside Partnership catchment area. For the purpose of this study I am focusing on Learning Support Teachers who are providing assistance to children in **First Class** who are experiencing difficulties in reading.

Despite the focus on reading attainment in Ireland over recent years the performance of those children in receipt of learning support has largely been understudied. This study examines contributing factors for those children in First Class who struggle to master the reading process at this important stage in their reading development. It also looks at the practice and beliefs of the Learning Support Teachers who teach them. The initial phase of the study involves completing the attached questionnaire.

This questionnaire has three sections. The first section seeks background information and asks some general questions while the second section looks at elements of your practice as a learning support teacher. The third section probes your perceptions and beliefs regarding the motivation and attitude of the children from First Class in your learning support programme. You are under no obligation to complete the questionnaire, or to answer all questions. It is hoped, however, that the findings will inform an intervention to support learning support teachers, will contribute to a better understanding of their work and contribute to research on struggling readers in DEIS schools.

The questionnaire takes approximately 20-30 minutes to complete. If you agree to participate, please fill in the questionnaire, place it in the enclosed stamped envelope and return it to me as soon as possible. I realise that your time is valuable and your participation in this research project is appreciated. Please be assured that survey is confidential in regards to the responses and the reporting of results if you choose to participate in the study.

Should you have any questions regarding your participation please contact me at [gene.mehigan@mie.ie](mailto:gene.mehigan@mie.ie) or at 086 6077518.

Le dea-mhéin,

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Gene Mehigan



## APPENDIX 2

### PHASE 1 QUESTIONNAIRE

#### SECTION 1

##### GENERAL INFORMATION

*(please tick the circle(s) where appropriate)*

##### 1.1 Indicate the DEIS category of your school

DEIS Band 1

DEIS Band 2

##### 1.2 Description of your school

Infant school	Junior school (boys)	Junior school (girls)	Junior school (co-ed)	Vertical school (boys)	Vertical school (girls)	Vertical school (co-ed)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify) \_\_\_\_\_

##### 1.3 Teaching experience

1-5 years

6-10 years

11-15 years

16-20 years

>20 years

##### 1.4 Teaching experience as Learning Support Teacher

less than 1 year

1-3 years

4-6 years

7-10 years

> 10 years

##### 1.5 Have you a qualification in compensatory education (e.g. special/remedial education, learning support)?

Yes

No

If yes please give details of the qualification(s) \_\_\_\_\_

\_\_\_\_\_

##### 1.6 How many children in First Class participate in your learning support programme

**1.7 Indicate the gender balance of the children in First Class participate in your learning support programme**

no. of boys

no. of girls

**1.8 Please indicate the basis for selecting children in First Class for inclusion in your learning support programme**  
*(please tick any circle(s) that apply)*

Standardised  
tests results

Classroom teacher  
recommendation

Diagnostic  
Screening test  
results

Request from  
parent

Recommendation  
from former  
teacher

Other (please specify)  
\_\_\_\_\_  
\_\_\_\_\_

**1.9 Please indicate any of the following modes of intervention that you use with children receiving learning support in First Class** *(please tick any circle(s) that apply)*

Withdraw children  
from class for  
learning support  
(group instruction)

Withdraw children  
from class for  
learning support  
(individual  
instruction)

Provide learning  
support for  
children in their  
own class  
setting

Team/parallel  
teaching  
(working with  
other teachers in  
class)

Station teaching  
with other  
teachers in class  
setting

Peer  
tutoring

Other (please specify) \_\_\_\_\_  
\_\_\_\_\_

**1.10 On average how many minutes do you teach each group that you withdraw for learning support?**

**1.11 Please indicate if you use any of the following instruments in assessing the reading ability of children in First Class** *(please tick any circle(s) that apply)*

MICRA-T

Drumcondra  
Primary  
Reading Test

NRIT  
Test

Middle  
Infants  
Screening  
Test  
(MIST)

Drumcondra  
English  
Profiles

Tasks for  
Assess of  
Reading  
Achievement  
(TARA)

Quest  
Reading  
Diagnostic  
Test

Group  
Reading  
Test II  
(GRT II)

Neale  
Analysis  
of  
Reading  
Ability

Other (please specify)  
\_\_\_\_\_  
\_\_\_\_\_



## SECTION 2

**2.1 In the case of those children in your First Class learning support programme who experience difficulties in reading please indicate the extent you agree that the following are typically a contributing factor**

	strongly disagree	disagree	somewha t disagree	neither agree nor disagree	somewha t agree	agree	strongly agree
(i) Children have poor oral language ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Children have poor phonemic awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii) Children have difficulty with letter-sound relationship when reading (phonics)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv) Children have difficulty reading high frequency words by sight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v) Children have difficulty in decoding grade level words <i>accurately</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi) Children have difficulty in decoding grade level words <i>automatically</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii) Children have low motivation to read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii) Children have difficulty reading with expression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix) Children have difficulty reading at an appropriate rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(x) Children have limited oral reading vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(xi) Children have difficulty comprehending text even when accurately decoded	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Please indicate any other factor that you feel contributes to the difficulties in reading experienced by children in First Class**

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**2.2 How often were the following components of reading included in instruction for your First Class learning support participants this year?**

Reading Component		every lesson	frequently (once or twice a week)	Infrequently (once or twice a month)	rarely	never
(i)	Teaching phonemic awareness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii)	Teaching phonics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii)	Teaching reading vocabulary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv)	Teaching oral reading fluency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v)	Explicit teaching of comprehension strategies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2.3 How often were the following activities a primary focus of instruction for your First Class learning support groups this year?**

Reading related activity		every lesson	frequently (once or twice a week)	Infrequently (once or twice a month)	rarely	never
(i)	Teaching letter sound relationships in isolation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii)	Teaching word analysis skills (e.g. word families, initial consonant sounds, analogy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii)	Using phonics based or letter-sound relationships to read words in sentences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv)	Using context, pictures, and/or sentence meaning and structure to read words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v)	Explicit instruction on sight word recognition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi)	Listening to children read aloud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii)	Teaching individual words as part of reading vocabulary instruction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii)	Instructing children to spell out unknown words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix)	Using structural analysis to aid word recognition (e.g. <i>root words, prefixes, suffixes</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(x)	Giving children time to read books of their own choice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(xi)	Engaging children in discussions of text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2.4 What other areas of skill or knowledge do you believe are critical for struggling readers in First Class?**

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**2.5 How often were the following oral reading fluency activities a focus of instruction for your First Class learning support groups this year?**

Activity	every lesson	frequently (once or twice a week)	Infrequently (once or twice a month)	rarely	never
(i) Children engaged in repeated oral reading of the same text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Children engaged in choral reading of text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii) Children engaged in echo reading of text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv) Children engaged in paired (partner) reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v) Children were timed as they read text (assessing reading rate)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi) Children were recorded (audio) as they read text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii) Children were taught phrasing to develop oral reading fluency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii) Children listened to books read aloud on tape	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix) Children engaged in antiphonal reading ( <i>children read selected parts of text alternatively</i> )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(x) Children engaged in reader's theatre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(xi) Children listening to a fluent rendition of text as they read the same text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### SECTION 3

**3.1 Please respond to the following statements regarding your views about the attitude to reading that is *typical* of children from First Class who participate in your learning support programme**

Activity	strongly disagree	disagree	somewh at disagree	neither agree nor disagree	somewh at agree	agree	strongly agree
(i) Children typically regard themselves as being good readers	0	0	0	0	0	0	0
(ii) Children typically talk readily about their ideas regarding stories that they have read	0	0	0	0	0	0	0
(iii) Children typically approach words that they do not know with confidence	0	0	0	0	0	0	0
(iv) Children are typically confident when reading out loud	0	0	0	0	0	0	0
(v) Children typically regard reading as difficult	0	0	0	0	0	0	0
(vi) Children are typically interested in reading	0	0	0	0	0	0	0
(vii) Children typically regard reading as fun	0	0	0	0	0	0	0
(viii) Children typically find reading boring	0	0	0	0	0	0	0
(ix) Children typically think that their classmates regard them as good readers	0	0	0	0	0	0	0
(x) Children typically view it as important to finish a book that they have started reading	0	0	0	0	0	0	0
(xi) Children are typically motivated to be a better reader than their friends	0	0	0	0	0	0	0

**3.1 Please outline any other factor that typically describes the attitude to reading of learning support children in First Class**

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**3.2 Please respond to the following statements regarding the motivation for reading that is *typical* of children from First Class who participate in your learning support programme**

Statements	strongly disagree	disagree	somewhat disagree	neither agree nor disagree	somewhat agree	agree	strongly agree
(i) Children are typically confident when asked to read aloud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Children typically choose challenging books when given the opportunity to select reading material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii) Children are typically aware of their own individual progress in reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv) Children typically feel that they will become better readers with effort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v) If children were more motivated they would be more likely to improve their reading ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi) Children typically enjoy reading with a partner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii) It is obvious that becoming a better reader is a goal for children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii) Children typically persevere when reading is difficult for them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix) Children typically choose reading as an activity when given free choice of play time activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3.3 Please list what you consider as the key factor(s) for motivating children to read in your learning support programme**

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**3.4 With regard to improving children's motivation to read please indicate below how important you consider the following to be (please tick the appropriate circle)**

	not at all important	not very important	Somewhat important	important	vital
(i) Being able to read most words in grade level texts by sight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Having access to a range of reading material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii) Having access to texts that they can read independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv) Being able to orally read text at an appropriate rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v) Having free choice in their reading material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi) Being able to read with expression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii) Being read to on a regular basis (teacher modelling reading)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii) Having regular opportunities for repeated reading of texts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix) Having regular opportunities to hear themselves reading texts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(x) Having regular opportunities to read aloud as a performance activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(xi) Having set goals for children to achieve in reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3.6 Please indicate any other factor that you feel contributes to improving children's motivation to read**

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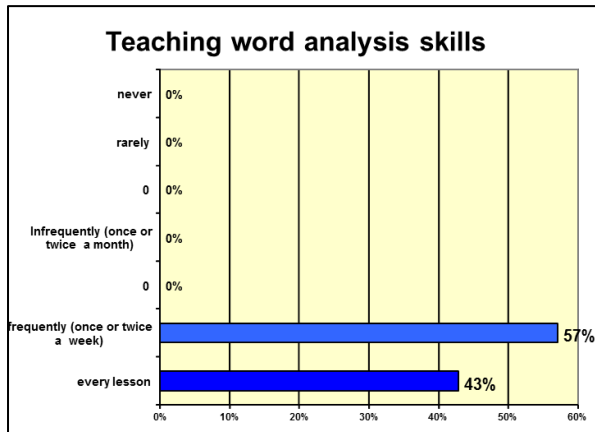
*Thank you for taking the time to complete this survey*

## APPENDIX 3

### EXAMPLES OF ANALYSIS OF QUANTITATIVE DATA FROM PHASE 1

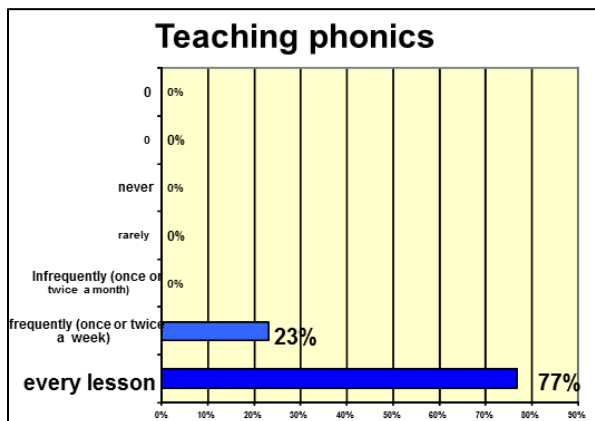
**Q 2.3 How often were the following activities a primary focus of instruction for your First Class learning support groups this year?**

(ii) Teaching word analysis skills (e.g. word families, initial consonant sounds, analogy)



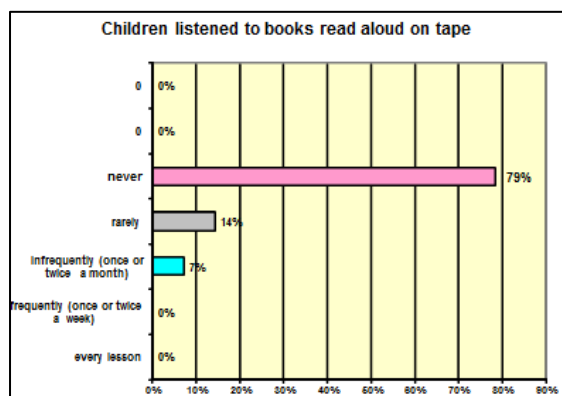
**Q 2.2 How often were the following components of reading included in instruction for your First Class learning support participants this year?**

(ii) Teaching phonics

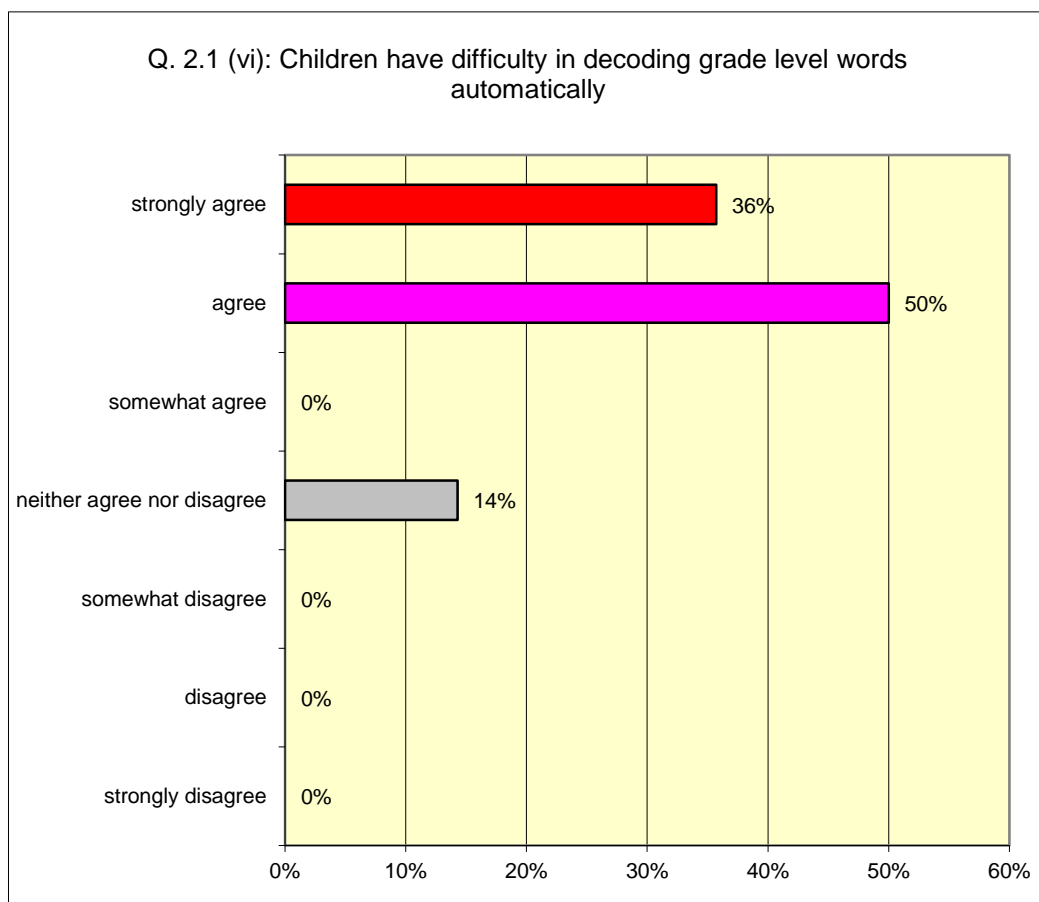
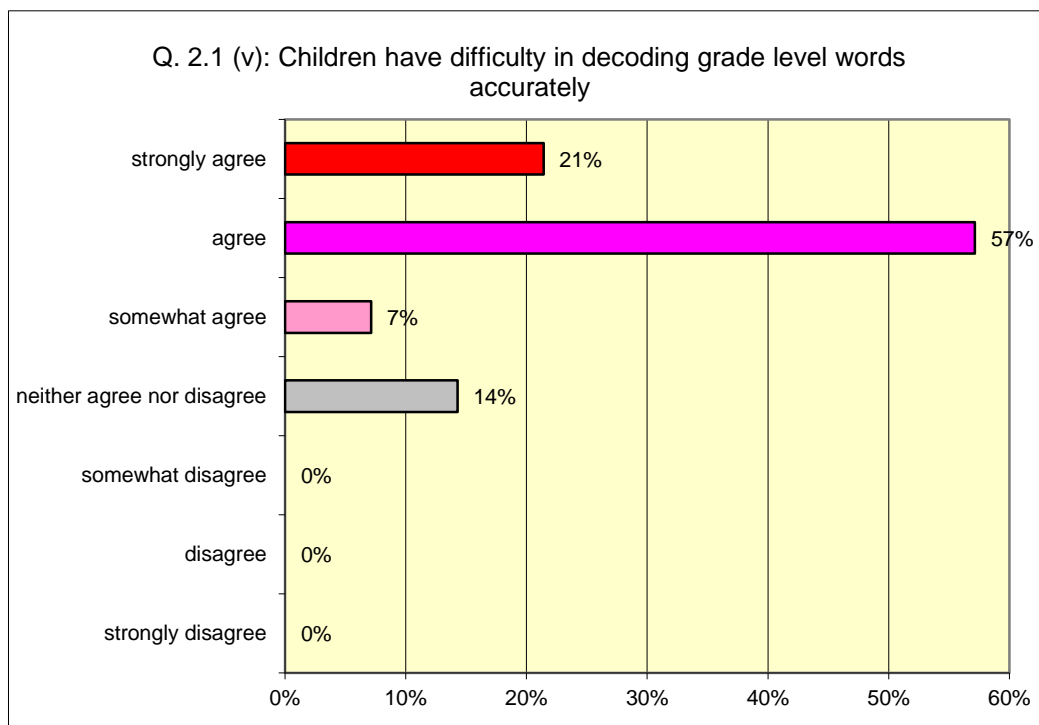


**Q 2.5 How often were the following oral reading fluency activities a focus of instruction for your First Class learning support groups this year?**

(viii) Children listened to books read aloud on tape



**Q 2.1 In the case of those children in your First Class learning support programme who experience difficulties in reading please indicate the extent you agree that the following are typically a contributing factor**



## APPENDIX 4

### PHASE 1 QUESTIONNAIRE: QUALITATIVE DATA ANALYSIS

	1.2 School Description (other)	1.5 Qualific. Details	1.8 Select basis (other)	1.9 Mode of Intervention (other)	1.11 Assessment instruments (other)	2.1 (xii) Reading difficulties contributing factor (other)	2.4 Area of skill or knowledge for struggling reader (other)	3.2 Attitude to reading factor (other)	3.4 Key factor(s) for motivating children to read	3.6 Factors in improving chn's motivation to read (other)
1		Grad Dip Spec Ed (UCD)			WRAT IV	Lack of support from <b>parents</b>		Boys generally less interested in reading than girls		Being able to read <b>fluently</b>
2		Reading Recovery training , LS courses			BAS word reading test RR assess tests	Lack of suitable printed material at <b>home</b>  <b>Parents</b> poorly <b>motivated</b> to help children  <b>Parents</b> lack confidence in reading themselves	Prediction  Recognition of word parts  <b>Automaticity</b>	Enjoy reading = positive experience	Lots of suitable interesting books that can be read fully in 10 mins Prep before reading e.g. new vocab Atmosphere where mistakes are accepted	<b>Fluent</b> reading
3		RR & Maths Rec/ literacy lift off		RR 1:1	Letter identification tests/ BAS / Duncan word test / Writing Vocab test Running records	Lack of exposure to literacy at <b>home</b>  Lack of confidence in attempting reading  Low <b>self-efficacy</b> for reading	Developing oral lang skills  ZPD Self-awareness  Creating independence	<b>Not very motivated</b>	Moving up a level in books Interest in topic Reading at correct text level Lots of books and oppor. to read them	Communication with <b>parents</b> Celebrate achievements Identify and encourage strengths Model enthusiasm
4		Dip Spec Ed			Dyslexia Portfolio screening test	Inability to transfer phonemic & phonol Aw for decoding new words  Poor working memory  Low level of support from <b>home</b>	Auditory / visual skills Enhanced working memory Good comprehension skills <b>Oral reading fluency</b>	Eager but need encouragement Exposure to books (wide variety)	Being part of a small group Exposure to varied reading material + variety of method & strategies Reading = fun	Positive <b>home</b> support Consistency in homework Exposure to varied reading material Realistic targets <b>Ability to read fluently</b>

	1.2 School Description (other)	1.5 Qualific. Details	1.8 Select basis (other)	1.9 Mode of Intervention (other)	1.11 Assessment instruments (other)	2.1 (xii) Reading difficulties contributing factor (other)	2.4 Area of skill or knowledge for struggling reader (other)	3.2 Attitude to reading factor (other)	3.4 Key factor(s) for motivating children to read	3.6 Factors in improving chn's motivation to read (other)
5	Infant girls school					Parents having similar difficulties Lack of motivation to read	Time for children to read books of own choice Seeing reading as enjoyable / worthwhile	Reading is typically an effort. Children are not motivated to read except when associated with games	Literacy games Confidence in reading accurately Experiencing fluent reading	Reading for a reason
6		H Dip in Ed (SLD)			Running records	Lack of parents reading to them at home  Poorly motivated to read	Enjoying reading, Reading at instruct level Understand reading strategies Experience, fluent reading Opportunities to read familiar books	Children are only motivated to read their levelled readers	Levelled books Opportunity to read books at independent level being modelled	
7	Co-Ed to 1 <sup>st</sup> Girls 2 <sup>nd</sup> -6 <sup>th</sup>			RR withdrawal	RR Observation Survey	Lack of focus and motivation Poor levels of concentration			Using levelled books to increase confidence	Home support for reading
8	Co-Ed to 1 <sup>st</sup> Girls 2 <sup>nd</sup> -6 <sup>th</sup>	RR qualificat	Selected by age		RR Tests Marino Test	Disruptive behaviour in class  Low self esteem Lack of home support Tiredness	Learning to self-correct, Scanning skill, R'ing for meaning (context) Chunking words	Children motivated when on PM readers	Praise, Prompting for meaning when reading, R'ing 1:1 (no negative peer reaction)	Having opportunity to listen to their own reading
9						Poorly motivated to read		Children confident and motivated when in small groups	Safe environment Interesting texts Sense of progress	
10		RR qualificat			Letter identification tests/ BAS / Duncan word test / Writing Vocab test  Running records	Not connecting reading with meaning Over reliance on phonics (little use of context)  Lack of self-motivation Lack of home support	Phrasing Pre teaching vocabulary / repeated phrases  Chunking words Using context Self-monitoring	Children with larger vocabulary are likely to be more confident	Praise, T'r expectation, Independence, Help when needed, Repeated reading of known text, R'ing at correct text & int. level	Validation Choice Positive home support

	1.2 School Description (other)	1.5 Qualific. Details	1.8 Select basis (other)	1.9 Mode of Intervention (other)	1.11 Assessment instruments (other)	2.1 (xii) Reading difficulties contributing factor (other)	2.4 Area of skill or knowledge for struggling reader (other)	3.2 Attitude to reading factor (other)	3.4 Key factor(s) for motivating children to read	3.6 Factors in improving chn's motivation to read (other)
11						Poor vocabulary Typically not motivated to read	Positive reinforcement to progress Foster a love of books Follow structured levelled program		Having interesting texts and varying them. Children get bored of reading the same text over and over	Reading with accuracy that does not require decoding
12					RR Assessment Tests	Poor attendance No reading assistance at home not motivated to read on their own		Reading not seen as critical at home effects attitude	Exposure to varied, interesting levelled reading material, Praise, Performance (reading for other classes)	Praise, Rewards  Read with Automaticity
13		Dip Sp Ed			PM Benchmark Reading Assessment	Parents poorly motivated to help children , Parents lack confidence in reading themselves. Access to wide range of books Lack of encouragement	Phonemic awareness,  Letter-sound relationship Word analysis skills, Sight word recognition	Children not motivated to read	Experiencing fluent reading being modelled	Access to school library Visits to local library
14					RR Assessment Tests	Low level of OL outside of school + lack of opportunity to use OL skills learned in school, Lack of reading culture @ home Lack of awareness of child's progress by parents	Developing reading skills through writing  Reading writing of LS peers  Timed reading, High frequency word drills	Children generally excited about books but lack motivation to read on their own	Self-selection of books (interest level)  Listening to recording of fluent reading	Having access to levelled readers so progress can be monitored Listening to before and after recording of their own reading



Reference to *fluency oriented activities*



References to *Parents & Home*



References to *motivation for reading*

## **APPENDIX 5**

### **INTERVIEW SCHEDULE LEARNING SUPPORT TEACHERS (PHASE 1)**

#### **Opening Remarks**

- Welcome, expression of gratitude, assurance of confidentiality
- Experience on completing the questionnaire

#### **1. General information**

- Description of your school
- Teaching experience as learning support teacher
- Description of how learning support is organised in your school (in class support/withdrawal/ team teaching etc.)
- Case load for learning support programme
- Modes of Intervention as per LS programme. Withdrawal, classroom support, station teaching, ability grouping.

#### **2. Teaching reading in general (sample probes and questions)**

- Do children need to learn the sounds associated with all letters before they can read independently
- *“There are just 26 letters in the alphabet and about 44 sounds surely teaching reading successfully to all children cannot be that difficult”* What is your opinion of this statement?
- How important do you think it is for children to experience success in reading from an early stage? How can we ensure this in a meaningful way?
- Do you have a particular philosophy/theory about how children learn to read that informs the way you teach reading?
- What reading skills do you emphasise with the children in your learning support programme? Why these particular skills? How do you teach those skills? What are the barriers to success?
- What measures, if any, do you employ to ensure that teaching reading is a fun activity for children in your programme?

#### **3. Learning difficulties of children in your programme**

- Over 90% of respondents agreed that poor oral language ability was a contributing factor for those children in their class who experience difficulties in reading. Can you tell me more about this?
- 78% of teachers reported that children had significant difficulties with reading with expression. Do you see this as a priority in your programme? What measures do you employ in this regard?

#### **4. Factors affecting children’s progress in reading**

- Home background
- Oral language ability
- Reading ability of parents
- Motivation for reading

#### **5. Attitude of children to reading**

- Is performance for other children/ teachers important?
- 80% of respondents agreed that children are typically aware of their own individual progress in reading. Is this a positive factor? Why?
- How would you describe children’s orientation towards reading?
- How difficult do they perceive reading to be?

#### **6. Current Approaches/practice**

- Can you tell me about how you teach reading in your learning support programme? Describe a typical lesson. What do you focus on? What are your priorities?
- What factors affect your level of autonomy in your learning support programme?

- 93% of teachers reported that they use phonics instruction in their learning support programmes each week with much lower percentages attributed to fluency oriented reading activities. Why do you think this is the case?
- Are children using levelled readers in your programme?
- 50% of respondents reported that children were never recorded (audio) as they read text with a view to listening to their own performance with a further 43% rarely doing so. What are your views on this?
- *Teaching fluency oriented reading activities such as readers theatre or antiphonal reading was reported as being rarely or never used as a focus of instruction with learning support children in First Class. Would this be the case in your teaching?*

#### 7. Parents

- One third of respondents had reservations in relation to parent's awareness of their child's reading ability. Can you tell me more about this? Is this the case in your school?
- There was a reported lack of support from parents/home for children reading at home. Why do you think this is the case?
- Teachers reported that lack of reading material outside of school was a factor in their students reading difficulties. Is this the case in your experience?
- *"Parents of some of the children in my class have similar difficulties in reading"*. Is this the case in your school?
- How are parents involved in your learning support programme?
- Do you think that parental involvement should be part of a school learning support programme?
- What are the barriers?
- How would you involve parents in a meaningful way in your programme?

#### 8. Fluency oriented reading instruction

- What is your understanding of oral reading fluency instruction?
- Fluency oriented reading activities (e.g. Choral, echo, antiphonal reading, Reader's Theatre) are not widely used by learning support teachers in the survey. Why do you think this is the case? Do you use FORI activities in your teaching? Why not?
- *'Once text is read with fluency and expression we don't worry about the reading rate'*. What is your view on this comment?
- *'Children get bored of reading the same text'* What are your views on repeated reading of same text:
- Recording of children reading. Do you see value in this activity

#### 9. Motivation

- Every teacher reported that children who participate in their learning support programme learn best when they are motivated to read yet 58% reported that their children had low motivation for reading. Why do you think this is the case?
- How do you set about motivating your struggling readers for reading?
- What typically is the motivation for reading of children in your programme?
- What do you think would enhance the motivation for reading of your children?
- *"Literacy games seem to be the most motivational part of my programme i.e. children learning without realising it"*
- 80% of respondents agreed that if children were more motivated they would be more likely to improve their reading ability

#### 10. Reading resources and materials

- A teacher commented that *'it is important that children read books that are at their reading level. If they are reading at this independent level they will attempt to read more readily and are more likely to succeed'* another commented that *'children only enjoy reading if it is at least at instructional level'*
- *'It is important that children read books that are at their reading level. If they are reading at this independent level they will attempt to read more readily and are more likely to succeed.'* What is your opinion on this comment?





## APPENDIX 7

### CONFIRMATION LETTER TO SCHOOLS PARTICIPATING IN FORI INTERVENTION

Dear \_\_\_\_\_,

I am writing to thank you for your participation in my recent study involving Learning Support Teachers in all DEIS Band 1&2 primary schools in the Dublin Northside Partnership catchment area. The initial phase of the study involved the completion of a questionnaire seeking background information and looking at elements of the current practice, perceptions and beliefs of learning support teachers. The second phase of the study will be based in **three** schools from the Dublin Northside Partnership catchment area who participated in the initial phase of the study.

At the preliminary presentation of results in MIE on June 26<sup>th</sup> you expressed an interest in participating in the next phase of the study involving a school-based reading intervention over an eight week period in October/December 2013. I am delighted to inform you that your school has been selected to take part in this intervention. This will involve selecting a group of children (4-6 children) in **First Class** who have been identified as candidates for learning support in reading for the forthcoming term. This group of children will receive **Fluency Oriented Reading Instruction (FORI)** each day (on a withdrawal

The proposed schedule of the study for the next term is as follows:

Date	Activity
<b>September, 2013</b>	(i) Initial meeting with participating teachers (MIE@ 11.am on Friday, Sept. 6 <sup>th</sup> ) (ii) CPD/preparation for teachers on FORI (3 sessions, dates to be agreed) (iii) Pre-assessment of children participating (TOWRE-2; GORT-5; MRP-A) (iv) Interview with participating teachers (learning support teachers and class teachers) (v) Questionnaire on motivation for reading of participating children (teachers) (vi) Interview with parents of each participating child
<b>October, 2013</b>	(i) 20 days instruction in learning support groups (4 weeks X 5days) (ii) Interim review meeting with participating teachers
<b>November, 2013</b>	(i) 20 days instruction in learning support groups (4 weeks X 5days)
<b>December 2013</b>	(i) Review meeting with participating teachers (interviews) (ii) Post-assessment of children participating (TOWRE-2; GORT-5; MRP-A) (iii) Questionnaire on motivation for reading of participating children (teachers) (iv) Interview with parents of each participating child
<b>May 2014</b>	Follow up focus group interviews with parents (each school)

While the broad structure of this intervention is already designed it is envisaged that details such as the nature of instruction, the texts that will be used, dates for interviews and assessment of children will be agreed during the CPD/preparation days.

Please let me know if you are able to attend the initial meeting at Marino Institute of Education at **11.am** on Friday, September 6<sup>th</sup>. Contact details: [gene.mehigan@mie.ie](mailto:gene.mehigan@mie.ie) (086) XXXXXXX

Le dea-mhéin,

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Gene Mehigan

## APPENDIX 8

### LETTERS OF CONSENT

#### (a) Letter of Consent: Learning Support Teachers

Dear \_\_\_\_\_ ,

Thank you for your expression of interest in participating in the research project to investigate the effects of Fluency Oriented Reading Instruction (FORI) on the motivation for reading of children in First Class in your school.

To investigate the effects of FORI on motivation for reading it is proposed to carry out a reading intervention with children in your learning support class over an eight week period. The intervention seeks to investigate how a particular style of reading instruction impacts on the motivation for reading for those children who are struggling with the reading process.

As part of the project you may be asked to complete questionnaires and to participate in individual and focus group interviews to ascertain your views on the reading performance and the motivation for reading of the children selected for the intervention. The interviews will be digitally recorded. You will also be asked to keep a journal to record your thoughts and observations over the course of the intervention. Your anonymity will be preserved in all data collection and analysis.

In developing the reading intervention, I anticipate working with you in a number of ways: providing professional reading material to inform the theory underpinning FORI; providing reading resources to support the intervention; providing professional development on FORI methodology; being on-site in your school each week to discuss your needs and questions.

I would be most grateful if you would sign the permission slip at the end of this letter to formally indicate your consent to participate in the research study. It is most important for you to realise that this is voluntary and you may withdraw from the study at any stage in the event of a difficulty arising.

This intervention promises to be a very exciting experience and I look forward to working with you.

Many thanks for your support,

Yours sincerely,

Gene Mehigan

Marino Institute of Education

Griffith Avenue

Dublin 9

✂-----

I agree to participate in the FORI project

Signed: \_\_\_\_\_ (learning support teacher)

**(b) Letter of Consent: Children**

Dear Parent,

The Principal and teachers in your child's school have agreed to take part in a Reading Research Project which aims to improve your child's motivation and engagement in reading. The project will involve a reading intervention which will take place for eight weeks from October to December 2013.

The intervention will focus on children in First Class in the school and your child has been selected to be part of the study. This will involve your child taking part in an interview to find out his/her views on and attitude towards reading. The interview will be digitally recorded but your child's name or the name of the school will not appear on any documents. All information provided by your child will remain anonymous and will only be shared with other professionals in the context of the research study. Before and after the intervention your child's reading ability will also be assessed by an experienced independent research assistant. The results of this assessment will be made available to you at both stages of the study.

In order for your child to take part in the study I would be most grateful if you would sign and return the consent slip at the end of this letter. It is most important for you to realise that this is voluntary and there is no compulsion on you to give permission. If you have any questions about the intervention please do not hesitate to contact the school principal.

This intervention promises to be a very exciting experience for both teachers and children and I look forward to working with you, your child and the teachers in the school.

Many thanks for your support,

Yours sincerely,

Gene Mehigan

Marino Institute of Education  
Griffith Avenue  
Dublin 9

✂-----

I have discussed the reading intervention with my child and I consent to my child's participation in the research project.

Signed: \_\_\_\_\_

I do not give my consent for my child to participate in the research project.

Signed: \_\_\_\_\_

## (C) Letter of Consent: Parents

Dear Parent

Thank you very much for taking the time to attend this group interview about our Reading Intervention. I invite you to read the statements below and if you find them agreeable please sign the consent form below

Any information discussed in the course of the interview will always remain anonymous and will only be shared with other professionals for the purposes of the research study.

Yours sincerely,

---

Gene Mehigan

Marino Institute of Education

Griffith Avenue

Dublin 9

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The purpose and nature of the study has been explained to me in writing.

I am participating voluntarily.

I give permission for my interview to be tape-recorded

I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.

I understand that I can withdraw permission to use the data within two weeks of the interview, in which case the material will be deleted.

I understand that anonymity will be ensured in the write-up by disguising my identity.

I understand that disguised extracts from my interview may be quoted in the thesis and any subsequent publications.

I agree to participate in the interview:

Signed: \_\_\_\_\_

## APPENDIX 9

### RESEARCH SCHEDULE SUMMARY

	Research Activity	Instrument	Method
<b>PHASE 1</b>	Survey of Learning Support Teachers in 14 DEIS schools in Dublin Northside Partnership Catchment area	Questionnaire	Quantitative (some open ended questions)
	2 Focus Group Interviews with learning support teachers	Semi-structured interview	Qualitative
	Data analysis Selection of Schools for intervention (n=3)		
<b>PHASE 2</b> (pre-intervention)	Teacher Professional Development on Fluency Oriented Reading Instruction for LS teachers (n=3)		
	Pre-test of children's <i>word reading ability</i>	Test of Word Reading Efficiency – Second Edition (TOWRE-2)	Quantitative
	Pre-test of children's <i>oral reading fluency (Accuracy)</i>	Gray Oral Reading Test – Fifth Edition (GORT-5)	Quantitative
	Pre-test of children's <i>oral reading fluency (Rate)</i>	Learning A-Z WCPM test	Quantitative
	Pre-test of children's <i>oral reading fluency (Prosody)</i>	NAEP Fluency Scale	Quantitative
	Assessment of teacher's perceptions of children's motivation for learning to read (classroom teachers & learning support teachers)	Questionnaire [Young Reader Motivation Questionnaire -Teacher Rating (adapted)]	Quantitative
	Individual interviews with teachers	Semi-structured interview	Qualitative
	Assessment of children's motivation for reading (18 children) Interviews with children	Questionnaire [YRMQ -Student Form (adapted)] Conversational Interview	Quantitative Qualitative
	Assessment of parents' perceptions of children's motivation for reading - interview with parents	Semi-structured interviews	Qualitative
	<b>PHASE 2</b> (intervention)	Learning Support Teachers Observation Schedule	Reflective Journal
Researcher Observation		Field Notes	Qualitative
<b>PHASE 2</b> (post-intervention)	Post- intervention test of word reading ability	TOWRE-2	Quantitative
	Post- intervention test of ORF (Accuracy)	GORT-5	Quantitative
	Post-test of children's ORF ( <i>Rate</i> )	Learning A-Z WCPM test	Quantitative
	Post-test of children's ORF ( <i>Prosody</i> )	NAEP Fluency Scale	Quantitative
	Individual interviews with teachers (classroom teachers & learning support teachers)	Semi-structured interview schedule	Qualitative
	Assessment of teacher's perceptions of children's motivation for learning to read (classroom teachers & learning support teachers)	Questionnaire [YRMQ -Teacher Rating (adapted)]	Quantitative
	Individual interview with parents	Semi-structured interview schedule	Qualitative
	Assessment of children's motivation for reading Interviews with children	Questionnaire [YRMQ -Student Form (adapted)] Conversational Interview	Quantitative Qualitative
6 months later	Focus group interviews with parents and teachers and children (one interview in each participating school)	Semi-structured interview schedule	Qualitative

## APPENDIX 10

### UCC Ethics Approval Letter



Eugene Mehigan,  
School of Education,  
University College Cork

12<sup>th</sup> March 2015

**Oifig an Leas - Uachtaráin Taighde  
agus Nuálaíochta**  
Office of the Vice President  
for Research and Innovation

4th Floor, Block E,  
Food Science Building,  
University College Cork,  
College Road, Cork, Ireland.


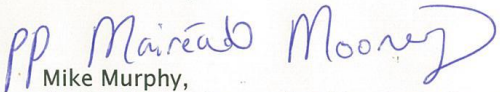
T +353 (0)21 4903500  
E [vpresearch@ucc.ie](mailto:vpresearch@ucc.ie)  
[www.ucc.ie](http://www.ucc.ie)

Dear Eugene,

Thank you for submitting your research (project entitled *Investigation into the Effects of Fluency Oriented Reading Instruction (FORI) on the Motivation of Struggling Readers*) to SREC for ethical perusal. I am pleased to say that we see no ethical impediment to your research as proposed and we are happy to grant approval.

We wish you every success in your research.

Yours sincerely,

  
  
Mike Murphy,  
Chair of Social Research Ethics Committee

Professor Anita R Maguire BSc PhD CChem MRSC  
Vice President for Research and Innovation

**Ollscoil na hÉireann, Corcaigh**  
National University of Ireland, Cork

## APPENDIX 11

### FORI INVENTORY OF RESOURCES FOR EACH SCHOOL

ITEM	Quantity	Belle School	Ben School	Bon School
Reflective Journal	1	✓	✓	✓
Whisperphones	7	✓	✓	✓
Whisperphones Connecting Tubes	4	✓	✓	✓
Toobalooos	6	✓	✓	✓
Regular dice	2	✓	✓	✓
20 –sided dice	3	✓	✓	✓
10 –sided dice	6	✓	✓	✓
One-minute timer	2	✓	✓	✓
Timed reading graph sheets (one minute)	24	✓	✓	✓
Wipe boards	6	✓	✓	✓
Wipe off phrase strips	10	✓	✓	✓
STAR sheets (recording and reinforcing)	10	✓	✓	✓
Book of “Super” stamps	1	✓	✓	✓
Face masks	6	✓	✓	✓
Whiteboard Markers	3	✓	✓	✓
Scrap Book	6	✓	✓	✓
Wooden Templates for sight word activities	8	✓	✓	✓
Home Reading Log	6	✓	✓	✓
Diagrammatic Innovation Template	10	✓	✓	✓
Write and Draw Template	20	✓	✓	✓
Box of assorted stickers, card etc	1	✓	✓	✓
Smiley Erasers for prizes	6	✓	✓	✓
Reward Certificates	12	✓	✓	✓
Scooby Doo Reading Medals	12	✓	✓	✓
MIE FORI USB key (with digital copies of all activities)	1	✓	✓	✓



## APPENDIX 12

### FORI TEXTS AND INVENTORY OF RESOURCES FOR EACH TEXT

UNIT	WEEK	TEXT	TOTAL WORDS	UNIQUE WORDS	SOURCE
1	1 & 2	<i>What's for Dinner?</i>	133	68	Reading A-Z
2	3 & 4	<i>Where is Cub?</i>	153	48	Reading A-Z
3	5 & 6	<i>Dr. Jen</i>	129	52	Reading A-Z
4	7 & 8	<i>Time for Bed</i>	111	51	Reading A-Z

ITEM (for each text)	TEXTS							
	UNIT 1		UNIT 2		UNIT 3		UNIT 4	
	<i>What's for Dinner?</i>	copies	<i>Where is Cub?</i>	copies	<i>Dr. Jen</i>	copies	<i>Time for Bed</i>	copies
Book for each child	✓	2	✓	2	✓	2	✓	2
Wordless book for each child	✓	1	✓	1	✓	1	✓	1
Master copy of text for LS teacher	✓	1	✓	1	✓	1	✓	1
Words lists for timed reading (5 lists of 20 words on each sheet)	✓	1	✓	1	✓	1	✓	1
Word Count texts	✓	1	✓	1	✓	1	✓	1
Text sheet for timed reading	✓	1	✓	1	✓	1	✓	1
Word Dash	✓	1	✓	3	✓	3	✓	3
Matching phrases (sentence completion)	✓	1	✓	3	✓	3	✓	3
Sentence Reconfiguration	✓	1	✓	3	✓	3	✓	3
Phrase Grid	✓	10	✓	10	✓	10	✓	10
Character match sheets	✓	5	✓	6	✓	6	✓	6
Cumulative Choral Reading Text	x		✓	6	✓	6	✓	6
Reader's Theatre Text	✓	6	✓	6	✓	6	✓	6
Slide and Glide Sheet	✓	1	✓	1	✓	1	✓	1

## APPENDIX 13

### EXAMPLES OF FLUENCY ORIENTED READING ACTIVITIES USED IN THE INTERVENTION

#### UNIT 2: *Where is Cub?*

**Where is Cub? (Story Text)**

Mother Bear wakes up. Her cub is missing. She looks for her cub in the cave. She cannot find him. Mother Bear goes to Freddy Fox.  
 “Have you seen my cub?” she asks. “He is missing, and I am worried.” “No, I have not,” says Mr. Fox.  
 Mother Bear goes to Doris Deer.  
 “Have you seen my cub?” she asks. “He is missing, and I am worried.” “No, I have not,” says Ms. Deer.....

#### 1. PHRASE GRID (1x6)

Die is cast and children respond by reading the phrase in the corresponding section

<b>1</b> Have you seen	<b>2</b> Her cub is	<b>3</b> <i>very worried</i>
<b>4</b> A bee buzzing	<b>5</b> He is missing	<b>6</b> <i>I am worried</i>



#### 2. SLIDE AND GLIDE

Teacher reads black print and children continue reading red print

Mother Bear **wakes up**.

Her cub **is missing**.

She looks for her cub **in the cave**.

She cannot **find him**.

Mother Bear goes to **Freddy Fox**.

#### 3. PHRASE GRID (1X9)

<b>Have you seen</b>	<b>Her cub is</b>	<b>very worried</b>	<b>ask Doris Deer</b>
<b>A bee buzzing</b>	<b>He is missing</b>	<b>I am worried</b>	<b>He is eating</b>
<b>Mother Bear goes</b>	<b>is eating honey</b>	<b>is missing</b>	<b>you should go</b>

#### 4. WORD DASH (30 SECONDS)

Read the words from left to right and from top to bottom.

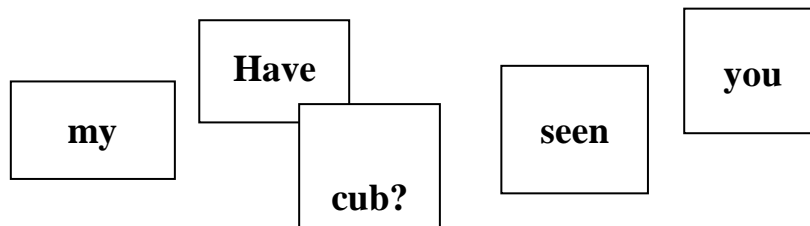
wakes	up	goes	looks	missing	bee
seen	honey	cub	buzzing	worried	find
looks	wakes	worried	bee	find	cub
honey	missing	up	buzzing	seen	goes
cub	up	find	looks	wakes	honey
bee	buzzing	goes	seen	worried	missing

Mark the last word read.

Words read correctly: 1<sup>st</sup> time  2<sup>nd</sup> time  3<sup>rd</sup> time  4<sup>th</sup> time

#### 5. SENTENCE RECONFIGURATION

<b>Have</b>	<b>you</b>	<b>seen</b>	<b>my</b>	<b>cub?</b>
-------------	------------	-------------	-----------	-------------



#### 6. SIGHT WORD ACTIVITY



Children choose one star and find that word throughout the book. They then record the word on their wipe board.



**7. WORD STUDY E.G. /EE/**

Underline the word with the /ee/sound. Write the word on the line below

1. "Have you seen my cub?" she asks.  
\_\_\_\_\_
2. Mother Bear goes to Doris Deer.  
\_\_\_\_\_
3. "No, I have not," says Ms. Deer.  
\_\_\_\_\_

**8. SENTENCE MATCHING/COMPLETION**

Giraffe tried eating grass	just like a bear.
Giraffe tried eating ants	just like an otter.
Giraffe tried eating honey	just like a deer.
Giraffe tried to eat fish	just like an anteater.

**9. TIMED READING**

*What's for Dinner?*

Giraffe was very hungry.	4
"I don't want to eat leaves," he said.	12
"I always eat leaves."	16
Giraffe tried eating grass just like a deer.	24
But bending down hurt his neck.	30

**10. SIGHT WORD LIST (20 SEC) MOTIVATIONAL READING + STARS**

List 1		List 2		List 3		List 4		List 5	
1	Giraffe	1	very	1	eating	1	down	1	bit
2	like	2	hungry	2	neck	2	ants	2	honey
3	to	3	leaves	3	hurt	3	too	3	stung
4	eat	4	want	4	just	4	bear	4	fish
5	was	5	said	5	don't	5	water	5	wet
6	his	6	always	6	bending	6	got	6	not
7	I	7	grass	7	anteater	7	bugs	7	otter
8	he	8	But	8	bees	8	frog	8	pick
9	but	9	tried	9	nose	9	fast	9	tree
10	a	10	deer	10	fell	10	seeds	10	bird
11	like	11	always	11	anteater	11	ants	11	stung
12	was	12	said	12	neck	12	bear	12	fish
13	I	13	deer	13	hurt	13	fast	13	wet
14	eat	14	leaves	14	bees	14	water	14	bit
15	to	15	hungry	15	fell	15	down	15	bird
16	Giraffe	16	very	16	eating	16	got	16	pick
17	but	17	want	17	just	17	too	17	otter
18	a	18	grass	18	don't	18	bugs	18	tree
19	he	19	But	19	nose	19	seeds	19	not
20	his	20	tried	20	bending	20	frog	20	honey

## APPENDIX 14

### LOG OF CORE FLUENCY ORIENTED READING ACTIVITIES

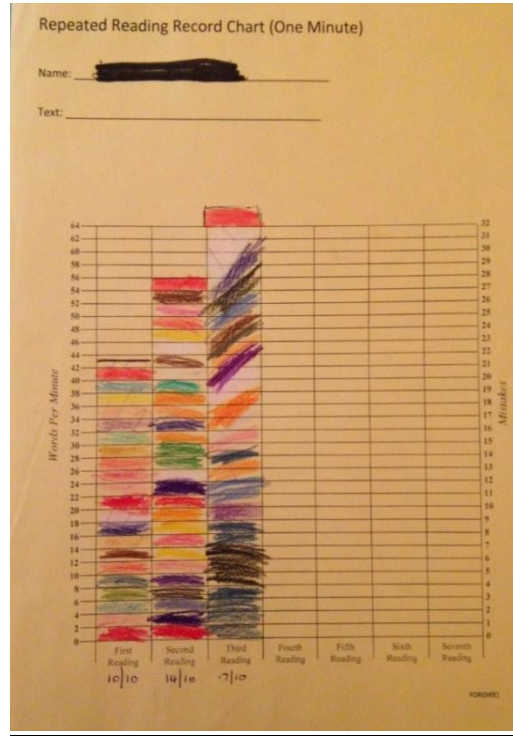
Activity	Date	Date	Date	Date	Date	Date	Date
Modelled Reading							
Echo Reading							
Choral Reading							
Cumulative Choral reading							
Whisper Reading (Toobaloos)							
Partner reading (Whisperphones)							
Readers Theatre							
Audio Assisted reading							
Retelling (wordless books)							
Timed Repeated Reading							
Word Dash (Timed reading of word lists)							
Sentence Reconfiguration							
Sentence Matching (Completion)							
Text Innovation (Circle Diagram)							
Fluency Activity (Scrap book )							
Matching activity (character cards)							
Phrase Reading (Slide and Glide)							



## APPENDIX 16

### EXAMPLES OF PROGRESS RECORDS ON FORI ACTIVITIES

#### 1. Repeated Reading Record Chart



#### 2. Word Dash (30 Seconds)

Read the words from left to right and from top to bottom.

wakes	up	goes	looks	missing	bee
seen	honey	cub	buzzing	worried	find
looks	wakes	worried	bee	find	cub
honey	missing	up	buzzing	seen	goes
cub	up	find	looks	wakes	honey
bee	buzzing	goes	seen	worried	missing

Words read correctly: 1<sup>st</sup> time 11 2<sup>nd</sup> time 14 3<sup>rd</sup> time 17 4<sup>th</sup> time 24

**APPENDIX 17**

**TOOBALOOS AND WHISPERPHONES**



Toobaloo







Whisperphones



## APPENDIX 18

### EXTRACT FROM READERS THEATRE VERSION OF TEXT (*DOCTOR JEN*)

	<b>Sister:</b>	I feel sick. I have a fever
	<b>Narrator:</b>	Let's take you to Doctor Jen.
	<b>Brother:</b>	I feel sick. I have a tummy ache.
	<b>Narrator:</b>	Let's take you to see Doctor Jen.
	<b>Father:</b>	I feel sick. I have a cough
	<b>Narrator:</b>	Let's take you to Doctor Jen.
	<b>Mother:</b>	I am ill. I have a sore throat.

## APPENDIX 19

### CORRELATION OF TEXTS USE IN FORI INTERVENTION TO OTHER LEVELLING SYSTEMS FOUND IN LEVELLED READING MATERIALS

Learning A-Z Correlation Chart							
Learning A-Z	Ages	Grade	Fountas & Pinnell	Reading Recovery	DRA	PM Readers	Lexile
<b>A</b>	4-6	K	A	1	A-1	Starters 1	BR-70
<b>B</b>	4-6	K	B	2	2	Starters 2	BR-70
<b>C</b>	4-6	K	C	3-4	3-4	3-4 red	BR-70
<b>D</b>	4-7	1	D	5-6	6	5-6 red/yellow	80-450
<b>E</b>	6-7	1	E	7-8	8	7-8 yellow	80-450
<b>F</b>	6-7	1	F	9-10	10	9-10 blue	80-450
<b>G</b>	6-7	1	G	11-12	12	11-12 blue/green	80-450
<b>H</b>	6-7	1	H	13-14	14	13-14 green	80-450
<b>I</b>	6-7	1	I	15-16	16	15-16 orange	80-450
<b>J</b>	6-8	1	J	17	18	17 turquoise	451-500
<b>K</b>	7-8	2	J	17	18	18 turquoise	451-550
<b>L</b>	7-8	2	K	18	20	19-20 purple	501-550
<b>M</b>	7-8	2	L	19	24	21 gold	551-600
<b>N</b>	7-8	2	M	20	28	22 gold	551-650
<b>O</b>	7-8	2	M	20	28	22 gold	601-650
<b>P</b>	7-8	2	M	28	28	22 gold	601-650
<b>Q</b>	7-9	3	N	30	30	23 silver	651-690
<b>R</b>	8-9	3	N	30	30	23 silver	651-730
<b>S</b>	8-9	3	O	34	34	24 silver	691-770
<b>T</b>	8-9	3	P	38	38	25 emerald	731-770
<b>U</b>	8-11	4	Q	40	40	26 emerald	771-800
<b>V</b>	9-11	4	R	40	40	26 emerald	771-830
<b>W</b>	9-11	4	S	40	40	27 ruby	801-860
<b>X</b>	9-11	5	S	40	40	28 sapphire	831-860
<b>Y</b>	9-11	5	T	40	40	29 sapphire	861-890
<b>Z</b>	9-11	5	U-V	N/A	50	30 sapphire	891-980

## APPENDIX 20

### YOUNG READER MOTIVATION TO READ — TEACHER RATING (T-YRMR)

Student Name: \_\_\_\_\_ Teacher Name: \_\_\_\_\_

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

Achievement Level in Reading for Age (circle)      High                  Average                  Low

Overall level of Motivation to Read (Circle)      High                  Average                  Low

		No, never	No, not usually	Yes, sometimes	Yes, always
<b>3. PERCEPTIONS OF STUDENT EFFICACY FOR READING</b> This student.....					
(i)	thinks he/she can work out hard words by himself/herself when he/she reads	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii)	thinks he/she is good at remembering words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii)	thinks he/she can work out sounds in words	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv)	thinks he/she can read well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v)	thinks he/she can work out hard words in a story even if there are no pictures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>4. PERCEPTIONS OF STUDENT READING ORIENTATION</b> This student.....					
(i)	likes to play word games in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii)	thinks it is fun to read books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii)	likes reading out loud in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv)	likes reading by himself/herself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v)	likes to bring books home to read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi)	avoids participating in reading activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vii)	is easily distracted when reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(viii)	must be told to get a book to read	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ix)	is enthusiastic about reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>5. PERCEPTIONS OF STUDENT DIFFICULTY IN READING</b> This student.....					
(i)	finds reading to the class hard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii)	thinks the books he/she reads in class are too hard	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii)	makes lots of mistakes in reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv)	needs extra help in reading	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v)	finds it hard to understand the stories he/she has to read in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi)	Is easily discouraged when he/she encounters difficult text	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## APPENDIX 21

### YOUNG READER MOTIVATION QUESTIONNAIRE - STUDENT FORM (S - YRMQ)

Student Name: \_\_\_\_\_ Teacher Name: \_\_\_\_\_

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


	Practice items			
(i)	Do you bring your schoolbag to school?			
	1 No, never	2 Sometimes	3 Yes, always	
(ii)	Do you eat grass for your breakfast?			
	1 No, never	2 Sometimes	3 Yes, always	
(iii)	Do you wear a tracksuit to school?			
	1 No, never	2 Sometimes	3 Yes, always	
<b>2. EFFICACY FOR READING</b>				
(i)	Can you work out really hard words by yourself when you read?			
	1 No, never	2 Sometimes	3 Yes, always	
(ii)	Are you good at remembering words you have seen before?			
	1 No, never	2 Sometimes	3 Yes, always	
(iii)	Do you think you read well?			
		1 Yes	2 No	
(iv)	Can you work out really hard words in a story even if there are no pictures?			
	1 No, never	2 Sometimes	3 Yes, always	
(v)	How do you feel when you read out loud to someone?			
	1 Happy	2 Embarrassed	3 OK	4 Sad
(vi)	What kind of reader are you?			
	1 I am a very good reader.	2 I am an OK reader.	3 I am NOT a very good reader.	

<b>3. READING ORIENTATION</b>			
(i)	Is it fun for you when you read books?		
	1 No, never	2 Sometimes	3 Yes, always
(ii)	Do you like reading at home?		
	1 No, never	2 Sometimes	3 Yes, always
(iii)	Which would you most like to get as a present?		
	1 A new game	2 A new book	
(iv)	Do you like to read during your free time or do something else?		
	1 Read	2 Do something else	
(v)	How would you feel if someone gave you a book for a present?		
	1 Disappointed	2 Sort of happy	3 Happy
(vi)	Do you read by yourself before you go to bed?		
	1 No, never	2 Sometimes	3 Yes, always
(vii)	Do you take books home from school to read?		
	1 No, never	2 Sometimes	3 Yes, always
(viii)	Which would you rather do?		
	1 Clean your room	2 Read a book	
(ix)	Do you read books out loud to someone in your family?		
	1 No, never	2 Sometimes	3 Yes, always
(x)	Do you like to read books all by yourself?		
	1 No	2 It's OK	3 Yes

<b>PERCEPTIONS OF DIFFICULTY IN READING</b>			
(i)	When you read out loud in the class is it hard for you?		
	1 No, never	2 Sometimes	3 Yes, always
(ii)	Are the books you read in your class too hard?		
	1 Yes	2 No	
(iii)	Do you make lots of mistakes in reading?		
	1 No, never	2 Sometimes	3 Yes, always
(iv)	Do you need to get some extra help in reading?		
	1 No, never	2 Sometimes	3 Yes, always
(v)	Is it hard for you to understand the stories you have to read in school?		
	1 No, never	2 Sometimes	3 Yes, always
(vi)	Learning to read is		
	1 Really easy	2 Sort of easy	3 Sort of hard
			4 Really hard

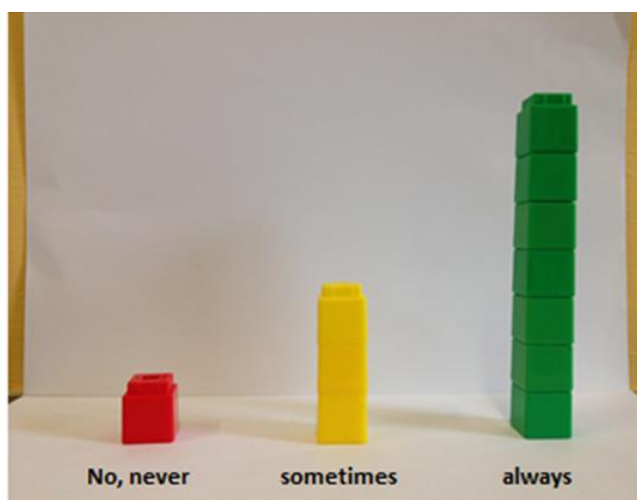
## APPENDIX 22

### YOUNG READER MOTIVATION QUESTIONNAIRE (YRMQ)—STUDENT FORM (as presented to children)

<p>1.</p>  <p>Can you work out really hard words by yourself when you read?</p>	<p>2.</p>  <p>Are you good at remembering words you have seen before?</p>
<p>3.</p>  <p>Do you think you read well?</p>	<p>4.</p>  <p>Can you work out really hard words in a story even if there are no pictures?</p>
<p>5.</p>  <p>How do you feel when you read out loud to someone?</p>	<p>6.</p>  <p>What kind of reader are you?</p>

## APPENDIX 23

(i)	Do you bring your schoolbag to school?		
	1	2	3
	No, never	Sometimes	Yes, always



(v)	How would you feel if someone gave you a book for a present?		
	1	2	3
	Disappointed	Sort of happy	Happy





## APPENDIX 24

### DETAILS OF FLUENCY ORIENTED READING INSTRUCTION INTERVENTION IN BELLE SCHOOL, BEN SCHOOL, AND BON SCHOOL (JUNE 2013 - JUNE 2014)

DATE	ACTIVITY	NOTES
June 24 <sup>th</sup> -28 <sup>th</sup> 2013	3 schools identified for Fluency Oriented Reading Instruction and informed of details of the proposed intervention Meeting with Principals and learning support teachers in all schools (n=3)	<ul style="list-style-type: none"> <li>Belle School; Ben School; Bon School</li> <li>Details of the proposed study outlined</li> <li>Criteria for selection of children identified (n=18)</li> <li>Commitment by LS teachers to CPD on Fluency Oriented Reading Instruction in September</li> </ul>
August 30 <sup>th</sup>	Presentation on Fluency Oriented Reading Instruction (FORI) to learning support teachers in MIE	<ul style="list-style-type: none"> <li>Design of proposed FORI intervention</li> <li>Identification of methodology and resources</li> <li>Selection of texts (decision to use levelled texts <i>Learning A-Z</i>)</li> </ul>
Sept. 2 <sup>nd</sup> - 4 <sup>th</sup>	Visit to each participating school CPD with learning support teachers	<ul style="list-style-type: none"> <li>Meeting with learning support teachers and classroom teachers of children to be selected for intervention</li> <li>Children identified for initial assessment in reading ability and motivation for reading</li> </ul>
Sept 13 <sup>th</sup>	Meeting with Research Assistant for reading assessment	<ul style="list-style-type: none"> <li>Instruments to assess children's word reading efficiency and oral reading fluency selected</li> <li>Schedule for assessment in schools agreed</li> </ul>
Sept. 16 <sup>th</sup>	Continuing Professional Development (CPD) with learning support teachers	<ul style="list-style-type: none"> <li>Design of resources</li> </ul>
Sept. 30 <sup>th</sup>	CPD with learning support teachers	<ul style="list-style-type: none"> <li>Design of resources</li> <li>Journal for recording during intervention</li> </ul>
Sept. 19 <sup>th</sup> -23 <sup>rd</sup>	Meetings and interviews with parents	<ul style="list-style-type: none"> <li>Focus group meeting with parents in each school</li> <li>Individual semi-structured interviews with parents of all children selected for participation in the study (n=18)</li> <li>Interview schedule for parents structured around perceptions of their child as a reader around constructs of efficacy, orientation and difficulties</li> </ul>
Sept. 23 <sup>rd</sup> -27 <sup>th</sup>	Questionnaire issued to learning support teachers and class teachers	<ul style="list-style-type: none"> <li>Identifying teachers perceptions of children's motivation for learning to read under three constructs (a) self-efficacy for reading (b) orientation towards reading (c) difficulties in reading</li> </ul>
Sept. 23 <sup>rd</sup> -27 <sup>th</sup>	Pre-testing children for reading ability (Research Assistant)	<ul style="list-style-type: none"> <li>All children tested independently for word reading efficiency and oral reading Word Reading Efficiency (TOWRE-2)</li> <li>Oral Reading Fluency (GORT 5)</li> </ul>
Sept. 30 <sup>th</sup> - Oct. 4 <sup>th</sup>	Preparation and delivery of FORI materials to participating schools	<ul style="list-style-type: none"> <li>Inventory of materials supplied on USB</li> </ul>
Oct. 1 <sup>st</sup> -4 <sup>th</sup>	Assessment of Children's motivation for reading	<ul style="list-style-type: none"> <li>Young Reader Motivation Questionnaire - Student Form adapted) administered to children</li> <li>Conversational interview (reading) with all children</li> </ul>

Oct. 7 <sup>th</sup>	FORI INTERVENTION COMMENCES	
Oct. 7 <sup>th</sup> – 11 <sup>th</sup>	FORI Intervention (week 1 )	<ul style="list-style-type: none"> <li>Text: <i>What's for Dinner?</i></li> </ul>
Oct. 11 <sup>th</sup>	Review of week 1	<ul style="list-style-type: none"> <li>learning support teachers</li> </ul>
Oct. 14 <sup>th</sup> - 18 <sup>th</sup>	FORI Intervention (week 2)	<ul style="list-style-type: none"> <li>Text: <i>What's for Dinner?</i></li> <li>Performance by children on Friday 18<sup>th</sup> in all three schools</li> </ul>
Oct. 21 <sup>st</sup> – 25 <sup>th</sup>	FORI Intervention (week 3)	<ul style="list-style-type: none"> <li>Text: <i>Where is Cub?</i></li> <li>Performance by children on Friday 25<sup>th</sup></li> </ul>
Oct 25 <sup>th</sup>	Review and update	<ul style="list-style-type: none"> <li>learning support teachers</li> <li></li> </ul>
Nov. 4 <sup>th</sup> – 8 <sup>th</sup>	FORI Intervention (week 4)	<ul style="list-style-type: none"> <li>Text: <i>Where is Cub?</i></li> <li>Performance by children on Friday 8<sup>th</sup></li> </ul>
Nov. 6 <sup>th</sup>	Review and update	<ul style="list-style-type: none"> <li>learning support teachers</li> <li></li> </ul>
Nov. 11 <sup>th</sup> – 15 <sup>th</sup>	FORI Intervention (week 5)	<ul style="list-style-type: none"> <li>Text: <i>Doctor Jen</i></li> <li>Performance by children on Friday 15<sup>th</sup></li> </ul>
Nov. 18 <sup>th</sup> -22 <sup>nd</sup>	FORI Intervention (week 6)	<ul style="list-style-type: none"> <li>Text: <i>Doctor Jen</i></li> <li>Performance by children on Friday 22<sup>nd</sup></li> </ul>
Nov. 22 <sup>nd</sup>	Review and update	<ul style="list-style-type: none"> <li>learning support teachers</li> <li></li> </ul>
Nov. 25 <sup>th</sup> -29 <sup>th</sup>	FORI Intervention (week 7)	<ul style="list-style-type: none"> <li>Text: <i>Time for Bed</i></li> <li>Performance by children on Friday 29<sup>th</sup></li> </ul>
Dec. 2 <sup>nd</sup> -6 <sup>th</sup>	FORI Intervention (week 8)	<ul style="list-style-type: none"> <li>Text: <i>Time for Bed</i></li> <li>Performance by children on Friday 6<sup>th</sup></li> </ul>
POST-INTERVENTION ASSESSMENT AND INTERVIEWS		
Dec 9 <sup>th</sup>	Focus Group Meeting with Parents	<ul style="list-style-type: none"> <li>Bon School</li> </ul>
Dec. 10 <sup>th</sup>	Assessment of children's motivation for reading	<ul style="list-style-type: none"> <li>Bon School</li> </ul>
Dec 11 <sup>th</sup>	Focus Group Meeting with Parents  Assessment of children's motivation for reading Assessment of children's reading (Research Assistant)	<ul style="list-style-type: none"> <li>Belle School</li> <li>Belle School &amp; Ben School</li> <li>Ben School</li> </ul>
Dec. 12 <sup>th</sup>	Focus Group Meeting with Parents Assessment of children's reading (Research Assistant)	<ul style="list-style-type: none"> <li>Ben School</li> <li>Belle School &amp; Bon School</li> </ul>
Dec. 18 <sup>th</sup>	Interviews with class teachers & LS Teachers Interview with class teacher & LS Teachers	<ul style="list-style-type: none"> <li>Ben School</li> <li>Bon School</li> </ul>
Dec. 19 <sup>th</sup> 2013	Focus Group Interviews with class teachers & LS Teachers	<ul style="list-style-type: none"> <li>Belle School</li> </ul>
June , 2014	Focus Group interviews/meetings with Parents, Teachers, Children	<ul style="list-style-type: none"> <li>Belle School &amp; Ben School</li> <li>Ben School</li> <li>Bon School</li> </ul>

## **APPENDIX 25**

### **INTERVIEW SCHEDULE FOR PARENTS (PHASE 2)**

- ❖ Setting the scene
- ❖ Introductions
- ❖ Perception of the Intervention
- ❖ Perceptions of your child as a reader in relation to (a) efficacy for reading (b) orientation towards reading (c) difficulties in reading

#### **Efficacy**

- If you are reading with your child does he/she typically feel confident in working out words by themselves?
- Does your child feel that he/she reads well?
- Is he/she confident when reading?
- Is he/she confident when reading out loud?
- What kind of reader does your child think he/she is?
- Does your child talk about themselves as a reader? What is/she likely to say?
- Does your child talk about stories he/she reads at school?

#### **Orientation**

- Does your child read books by himself/herself?
- Does your child look for a story to be read at night?
- How would he/she feel if given a book for a birthday present?
- If given a choice for free time play is he/she likely to read a book or do something else?
- Does your child read voluntarily at home?
- Is he/she likely to favour a new game or a book?
- Does your child talk with friends about books?
- Does your child read in bed?
- If given the choice would your child choose to clean their room or read a book?
- Does your child volunteer to read out loud to a family member?

#### **Difficulty**

- How do you think your child perceives reading?
- Does your child find reading hard?
- Does your child look for help in reading?
- Does your child complain that reading is difficult?
- Does your child have difficulty understanding what they read?
- Do you think that they find learning to read easy or hard?

#### **Future Expectations**

- How would you like to see your child progress over the next few years
- What are the biggest challenges you foresee to them becoming competent readers?
- What are the biggest challenges you foresee to them becoming motivated readers?
- What advice would you give to parents if this intervention was to be offered to their children?

## **APPENDIX 26**

### **INTERVIEW SCHEDULE FOR TEACHERS PRE-INTERVENTION (PHASE 2)**

- ❖ Perceptions of individual children as readers in relation to (a) efficacy for reading (b) orientation towards reading (c) difficulties in reading

#### **Efficacy**

- Does he/she typically feel confident in working out words by themselves?
- Does he/she feel that he/she read well?
- Is he/she confident when reading?
- Is he/she confident when reading out loud?
- What kind of reader does the child think he/she is? [good; ok; not good]
- Does he/she talk about themselves as a reader? What is/she likely to say?
- Does he/she talk about stories he/she reads at school?

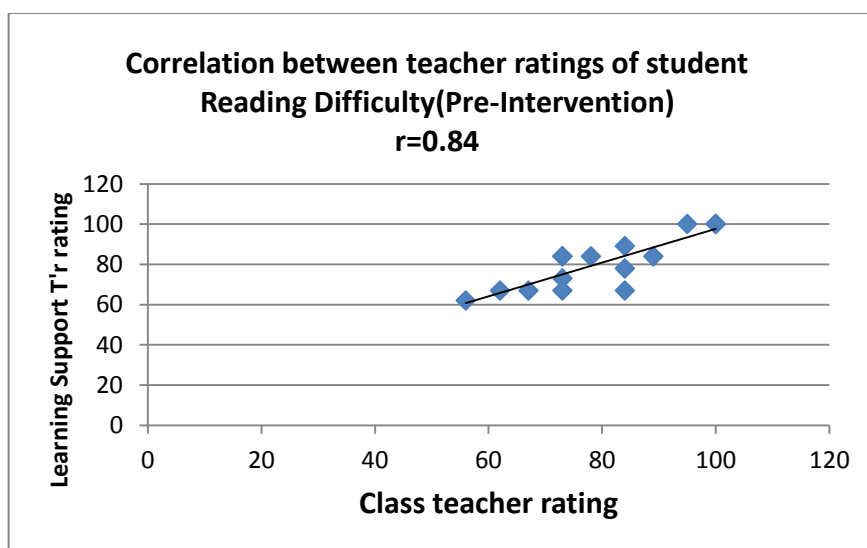
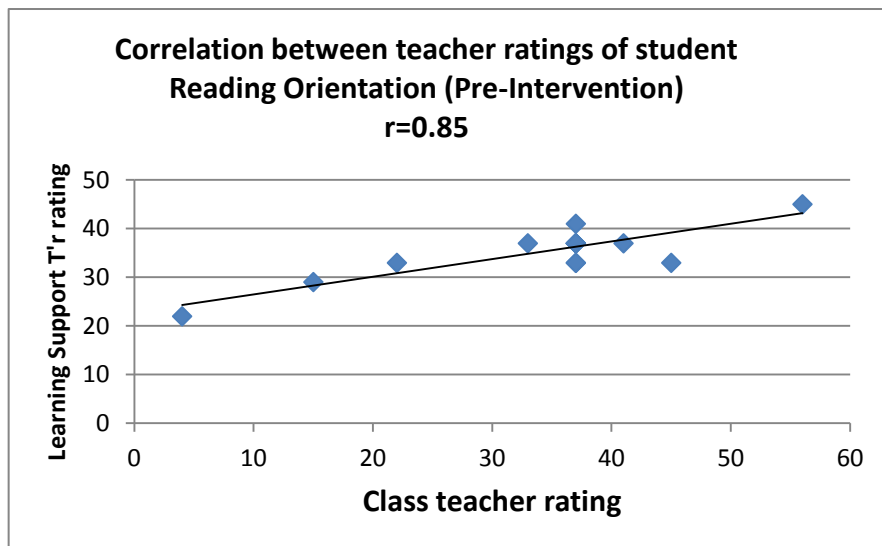
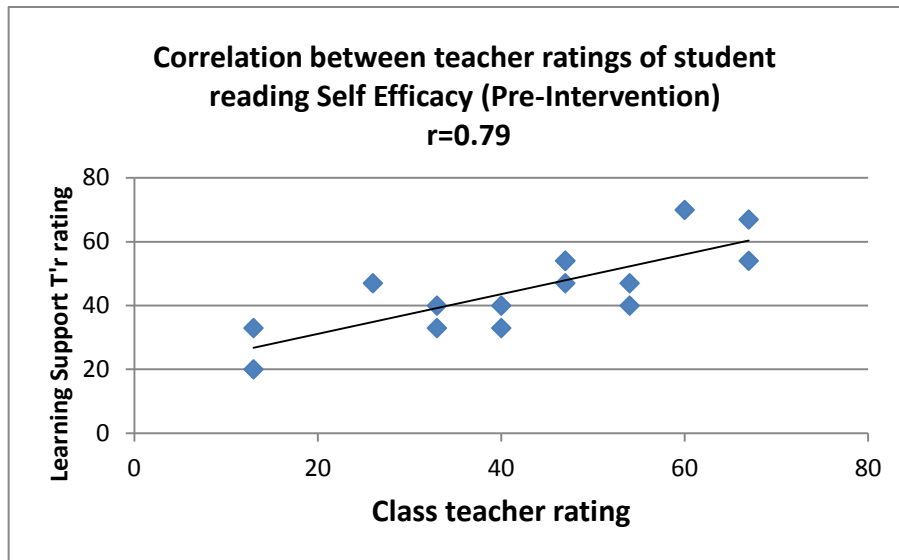
#### **Orientation**

- Does he/she read books by himself/herself?
- How would he/she feel if given a book for a birthday present?
- If given a choice for free time play is he/she likely to read a book or do something else?
- Does he/she read voluntarily in class?
- If given the choice would he/she choose to play a game or read a book?
- Does he/she talk with friends about books?
- If given the choice would he/she choose to write or read a book?
- Does he/she volunteer to read out loud in class?

#### **Difficulty**

- How do you think he/she perceives reading?
- Does he/she find reading hard?
- Does he/she look for help in reading in class?
- Does he/she complain that reading is difficult?
- Does he/she have difficulty understanding what they read?
- Do you think that he/she finds learning to read easy or hard?

## APPENDIX 27



## APPENDIX 28

### TEXT FOR ASSESSING ORAL READING FLUENCY (WCPM)

**Reading A-Z**

LEVEL **F**

Fluency Passage—Fiction

**A Day at the Beach**

Name \_\_\_\_\_

Word Count: 86

### A Day at the Beach

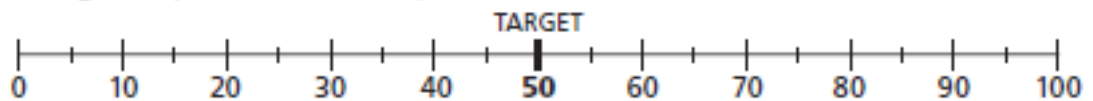
One hot day, we went to the beach.	8
We were glad we went because	14
it was a very, very hot day.	21
My sister and I played in the cool water.	30
We ran in the cool wind.	36
We saw two fish.	40
We saw lots of birds.	45
We made things in the sand.	51
We even ate at the beach.	57
When we went home, we even had	64
some of the beach with us.	70
There was sand in our shoes.	76
There was sand on us.	81
There was sand on everything!	86

Number of Errors 

1	2	3	4	5	6
---	---	---	---	---	---

Accuracy (%):

Reading Rate (Words Per Minute):



## APPENDIX 29

### RUBRIC FOR ASSESSING PROSODIC ELEMENTS OF ORAL READING FLUENCY

	<b>LEVEL</b>	<b>DESCRIPTOR</b>
<b>FLUENT READING</b>	<b>4</b>	<ul style="list-style-type: none"><li>• Reads primarily in larger, meaningful phrase groups.</li><li>• Although some regressions, repetitions, and deviations from text may be present, these do not appear to detract from the overall structure of the story.</li><li>• Preservation of the author’s syntax is consistent.</li><li>• Some or most of the story is read with expressive interpretation.</li></ul>
	<b>3</b>	<ul style="list-style-type: none"><li>• Reads primarily in three- or four-word phrase groups.</li><li>• Some small groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author.</li><li>• Little or no expressive interpretation is present.</li></ul>
<b>NON- FLUENT READING</b>	<b>2</b>	<ul style="list-style-type: none"><li>• Reads primarily in two-word phrases with some three- or four-word groupings.</li><li>• Some word-by-word reading may be present.</li><li>• Word groupings may seem awkward and unrelated to larger context of sentence or passage.</li></ul>
	<b>1</b>	<ul style="list-style-type: none"><li>• Reads primarily word-by-word.</li><li>• Occasional two-word or three-word phrases may occur—but these are infrequent and/or they do not preserve meaningful syntax.</li></ul>

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Centre for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 Oral Reading Study.

## APPENDIX 30

### ORAL READING FLUENCY ASSESSMENTS

<b>Assessment</b>	<b>Description</b>
<b>Standard Reading Assessment Passages (RAPs)</b>	RAPs provide teachers with passages for quick but accurate formative assessment of students' oral reading fluency. These assessments are a Curriculum Based Measurement (CBM) system that is intended to assist teachers in making instructional decisions and monitoring student progress.
<b>Dynamic Indicators of Basic Early Literacy Skills (DIBELS)</b>	DIBELS contains a subtest of Oral Reading Fluency and Retell Fluency for students in the first through third grades. The Oral Reading Fluency is standardized and individually administered. Students read a passage aloud for one minute. The number of correct words per minute provides the oral reading fluency rate.
<b>Gray Oral Reading Test, Fifth Edition (GORT-5)</b>	The GORT-5 is a norm-referenced measure of oral reading performance. Skills assessed include rate, accuracy, fluency (rate and accuracy combined), comprehension, and overall reading ability (rate, accuracy, and comprehension combined).
<b>National Assessment of Educational Progress (NAEP) Fluency Scale</b>	The NAEP Fluency Scale provides a descriptive guide for oral reading performance based on the student's "naturalness" of reading. The student's performance is rated on a four-point scale, with emphasis placed on phrasing of words, adherence to syntax, and expressiveness.
<b>Reading Fluency Monitor</b>	The Reading Fluency Monitor is an assessment instrument that allows teachers to monitor student progress. Grade-level passages are available for grades 1–8, to facilitate administrations throughout the year.

Adapted from Hudson, Lane, & Pullen (2005)



## APPENDIX 31

### EXTRACT FROM SAMPLE REPORT BY LEARNING SUPPORT TEACHER ON THE EFFECTS OF THE INTERVENTION ON CHILDREN IN THE PROGRAMME

Student	Comment on effects of the <b>FORI Intervention</b> on children's motivation for reading	Comment on effect of FORI intervention on the child's competency in reading
SC2	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Low confidence in his ability to read well.</li> <li>• Would not read aloud in class</li> <li>• Felt he could not read, "It is too hard"</li> <li>• Would not consider sitting down and reading a book for pleasure</li> <li>• Would never willingly choose a book to read</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Big increase in motivation to read</li> <li>• Derives great pleasure and enjoyment from reading</li> <li>• Positive attitude, "I am a good reader"</li> <li>• Very competitive in the Speed Drills</li> </ul>	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Books of an instructional level for XX at a much lower level than the class standard</li> <li>• Reading was slow, pedantic</li> <li>• Relying too much on decoding and therefore losing meaning</li> <li>• No intonation or phrasing</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Faster, fluent reading</li> <li>• Greater reliance on meaning for word-solving</li> <li>• Reads with expression and intonation</li> <li>• Much greater knowledge of high-frequency words</li> </ul>
SC3	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Not interested in reading for pleasure</li> <li>• Very low level of confidence in her own ability to read competently</li> <li>• Tried to avoid reading aloud in class</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Very excited about reading with the group</li> <li>• Exuding confidence in her reading ability</li> <li>• Happy and relaxed in class but also very competitive doing the word games etc.</li> </ul>	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Very few strategies used for problem-solving</li> <li>• Lots of appealing</li> <li>• Slow monotonic word-to-word reading</li> <li>• Losing meaning</li> <li>• No phrasing</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Very excited in class to read first</li> <li>• Almost over-expressive and excellent phrasing when reading</li> <li>• Highly motivated to succeed in all aspects of the class</li> </ul>
SC5	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• XX was the quietest child in the group.</li> <li>• She was afraid to be wrong so she stayed quiet, no confidence in herself</li> <li>• She felt reading was difficult</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Gradually became more involved in the class and lost the notion that it was too hard</li> <li>• Gained confidence through participation in echo and choral reading and games such as Word Dash and Phrase Grids</li> </ul>	<p><i>Pre-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Reading rate was very slow and XX struggled to problem solve.</li> <li>• Had some knowledge of High-Frequency words but seemed to lose meaning because of slow rate of reading</li> </ul> <p><i>During and Post-Intervention:</i></p> <ul style="list-style-type: none"> <li>• Initially held back and allowed other children to do all the talking. Then gradually started to take an active role in the class and enjoyed the games and building up a Scrapbook/Portfolio of her work</li> </ul>

They were a fantastic group to work with during the intervention. There was a good dynamic in the group. They appeared to thoroughly enjoy their time together and the FORI activities that they engaged in. They still ask if they can come back to my classroom to do it again. It is an intervention that set them up for success. Despite working hard, I think all of the pupils knew they could do the tasks and they knew they had achieved something by the end of each lesson. At the beginning they were unsure what it was all about and appeared to be working hard at the tasks. They appeared to gain confidence as the intervention progressed. They displayed increased ownership of the books and the activities linked to them. They self-corrected and helped each other to work words out. The children were eager to beat their own reading rate scores and they were keen to compete against each other. They enjoyed discussing their thoughts and working together. They appeared to be highly motivated to choose an activity that they could show to you. Their class teachers said that they often took their FORI books out to read during D.E.A.R. and library time in class. I would like to implement this intervention again with different children. I am curious to see what affect it might have on older children who display high levels of low self-esteem and self-confidence.

## **APPENDIX 32**

### **SAMPLE EXTRACT FROM FOCUS GROUP INTERVIEW WITH PARENTS ON THEIR PERCEPTION OF THE EFFECTS OF THE INTERVENTION ON CHILDREN IN THEIR PROGRAMME**

Thank you all for taking the time to come and meet with me this morning. I talked to you all a few months ago individually and you reported very honestly about your child's attitude to reading and the difficulties that your child experienced with reading. We discussed the reading help that we planned in the shape of an intervention with the learning support teacher and with the support of the classroom teachers, you and me. I made no assumptions with regard to how the children would perform during the intervention and how they might react to the programme. I would now like to get some idea of your views on how the intervention has impacted on your child

P1: I know XXXX has got on great now. He enjoys it. For a start you don't have to make him sit down and read. He reads to his little sister. If he can't understand a word now he goes and asks his brother. He would never have done that before.

R: How would he have typically behaved before the programme started?

P1: He wouldn't look at a book because he didn't understand it and then he hated it. Now he likes it so he'll do it and he's comin on great.

P4: I noticed a big difference in XXXX as well. She thinks she can read the paper. It's mad ....

P3: God that's good if she is actually trying to read the *paper*

R: That is very impressive alright XXXX how about your own child XXXX

P3: My XXXX loves reading the books that she got over the last few months and another thing that happened is her writing ... she is writing loads since you started.

R: Mrs. X told me that she was writing a lot alright and that she has a special notebook for writing. I recall when we met first in September that you were very concerned about her spelling and her writing and we were hoping that the reading intervention might have a good influence on this as well.

P3: Well it did. She done 63 words in five minutes the other day. She takes out the writing notebook you gave her and she starts writing and showing it around the house. The notebook is full of writing.

P2: I noticed a big difference in XXXX's reading even after the first few weeks. You remember how I told you that she had no interest in reading and she'd be afraid to do the words like and afraid to get them wrong. But she's sittin down now with the Strictly Come Dancing booklet and all and even on the toy show when it came to the book part she was like 'oh yeah I think I might get some books for Christmas' so she's much more interested in books.

R: That's wonderful. I have to say all children have been delightful from the start.

P4: I can't believe my XXXX. She thinks she is going to work in a Library now. It's funny watching her trying to read stuff in the Northside People an all. She was writing down the new words she could read (at least she thought she could read them) in her notebook. I really think that she did like to read before it's just that she couldn't you know and now she can. She always used to say 'that reading is too hard can I just read Biff and Chip' now she thinks she can try to read everything.

R: Yes I know, she does seem to have much more confidence. Now, as the programme was going from week to week myself and Mrs. R were obviously very aware of what was going on but I am wondering if the children were reporting back to you at home about the programme.

P1: After a while he was telling me about his book and they wanted to read it for me.

P3: Friday was just her best day ever.

P1: Yeah they were all saying that. They loved reading for you on Fridays.

P3: She missed two Fridays and she was heartbroken. She loved reading for you.

P1: Yeah they were always talkin about you coming in to hear them reading.

R: Hold on now it was Mrs. R who was doing all the hard work every day

P2: Ah no it's just on Fridays someone different like you know comin in to them on a Friday. She was killed practising her book all week so that she would be good on Friday.

R: I want to come back in six months when hopefully the sun is shining on us to chat with you all again if that's all right.

All: No problem, great, yeah (*general accord*)

R: What I would like to check on at the moment is how the children are sustaining their interest. I was very confident that the children's reading performance would improve given the work that Mrs. R was doing with them every day for the past eight weeks but I was really interested to see if the programme had any effect on their attitude towards reading and if you could tell me if you noticed and change in their motivation and .....

P2/P3: Yeah really .....that did happen

R: Well you all are the best source of evidence for any effect that may have happened over the last few months. They have been wonderful each Friday for me and both Mrs. R and Ms. J are both really happy with their progress in reading but you see them at home where they will most likely show their attitude.

P1: There was definitely a change in attitude by XXXX. I mean he was never interested in reading before and he always found reading really difficult. He still makes loads of mistakes well not loads but some but he doesn't seem to mind. His cousin is a real bookworm and is always stuck in books and all XXXX want to do is kick a ball and go on his bike but a couple of weeks ago when his cousin came over I seen XXXX picking up his book and lookin at it and readin it. That's a new thing for XXXX to do and big change in attitude...

P4: XXXX too

P3: I think they forgot about the difficulties they had because they were enjoying the reading and the games and all the other things so much.

P2: XXXX was getting very confused with the sounds and all that where I think it was better this way when she was getting familiar with the words first. She was always trying to sound out the words and was getting very frustrated that's why she wouldn't read. She was killed lookin at every letter and ayin the sound and sometimes it didn't make sense. I thought first what she was doing at the start of this thing, the programme, that she was only learning the book off but then with all the games I could see she really knew the words and now she remembers the words and she wants to read more.

R: That's interesting because the focus of our reading programme was not so much on the individual sounds (even though they are very important) but on reading words, phrases and sentences with the help of the teacher.

P3: Well Ms J was doing the sounds anyway. And they were still taught to sound out the words

R: Of course she was and that's very important. But it's also important that your children enjoy reading and learning to read. You know the books that they were reading during our programme.... *What's for Dinner, Where is Cub?, Dr. Jen and Time for Bed*. Did they read these for you at home?

P4: I wasn't sure at the start was the reading XXX doing with these books just like rote learning cos she seemed to almost know the books by heart and that she knew the books like a poem.

R: That's true but Mrs. R made sure that the activities they were doing were interesting. While the children got used to these books through repeatedly reading them they were also doing many other activities using the same words and vocabulary like timed reading over a minute, using whisper phones, choral reading like reading together and other activities. But what you observe there is valid.

P1: I was just happy that he could read the books and that he wanted to read them

P2: Well I couldn't believe that they were doing plays and all. They actually done it. XXXX had a sleep over and her and XXXX done it with the little ..... XXXX was the Narrator I think and XXXX was the Dad and they done it on the weekend like so it just goes to show how they loved it.

R: Well even if they did become very familiar with the books it is great that they were enjoying books. It is important now that the children are interested in books that we read with them and read to them and listen to them reading. It is important to remember that at the very start we were trying to find out if we could get children to like reading and enjoy reading and listening to you today I think this was achieved.

All: [Yea Definitely]

R: Can you tell me more about what type of reading happened at home during the last eight weeks.

P2: The books that she brought home every night she was reading and all.

P3: And we had to sign that she did it

P2: And also the other books that they got some Fridays as a prize. She loved these books because it was a prize and no one else had this book. Some of the reading was hard in them books but she was killed trying to read them and had her granny an all reading it with her.

R: That's interesting. Every Friday the children were given a choice of a prize from the 'treasure chest' which had things like pencils, colouring pencils, rubbers, pencil sharpeners or a prize of a book. Interestingly after a while they started to choose the books. There was one lovely moment one day when one of the girls chose a book and XXX took a pencil. He looked at her and said 'I wouldn't take a book' and she replied 'well you can't read a pencil'

All: [laughter]

P3: They loved getting a reward for their reading. Did they win a trophy for the school last week.

R: Yes, a trophy for being the best readers and they won it for the school.

P3: She told everyone that she seen since last Friday that they won the trophy for the school

P2: Oh yeah and all their names are going on the trophy and it goin up on the wall of the school.

R: That's the great thing about children, they'll report everything back.

P4: I find that XXXX is always going around with a piece of paper and a pen and even if the spellings are wrong she is writing words from the stories that she is reading. It's funny cos she always just refuses to do spellings but now since she started with yourself she is doing the spellings... but she's still not major into spelling but at least she's doing them.

P2: I notice that the 'I's are gone out of her writing cos she has more words. Her writing was always 'I did... I want ....I saw.... I went' everything was I, I, I, but now all the I's have changed into different type sentences.

R: That's a very interesting observation. It's not unusual for children to have a lot of sentences starting with I at their age. Can I remind you that we were not trying to 'fix' everything with this programme but more we wanted to change direction with the type of reading that the children were doing. We will test their reading performance and I am very confident that they will all show improvement since the programme began but we were more interested in getting children on a road where they wanted to read or would choose to read on their own accord.

P4: Are you going to do this in more schools?

R: Well we won't be going to other schools until we have some evidence that the programme has had some effect on the children's motivation for reading.

P1: Ah it's great

P2: It is yeah. XXXX is reading more now than me other daughter and she's in third class. I mean she wants to read more. Me other girl wouldn't sit down and read or nothin but XXXX will. You can see that she is more confident and really thinks she can read well. The other day she came into the kitchen and just said 'I'm good at my reading Mam' and I wasn't even talkin about readin or anything.

R: Is that so? Well the best evidence I have that something positive has happened is through stories like that.

P3: I definitely see an improvement with XXXX even after the first few weeks. She is no longer afraid of reading. She had a pack of Winnie the Witch books and the words in them books were big an all and she would never look at them cos she had no confidence or interest..... now she picks them up and she wants to read them and she chances the words she doesn't know so I found the whole programme very good for her. She is much more confident. She is talking more and all.

R: I definitely have seen that with XXXX. She is much more assertive and confident. On Friday she insisted that XXXX get up from her chair. It's nice to see that happening. Well I know that the programme finished last Friday but I did tell the children that I will come back to hear them on the last Friday of each month for the rest of the year just to keep in contact with them. Can I thank you all for coming in here this morning to talk with me and for all your support during the programme

P1: I just want to say that when XXXX got that cert for reading his confidence went through the roof.

P2: Yeah they really think they're great when they get a star or a cert or a medal.

P3: That's all they need isn't it

P1: You see such a difference when they do well.

R: Well I think that we all need a bit of praise and positive reinforcement

## APPENDIX 33

### SCHEDULE FOR CONVERSATIONAL INTERVIEW WITH CHILDREN

(Conducted in conjunction and immediately after administering the questionnaire)

A combination of **Questioning, Paraphrasing, Clarification, and Probing** were used to encourage children to elaborate on their responses to the questionnaire

	Questionnaire Item	Sample questions/paraphrasing/clarifications/ probes
<b>Efficacy for Reading</b>	Can you work out really hard words by yourself when you read?	<i>So when you see really hard words you what do you do? Are you better than other boys and girls in your class at reading hard words?</i>
	Are you good at remembering words you have seen before?	<i>How do you feel when you don't remember words that you have seen before? What you</i>
	Do you think you read well?	<i>Why do you think that you are/are not a good reader?</i>
	Can you read hard words in a story even if there are no pictures?	<i>Really? How can you do that? Why not? How do you feel when you can't read them?</i>
	How do you feel when you read out loud to someone?	<i>Do you like reading out loud? Are you good at it?</i>
	What kind of reader are you?	<i>Tell me what you think a good reader is like?</i>
<b>Reading Orientation</b>	Is it fun for you when you read books?	<i>Tell me how you feel when you read books. Is it really fun?</i>
	Do you like reading at home?	<i>What you are saying is, you don't read by yourself at home at all?</i>
	Which would you most like to get as a present? A new game /A new book	<i>Tell me how you would feel if you got a book as present for your birthday? If you could get 10 books or 1 game which would you choose?</i>
	Do you like to read during your free time or do something else?	<i>Can you tell me more about what you do with your free time? Would you ever like to get a book and read it?</i>
	How would you feel if someone gave you a book for a present?	<i>Could you tell me more about how you would feel if someone gave you a book for a present?"</i>
	Do you read by yourself before you go to bed?	<i>Do you mean to say that you never read by yourself before you go to bed .... even for a few minutes?</i>
	Do you take books home from school to read?	<i>Why do you/don't you? Do you have loads of books at home?</i>
	Which would you rather do? Clean your room/ Read a book	<i>Tell me when you might read a book? If you were allowed three treats at home would you read a book?</i>
	Do you read books out loud to someone in your family?	<i>Who do you read to? Do you do it every day/week?</i>
Do you like to read books all by yourself?	<i>Why don't you read books all by yourself?</i>	
<b>Perceptions Of Difficulty in Reading</b>	When you read out loud in the class is it hard for you?	<i>Tell me how you feel when you read out loud in your class</i>
	Are the books you read in your class too hard?	<i>Do you mean to say that all the books you read in your class are easy?</i>
	Do you make lots of mistakes in reading?	<i>I sometimes have to look very closely at words to read them properly. Do you ever have to do that?</i>
	Do you need to get some extra help in reading?	<i>Why do you think you need help in reading? Do you always need help?</i>
	Is it hard for you to understand the stories you read in school?	<i>Tell me why it's hard for you to understand the stories? What makes it hard?</i>
	Learning to read is: Really easy/ Sort of easy /Sort of hard /Really hard	<i>Tell me why you thing that reading is .....</i>

## APPENDIX 34

### READING ASSESSMENT INSTRUMENTS (PHASE TWO)

RESEARCH QUESTION	EVIDENCE		September (First Class)	December (First Class)
	Reading Assessment Instrument	Reading Assessment Instrument		
<b>Effects of FORI on the reading achievement of struggling readers</b>	<p><b>Test of Word Reading Efficiency (TOWRE- 2)</b></p> <p><u>Focus:</u> assessing isolated word and non-word reading fluency skills</p> <p><u>Purpose:</u> to measure an individual’s ability to pronounce printed words accurately and fluently</p>	<p><b>Assessment:</b></p> <p>(a)Sight Word Efficiency (SWE) subtest (b) Phonetic Decoding Efficiency (PDE) subtest</p> <p><b>Outcome Summary:</b></p> <p>(i) raw score (ii) age and grade equivalency score (iii) percentile rank (iv) scaled scores for each of the subtests (v) Total Test Score (Total Word Reading Efficiency Index)</p>	Form A	Form B
	<p><b>Gray Oral Reading Tests (GORT-5)</b></p> <p><u>Focus:</u> assessing reading fluency of connected text with comprehension.</p> <p><u>Purpose:</u> to measure growth in oral reading and an aid in the diagnosis of oral reading difficulties</p>	<p><b>Assessment:</b></p> <p>16 developmentally sequenced reading passages graded from simple reading level and progressing to a more difficult reading level.</p> <p><b>Outcome Summary:</b></p> <p>Four scores to determine oral reading fluency: (i) oral reading rate (ii) oral reading accuracy (iii) oral reading fluency (iv) reading comprehension</p>	Form A	Form B
	<p><b>Reading A-Z: Oral Reading Fluency Timed Assessment</b></p> <p><u>Focus:</u> assessing reading fluency of connected text .One-minute timed reading of a leveled passage to measure the number and accuracy of words read</p> <p><u>Purpose:</u> to measure growth in oral reading fluency</p>	<p><b>Assessment:</b></p> <p>Fluency Passage Fiction (86 words) Timed One Minute Assessment</p> <p><b>Outcome Summary:</b></p> <p>Total words the student in one minute Total words the student reads <i>correctly</i> in one minute</p>	Level F: <i>A day at the Beach</i>	Level F: <i>A day at the Beach</i>
	<p><b>National Assessment of Educational Progress’s (NAEP) Oral Reading Fluency Scale</b></p> <p><u>Focus:</u> assessing prosodic elements of reading fluency such as the pitch, stress, and duration with which children read text.</p> <p><u>Purpose:</u> to assess prosodic reading on a rating of 1 to 4</p>	<p><b>Assessment:</b></p> <p>Children read from connected familiar text (provided by class teacher). Each individual student's oral reading is rated by grouping of word (phrasing), syntax and sentence structure, expressiveness</p>	Text as provided by class teacher	Text as provided by class teacher

## APPENDIX 35

### PROFESSIONAL DEVELOPMENT ON FLUENCY ORIENTED READING INSTRUCTION

DATE	ACTIVITY	NOTES
August 30 <sup>th</sup> 2013	Presentation on Fluency Oriented Reading Instruction (FORI) to learning support teachers in MIE	<ul style="list-style-type: none"><li>• Design of proposed FORI intervention</li><li>• Identification of methodology and resources</li><li>• Selection of texts (decision to use levelled texts <i>Learning A-Z</i>)</li></ul>
Sept. 2 <sup>nd</sup> - 4 <sup>th</sup> 2013	Visit to each participating school for CPD with learning support teachers	<ul style="list-style-type: none"><li>• Meeting with learning support teachers and classroom teachers of children to be selected for intervention</li><li>• Integration of the proposed instructional approach into their own individual learning support programmes</li><li>• Videotapes introducing oral reading fluency instructional strategies</li></ul>
Sept 13 <sup>th</sup> 2013	Meeting with teachers and research assistant for reading assessment	<ul style="list-style-type: none"><li>• Instruments to assess children's word reading efficiency and oral reading fluency discussed and selected</li><li>• Schedule for assessment in schools agreed</li></ul>
Sept. 16 <sup>th</sup> 2013	Continuing Professional Development (CPD) with learning support teachers	<ul style="list-style-type: none"><li>• Design of resources (repeated reading)</li><li>• Instructional models to be employed</li><li>• Sample lesson plans for the implementation</li></ul>
Sept. 20 <sup>th</sup> 2013	CPD with learning support teachers	<ul style="list-style-type: none"><li>• Modelling the proper execution of fluency-oriented instruction.</li><li>• Design of resources (sight word lists, phrase grids, word dash)</li></ul>
Sept. 30 <sup>th</sup> 2013	CPD with learning support teachers	<ul style="list-style-type: none"><li>• Design of resources (timed repeated reading, sentence reconfiguration, readers theatre)</li><li>• Journal for recording during intervention</li></ul>