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"We can take words apart"

How can I Enhance my Teaching of Phonological Awareness?

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A Research Dissertation submitted to the Froebel Department of Primary and Early Childhood Education, Maynooth University, in fulfilment of the requirements for the degree of Master of Education (Research in Practice)

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Abstract

The aim of this research study was to enhance my practice in the area of phonological awareness instruction. Having worked as a Junior and Senior Infant teacher in a disadvantaged setting for the past number of years, I became increasingly concerned about the low level of early literacy development exhibited by several of my pupils. Upon investigation, I realised that my knowledge and understanding of phonological awareness, a crucial pre-curser to reading and writing, was limited and that this could be one explanation as to why some of my pupils were not achieving success. Following further reflection, I also realised that my teaching of early literacy had become over-reliant on commercial educational programmes and I was not teaching in an overly engaging, child-led or differentiated way. I was experiencing myself as a 'living contradiction' (Whitehead, 1989). Although I claimed to value engagement and equality within my practice, I was not living towards those values. A change in my practice was needed.

Working within a self-study action-research framework, my research followed an action-reflection cycle. A ten-week intervention was implemented which aimed to increase phonological awareness in my pupils, promote engagement and enjoyment and also equally include each pupil. Lessons were taught on a whole-class, small-group and individual basis and were largely games-based, incorporating movement, concrete materials and music. Data was collected through the use of semi-structured observations, a reflective journal, pre and post-intervention assessment and a post-intervention questionnaire.

The study found that a multi-modal, multi-sensory approach to phonological awareness promoted pupil engagement and enjoyment. All pupils increased their scores in the post-

intervention assessment. The study also found that whole class teaching of phonological awareness was insufficient in meeting the diverse range of needs in my classroom. Given the success of early intervention in preventing and remediating reading difficulties, it is important that schools prioritise this important aspect of early literacy development. This could be done through the provision of extra in-class support teachers to facilitate a station teaching approach, and by providing training to early years educators in phonological awareness.

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Chapter 1 Introduction

1.0 Focus and Aims of the Study

"If you are going to get anywhere in life you have to read a lot of books" (Roald Dahl, n.d.).

Reading is perhaps the most important skill a person will learn in their lifetime. Learning to read is certainly a complex and challenging process, with many differing opinions on how it occurs. I believe that reading and writing are at the heart of what Freire (1972), describes as 'education as the practice of freedom'. Children who do not learn to read are at risk of personal, economic and social limitations (Gillon et al., 2019).

This self-study action research project seeks to create new knowledge about how my teaching of phonological awareness can be enhanced. Phonological awareness, *the ability to identify and manipulate spoken sounds in our language*, is one of the strongest predictors of later reading success. A strong foundation in phonological awareness can lead to attainment in reading, spelling and comprehension (Ehri et al., 2001).

The focus of this study is two-fold; to identify ways in which my teaching of phonological awareness can be more engaging and inclusive while also increasing the phonological awareness of my pupils.

1.1 Research Title

The title of this thesis is "We can take words apart": How can I enhance my teaching of phonological awareness?

The first section of this research title is taken from a quote made by a pupil in my class during a post-intervention questionnaire. This simple comment, to me, shows a complete awareness of what phonological awareness is all about. Our language is made up of units of sound and these units can be broken up and put back together again in many different

ways to create new and exciting meanings. If a child can master this aurally and orally, they are on their way to cracking the alphabetic code (O'Sullivan, 2017).

1.2 Research Background and Context

Having taught Junior and Senior Infants for the past five years, I grew increasingly concerned about a number of children I felt were not able to access the infant curriculum. They struggled with the concept of rhyme and were unable to identify and manipulate phonemes. I noticed that these children also made little progress in reading and writing throughout the year. Following an interesting discussion about why this might be the case with a colleague, I began to think more about the impact that phonological awareness can have on a child's literacy development. This is where my interest and decision to research in this area began.

Upon further reflection, I also realised that I had not been teaching literacy in a particularly engaging or inclusive manner. I had been prescriptively following a programme which had long been used in the school, without giving much thought as to why I was doing so. In an attempt to keep up with the demands of an overloaded curriculum, my pupils had fallen victim to a 'hurry-along curriculum' (Dadds, 2001). I was not focusing on how the children could learn most effectively, or whether they were even engaged in what they were learning. I was merely rushing through what I assumed would give me the results that I needed. Each child was not being given an equal opportunity to succeed, only the ones who could keep up.

Finally, my school's disadvantaged context plays a central role in the development of this research study. Children who come from lower-socio economic backgrounds are at a greater risk of academic underachievement than their more advantaged peers and are more likely to leave school early (Frawley, 2014; Loftus, 2017). Given the well-

established evidence for early intervention as a factor in addressing educational disadvantage, this research is well placed to do so. I want my pupils to be able to fully access reading and writing and believe that by giving them a solid foundation in phonological awareness, I am going some way in providing this for them.

1.3 Potential Contribution of the Study

In undertaking this research study, I claim to have generated knowledge about how to teach phonological awareness in a more effective way. Through disseminating this new professional learning, it is my hope that my colleagues and other teachers will be more informed about what phonological awareness is, its important role in early literacy acquisition and how to teach it.

In making sincere efforts to improve my own knowledge and practice in this area, it is also my hope that I am giving my pupils, now and in the future, a solid foundation for literacy.

1.4 Format of the Study

This study took place over the course of ten weeks in my senior infant classroom. All 19 pupils in the class took park in the study, with one pupil leaving the school in February; their data has not been included within this thesis. A phonological awareness intervention was implemented in which 20-30 minute lessons were taught 3-4 times per week. Instruction took place on a whole-class, small-group and individual basis. This intervention sought to gather information on how pupil engagement within phonological awareness instruction could be promoted. It also sought to create new knowledge relating to how each child could be equally included. The intervention was multi-modal and

multi-sensory in approach, incorporating movement, music, concrete materials and explicit instruction as informed by literature.

1.5 Chapter Summary and Thesis Layout

In summary, this research project aims to create new knowledge about the effective teaching of phonological awareness. My values of engagement, inclusion and equality were central to the aims of the research and I hope that they are evident to the reader throughout this thesis.

This thesis is divided into five sections, which will take the reader through my research journey over the past year. This first chapter has introduced the reader to the rationale behind the research, the aims of the research and the context the research takes place within. The second chapter will outline the pertinent literature related to phonological awareness, engagement and motivation and educational disadvantage. The study's methodology, research methods and ethical issues will be discussed in Chapter 3. Two findings which emerged from the data collected will be analysed and discussed in relation to literature in chapter 4. Chapter 5 will conclude this thesis with an overview of the study, potential limitations, recommendations for further research and suggestions for practice.

Chapter 2 Literature Review

2.0 Introduction

"Reading is the key to education and education is the key to success for both individuals and a democracy." (Adams, 1990: 13). The importance of reading has long been at the forefront of educational discussion and debate. How a child learns to read is a complex process with many components influencing the outcome including motivation, reading fluency, comprehension and vocabulary (Kennedy, et al., 2012). A fifth component of literacy development, phonological awareness, has received widespread attention in literature over the past four decades. Phonological awareness has proven to be a primary factor underlying early reading achievement (Ehri, et al., 2001; Kennedy, et al., 2012; O'Sullivan, 2017). A child's phonological awareness at age 4 or 5 can also strongly predict their later reading and spelling ability (Gillon, 2018), making it a powerful tool in early intervention.

Within this chapter the pertinent literature related to phonological awareness is outlined, detailing its importance to literacy development and the implications this holds for early-years educators. As the promotion of pupil engagement within phonological awareness instruction is central to the research objectives, this chapter will also deal with engagement and its importance to learning. This will be followed by a section on educational disadvantage, with equality and inclusion also influential values to the research which has taken place within a DEIS (Delivering Equality of Opportunity in Schools) setting.

2.1 Phonological Awareness Defined

In order to fully understand the predictive power of phonological awareness, practitioners working in the field of early literacy such as educators and speech and language therapists

must first gain a clear understanding of the theory behind and terminology used within it (Gillon, 2018). This clarification will certainly help teachers to interpret phonological assessments appropriately and provide a consistent definition of phonological awareness when working collaboratively with other professionals and parents.

Numerous definitions of phonological awareness have emerged since the term began to appear in the late 1970's and early 1980's. Zgonc (2010) describes it as the ability to understand that the language we use is made up of words and that our words are made up of individual units of sound. Hatcher et al. (2014) define it as the ability to access and manipulate the sound structure of spoken words. There has been some debate in the literature as to which phonological skills come under the umbrella of phonological awareness. Ball and Blachman (1991) specify that phonological awareness describes the ability to represent spoken words and syllables at the phoneme level. This narrow definition excludes a child's awareness of larger units of sound such as syllables or words. A more widely accepted consensus is that phonological awareness is a 'unified ability' which refers to one's ability to identify and manipulate sounds, regardless of the size of the word unit (Anthony and Francis, 2005).

Phonological awareness is a multi-level skill and can be broken down into three sub-categories of awareness: syllabic awareness, onset-rime awareness and phonemic awareness. Syllabic awareness refers to the understanding that words can be broken down into different parts, or syllables e.g. cat has one syllable, doctor has two syllables, umbrella has three syllables and so on. Tasks which can be used to assess children's awareness of syllabic structure include syllable segmentation, syllable blending, syllable identity and syllable deletion. Onset-rime awareness is the ability to identify the onset of the syllable and the rime of the syllable or rhyme. In the word cat /c/ is the onset of the

syllable and /at/ is the rime. This can be assessed through rhyming activities such as detecting and generating rhymes.

Phonemic awareness describes the ability to identify and manipulate the smallest units of sound which can influence a word's meaning (Hamilton, 2007). Ship has three phonemes; /sh/ /i/ /p/, plant has four; /p/ /l/ /a/ /n/ /t/ and so on. This subcategory of phonological awareness has been shown to hold the strongest predictive power of reading success (Adams, 1990; Ehri et al., 2001; Gillon, 2018). Pre-school age children's phonemic awareness can account for as much as 50% of the level of their level of reading proficiency level at the end of the first grade (Stanovich, 1986, Ball and Blachman, 1991). More difficult phonological awareness activities such as spoonerisms (switching sounds or syllables) or phoneme addition and deletion require a deeper level of phonological awareness (Gillon, 2018).

It is important here to make the distinction between phonological awareness and *phonics*, which are often confused (Schule and Boudreau, 2008). Phonics refers to the teaching of letter-sound correspondence; a is for apple, for example. This is a different type of knowledge than phonological awareness, drawing on both visual and aural skills, requiring the child to recognise letters in print. Children who cannot first recognise sounds in words will be able to make little sense of alphabetic print (O'Sullivan, 2017).

There is a general consensus among research that phonemic awareness and phonics should be taught in an integrated way in order to be most effective. Hatcher et al.'s 1994 study of 7-year-old struggling readers found that groups which received phonological awareness or phonically based reading training alone did not make as much progress as those who received both. In 2006 the researchers used a modified version of the Reading with Phonology program used in their previous research to assess the long-term outcome

of this intervention. The intervention brought about significant gains in reading scores. When the same children were retested five years later in a subsequent study, these gains were for the most part maintained (Snowling and Hulme, 2011).

2.2 The Developmental Continuum of Phonological Awareness

Lieberman et al. (1974) were the first researchers to produce evidence of a developmental sequence in phonological awareness. The researchers hypothesised that children could master syllabic segmentation earlier than segmentation of a word into individual components. This was backed up by their research which demonstrated a 'task and age effect'; the majority of the children were able to complete the same phonological tasks at the same ages. Most of the children in nursery (average age 4 years 11 months) were able to segment syllables but could not segment phonemes, while the children in first grade (average age 6 years 11 months) were more easily able to complete phoneme segmentation tasks. Although this research was carried out in the early seventies, its conclusion that awareness of larger units in words comes before awareness of smaller units has been proven and expanded on by several researchers since then (Treiman and Zukowsky, 1991; Lonigan et al., 1998). Interestingly this study also considered children's socio-economic backgrounds as a possible influence on phonological awareness development. Children in the low-income families scored significantly lower in the study than their middle-class counterparts and their rate of growth in phonological awareness at age 3-4 was less evident.

Evidence also points to the wide variability of phonological awareness before the age of 4. Dodd and Gillon (2001) found that most 4-year-olds demonstrated limited phonological awareness, other than emerging syllabic and rhyme detection, while Lonigan et al. (1998) found that 25% of 2-3-year-old children could perform competently

on rhyming detection tasks. Mac Lean et al. (1987 cited in Ericson and Juliebo, 1998) stated that many 2-3-year-old children have knowledge of nursery rhymes, alliteration and nonsense sequences showing that very young children can, but do not always demonstrate phonological awareness. Together, these studies provide evidence that stability in phonological awareness development begins after the age of 4. This is when phonological awareness instruction should begin (Gillon, 2018).

Researchers such as Duncan and Johnston (1999) have questioned the progressive theory of phonological awareness development, reporting that some older children with reading difficulties perform better in the area of phonemic awareness than in rhyming tasks, contradicting the general pattern of phonological awareness from larger to smaller units of sound. Gillon (2018) suggests, however, that understanding typical phonological developmental patterns is crucial to developing effective assessment and early intervention strategies.

2.3 The Predictive Power of Phonological Awareness

As previously stated, the influence of phonological awareness on later reading and spelling development has been well established over the past 40 years. An early study by Bradley and Bryant (1983) tested 4 and 5-year-old British children who were asked to identify the word in a sequence which did not begin with the same initial sound as the rest. The researchers then designed a two-year training study for those children who had struggled on this test and divided them into four groups. The first group was given training on categorising words according to phonemes, the second group was given the same training with sound-letter knowledge also taught. Group three was given training on semantic categorization while the fourth group was not given any additional training. The researchers found that the groups who had received phonological awareness training,

particularly the group which also included letter-sound knowledge performed the best. They concluded that phonological awareness ability at the pre-school level has a powerful influence on reading and spelling achievement three years later. Although this study is nearly 40 years old, its findings have been discussed in much of the literature to date, suggesting that it is a well-respected and authoritative piece of research.

Leading researchers have concluded that phonological awareness can better predict future reading achievement than other variables such as IQ level (Adams, 1990., Blachman, 1989), socio-economic background or mental age (Torgeson, 2000). Research by Catts et al. (2001) found that children's level of phonological awareness was one of five factors which could point to the existence of a reading disability in second grade. Adams (1990) has described it as a powerful predictor of reading success, while Ehri et al. (2001) concluded that it is highly correlated to later success in reading and spelling. This predictive power holds significant educational value for teachers who can put in place necessary early interventions to facilitate more successful outcomes for those children who are at risk of future reading difficulties.

2.4 The Link between Phonological Awareness and Reading Difficulties

A strong association exists between phonological awareness and reading difficulties such as dyslexia (Gillon, 2018). Dyslexia is a specific language-based disorder which affects the acquisition of accurate and fluent reading and spelling skills which can occur despite a child having average intelligence and adequate reading instruction. The association between the two holds huge relevancy for teachers given that approximately 10% of the population are affected by dyslexia (Dyslexia Association of Ireland, 2016).

Many theories have been proposed to explain the cause of dyslexia, including working memory deficit, cerebella deficit and magnocellular deficit (Cogan, 2015). One of the

most widely accepted theories, the phonological deficit hypothesis, argues that some children are born with an insensitivity to the phonic structure in their native language (ibid). Children with dyslexia have difficulty with phonological processing and so will struggle to remember and retrieve phonological knowledge and lack awareness of the sound structure of spoken words (Anthony and Francis, 2005). Tasks at the phoneme level are particularly difficult for struggling readers and are an important factor in identifying those at risk of reading failure (Duncan and Johnston, 1999). Research has shown that children who have not learned to read by the age of 9 or 10 will likely never learn to read (Powers, 2008). The importance of early identification and intervention of children at risk of reading failure is highlighted by the persistent nature of phonological processing and word-recognition difficulties among older children with dyslexia (Gillon, 2018).

Cogan's (2012) work on the early identification of dyslexia draws heavily on phonological awareness as a key factor in reading difficulty. The development of the Trinity Early Screening Test in reading and writing (test 2R) aims to identify children who will struggle to read at aged 10. The test was developed using 1041 participants aged 5 to 6 years-old and was based on research literature of reading development, dyslexia, language and memory (Cogan, 2015). The participants of the study represented a variety of different contexts including DEIS, non-DEIS, urban and rural schools. The test comprises of 18 tasks including measures of phonological awareness (rhyme recognition, alliteration, phoneme deletion etc.), phonics (phonetic spelling) and other measures such as spatial memory, finger localisation and timed rapid automatised naming of objects. Cogan found that many of the tasks administered at age 4, 5 and 6 were predictive of literacy performance at 10 years of age. Measures of rhyme recognition oddity and phoneme segmentation proved to be the strongest measures of predictability. These

findings again reinforce the importance of phonological awareness as an indicator of future reading success.

2.5 Successful and Effective Phonological Awareness Instruction

As outlined, phonological awareness is a vital first step towards early literacy (Parkinson, 2018). In order to develop this skill effectively and successfully, early years educators need to be aware of the teaching methods which are most effective in promoting learning and the implications this holds for instructional practice. Pedagogical strategies which have been consistent with effectively developing phonological awareness have been summarised by leading researchers (Lonigan et al., 2008., Zgonc, 2010, Gillon, 2018). These will be discussed below, along with an outline of the literature regarding the ways in which phonological awareness interventions may be structured.

2.5.1 Systematic and Explicit Teaching

Researchers have consistently highlighted the importance of systematic and explicit phonological awareness instruction (Lonigan et al., 2008., Hatcher et al., 2014., Zgonc, 2010, O'Sullivan, 2017, Gillon, 2018). Implicit or incidental instruction in this area is likely to be unsuccessful in many cases, due to the often-incorrect presumption that all children have a necessary level of conceptual understanding around language and sounds e.g. an awareness of what rhyming means. It is important therefore that phonological awareness instruction is carefully and systematically planned, something which had been missing within my own practice. Lonigan et al. (2008) describe the necessity for teachers to have a coherent 'road map' that carefully considers which phonological skills are going to be taught, in which sequence, lesson pacing and the classroom management strategies and groupings which are to be used. This structure ensures that the children can access

the maximum amount of instruction at a developmentally appropriate level (Gillon, 2018). These considerations are discussed in more detail below.

2.5.2 Instructional Sequencing

The levels of phonological awareness and the individual skills being taught should reflect the developmental continuum of phonological awareness, moving from the largest to smallest units of sound (Yopp & Yopp, 2000). Thus, teachers should start with word awareness and syllabic awareness activities before onset-rime awareness followed by phonemic awareness. Teachers must first also consider the possible diversity of phonological awareness within a given class level. Assessments such as the PHAB (Phonological Battery Test), DIBELS (Dynamic Indicators of Early Literacy Skills) and the PAST (Phonological Awareness Skills Test) can provide baseline data regarding the phonological abilities of the pupils and the specific skills which may need to be targeted. Children at risk of reading and spelling difficulties may also be identified during the course of these assessments and remediation can be introduced (Gillon, 2018). The complexity and difficulty level of activities should be increased according to age and phonological ability. Words which are familiar, phonetically regular and have simple sound-letter correspondence are recommended for use with young children or those presenting with early reading difficulties (ibid). Pupils may acquire different phonological skills in overlapping stages, therefore complete mastery of one skill is not required before moving to the next (O'Sullivan, 2017).

2.5.3 Length of Instruction and Lesson Pace

Phonological awareness lessons should be brief and interactive, consisting of 10-30-minute sessions approximately 3 to 4 times per week (O'Sullivan, 2017). Authors such as Lonigan (2008) have suggested using a fast pace within lessons to encourage engagement and maximum practice time. This is echoed in previous research carried out

by Zanolli et al. (1995) which concluded that rapid-paced teacher attention produced higher levels of engagement within a small group setting. Researchers O'Sullivan (2017) and Gillon et al. (2019) have suggested that short, intensive periods of instruction ranging from 10-14 weeks can be effective in raising children's early literacy profiles.

2.5.4 Classroom Management

Children need to be given the opportunity to practice newly introduced skills in multiple settings as often as possible in order to achieve proficiency. Aside from formal phonological awareness instruction time, Gillon (2018) suggests that teachers integrate simple phonological awareness tasks into their classroom management routines or everyday activities such as news or story time (e.g. identifying initial sounds in big book illustrations or allowing those children who have the sound /b/ at the start of their name to line up first). Similarly, phonological awareness stimuli such as rhyming pictures or puzzles could be included within a free-play setting, allowing for phonological skills to be reinforced on a daily basis. Lonigan et al. (2008) advise that having well-managed transitions and clear routines within phonological awareness instruction time can help to support the needs of children with attention and behavioural difficulties.

2.5.5 Grouping

There is some debate within the literature as to how children should be grouped within phonological awareness instruction. While many researchers suggest that small-group or individualised instruction is more effective in supporting children's phonological awareness development (Lonigan et al., 2008), I would argue that this may not always be possible within a classroom setting without the support of a designated learning support, special education needs teacher or speech and language therapist. Other researchers propose a multi-tiered whole-class or large group phonological awareness intervention (Swanson et al., 2017, Gillon et al., 2019, Zgonc, 2010). Gillon et al. (2019) conducted

research into the effectiveness of a class-level intervention on children's phonological awareness, letter and vocabulary knowledge. Interestingly, the participants came from low-socio economic backgrounds who had been adversely affected by the earthquakes in Christchurch, New Zealand in 2011. Their findings indicated that a targeted class-level intervention was effective in advancing the participants literacy skills and suggested that this was an efficient and cost-effective method of intervention which allowed for individual follow up intervention for those with more significant needs. Zgonc's (2010) 'Interventions for All' programme also provides opportunities for skills to be taught flexibly at a whole-class, small-group and individual level which may be more suited to teachers of large classes who do not have extra supports. This model of tiered intervention was used within this research study.

2.5.6 Feedback

Providing children with feedback can greatly enhance children's learning and achievement (Marzano et al, 2001). This is also an important consideration within phonological awareness instruction. Hattie and Timperly (2007), however, warn that feedback can have a negative impact on learning if used inappropriately. Effective feedback should be specific, focusing in on the exact aspect of the lesson, or phonological skill the child has mastered, avoiding generic feedback such as 'good job' or 'well done'. By giving positive and explicit feedback, pupils are more likely to feel motivated and supported regardless of their success in a given phonological awareness task (Lonigan et al., 2008).

2.5.7 Explicit teaching

As discussed, implicit instruction is unlikely to be successful in supporting *all* children in their phonological awareness development. Within phonological awareness instruction, the teacher needs to make explicitly clear what is being taught (Lonigan et

al., 2008, O'Sullivan, 2017). Phonological concepts should first be clearly defined to ensure understanding e.g. "rhyming words have the same sound chunk at the end." Practical tasks need to be explicitly modelled and explained by the teacher, before supporting the children in independent practice. Verbal cues, reminders and repeated modelling can help to scaffold the children's learning and provide higher levels of support for those pupils who may need it (ibid).

2.5.8 A Balanced Approach

Neither phonological awareness or phonics are of value on their own and should be taught in an integrated manner (Gillon, 2018). This balanced approach will help children to appreciate the link between sounds and letters in print (Hatcher et al., 2014). Phonological awareness should be initially a precursor to phonics, and then taught alongside it. When children display an ability to blend and segment sounds orally, then they are at the stage of phonics instruction. (Sullivan, 2017).

2.5.9 Articulation

Modelling the correct articulation of letter sounds is paramount to phonological awareness (Lonigan et al., 2008, Zgonc, 2010). Teachers should be aware of the difference between stop sounds such as /b/ or /c/ which can only be uttered for a second, and continuous sounds such as /s/ which can be elongated. It is important that teachers are not adding extra sounds to the end of any letter sound e.g. /buh/, /cuh/ etc. This distorts the sound and can cause confusion. Teachers should also be aware of the spacing they use between words or sounds during blending or segmenting activities. (Lonigan et al., 2008). Zgonc (2010) recommends that teaching continuous sounds first when introducing the alphabet can help children blend words more easily. Teachers should also draw children's attention to the oral-motor aspect of how sounds are made by the mouth (Yopp and Yopp, 2010).

2.5.10 A Multi-Sensory Approach

Learning through using a combination of senses has a long history in educational pedagogy. While phonological awareness is primarily an aural and oral skill, a multi-sensory approach to instruction has been advised by authors such as Teachworth (2001) who encourages the use of song, tactile materials and play within phonological awareness instruction. Hands-on activities with materials that children can manipulate have also been recommended (Yopp and Yopp, 2010).

Similarly, the National Council for Special Education (NCSE) recommend the deployment of visual, auditory, kinaesthetic and tactile sensory modalities within literacy instruction for children with dyslexia. A multi-sensory approach can help to address sound and word retrieval difficulties and can also anchor long-term memory skills by allowing pupils to learn through the sense they learn most effectively with (NCSE, n.d).

2.6 Phonological Awareness in the Irish Context

Phonological awareness and phonemic awareness appear as Learning Outcome 4 within the strand of reading in the new Primary Language Curriculum (NCCA, 2015), under the heading of 'Understanding'. The curriculum states that children at stage one (Junior and Senior Infant level) should be able to ''play with and recognise sounds such as syllables, rhyme, onset-rime and phonemes in spoken words'' and outlines progression milestones by which teachers can measure pupil progress. This is in contrast with the previous English curriculum (Department of Education and Science and National Council for Curriculum and Assessment, 1999) which did not explicitly mention phonological awareness within infant level strands, showing an increased awareness of how important this skill is to early literacy development.

The National Council for Curriculum and Assessment (NCCA) has recognised phonological awareness as "one of the key underlying processes most influential in the development of early reading..." (Kennedy et al., 2012:124). It has been highlighted as a key component of the reading process alongside other factors including comprehension, motivation, vocabulary and reading fluency. The Professional Development Service for Teachers (PDST) booklet 'The Reading Process', along with the curriculum support materials provided by the NCCA provide a clear definition of phonological awareness and its development and suggest activities to develop skills at each level. These documents reflect the recommendations for instruction within the literature discussed.

Phonological Awareness is also briefly mentioned within the Chief Inspectors Report 2010-2012 (Hislop, 2013), which recommends that a stronger focus be placed on it, alongside the acquisition of language structures, grammar rules and the consolidation of newly acquired aspects of language.

O'Sullivan's forthcoming research on the impact of Irish children's socio-economic background on phonemic awareness will be interesting and relevant to educators who work within a DEIS context; however, this research is not available at present. The lack of Irish input specifically in the area of phonological awareness suggests that there is more scope for research in this area in Ireland the future.

2.7 Difficulties in Accessing Phonological Awareness Literature

Due to the linguistic nature of phonological awareness, academic literature in this area is often written by and for professionals such as speech and language therapists and psychologists. The many terminologies and theories associated with phonological awareness can make it difficult for primary school teachers without a background in

linguistics to access fully. This may go some way to explain why many teachers lack a clear understanding of phonological awareness (Harris, 2016).

2.8 Engagement and Motivation

One of the main focuses of this research project was to find out how I could teach phonological awareness in a more exciting and engaging manner. Motivating and engaging pupils is a considerable challenge for many teachers (Hedden and MacKay, 2015) and one which has been at the forefront of educational debate in recent times. When students are authentically engaged in work which is meaningful to them, they are more likely to acquire and remember new knowledge (Hancock and Betts, 2002). Students who are engaged are also more likely to be able to work well with others and problem solve (Jones et al., 1994).

Although there is considerable variation in how pupil engagement is defined and measured, Martin and Torres (2016:3) have described it as "meaningful student involvement throughout the learning environment". This learning environment includes the school community, the pupils' teachers and peers, the instruction they receive and the curriculum they are taught. They outline three dimensions within pupil engagement, which they describe as a dynamically interrelated. Behavioural engagement focuses on the child's participation in academic, social and extra-curricular activities. Emotional engagement focuses on the extent of the child's reactions to teachers, classmates and others, while cognitive engagement relates to the pupils' levels of investment in learning. This suggests that engagement is a complex process, which goes beyond the lesson content or topic being pursued.

Schelcty (2002) defines engagement as the level of attention and commitment pupils give to a learning activity or task and argues that engagement should be the 'core business' of

schools. He describes a continuum of engagement, outlining five ways in which pupils respond or adapt to tasks or activities within a school setting. This gives teachers a way in which to measure what pupil engagement looks like in their classroom or school setting and identify those who may be at risk of disengagement. He describes truly engaged pupils as having high attention and high commitment to the task at hand. The learning has meaning and value for the pupil and therefore they will persist even if it is difficult to do so. Strategic compliance involves the pupil having high attention but low commitment. They see the results of the task or learning (such as grades or prizes) as having more value than the actual task itself and will give up more easily if these results do not materialise. Pupils at the ritual compliance level show low attention and low commitment to learning. They are interested only in avoiding negative consequences and will often learn at a low or superficial level. Following this, Pupils at the level of retreatism exhibit no attention and no commitment to what is being taught. They do not participate in the task and learn little or nothing from it, however they do not disrupt or focus their attention elsewhere. In contrast to this, pupils at the lowest rebellion level have no commitment to the task and actively seek to divert their attention elsewhere. This can often manifest as misbehaviour or disruption to the class which has been described as a major concern for teachers (Sullivan et al., 2014).

2.8.1 Motivation

Examining Schlecty's levels, it is evident that authentic pupil engagement relies heavily on children's motivation and commitment to what they are learning. In order to be truly engaged, the learning must have direct meaning and value for the pupil. Learning should have value in and of itself (Bowen, 2003). If pupils are committed to a task only because they feel obliged to be, or because they are expecting an outcome or reward such as a high grade or prize, then they run the risk of learning and understanding less.

The distinction between these forms of intrinsic and extrinsic motivation have been well documented in literature. While teachers may rely on extrinsic rewards such as stickers or prizes to motivate disengaged pupils, researchers have long criticized this 'carrot and stick' approach. Kohn (1993) has described rewards as undermining learning and reducing children's performance on tasks, particularly when they are challenging. Similarly, Pink (2009) claims that extrinsic incentives can 'extinguish' intrinsic motivation and significantly diminish learning. Some researchers, however, believe that motivation is not exclusively intrinsic or extrinsic, and that intrinsic motivation cannot always be relied upon to promote learning. Ledford et al. (2013) argue that external rewards can, if used appropriately, enhance intrinsic motivation and lead to increased feelings of competence and self-control. Others such as Vialle et al. (2005) also state that where pupils cannot be intrinsically motivated, rewards can have a positive effect on pupil engagement.

Evident from the wealth of literature related to motivation, is the need for teacher to implement a balanced approach to intrinsic and extrinsic motivation within the classroom, ensuring that if they use rewards, that they are carefully considered (Williams, & Williams, 2011).

2.8.2 Factors Contributing to Pupil Engagement

Researchers have pointed to several factors which may positively influence pupil engagement. As discussed, motivation and commitment play a significant role in how pupils engage in their learning. According to Self Determination Theory (Deci and Ryan, 2008), when pupils' needs of competence, relatedness and autonomy are fulfilled, their motivation and engagement will be enhanced. This need to feel autonomous suggests that for pupils to authentically engage, they must be active agents in their own learning. The more educators use child-centred and child-led approaches, the more motivation and

engagement are likely to rise (Toshails and Nakkula, 2012). The new language curriculum (NCCA, 2015) has acknowledged the pupil voice as an important aspect of literacy development and have named choice and motivation as learning outcomes within the strands of reading and writing. This is in line with my own Froebelian principles. Froebel was one of the earliest advocators of pupil autonomy, arguing that children need to be give the freedom to make guided decisions about their learning (Bruce, 2015).

Group work too, has shown to be an important factor in motivation and engagement (Digamon and Cinches, 2017).

Learning is a social activity (Toshails and Nakkula, 2012) and peer interaction can positively impact on children's engagement and learning (Schlecty, 2001). By giving pupils the chance to work in groups or pairs, they are more likely to put in more cognitive effort and feel a sense of belonging or relatedness, another factor important to self-determination theory (Bowen, 2003).

Relatedness too, comes in the form of the relationships that pupils have with their teachers, which researchers have found can impact on their engagement. Marsh (2012) investigated the influence pupil-teacher relationships had on engagement and found that teacher traits such as being friendly and flexible, providing opportunities for authentic and personal interactions and recognising good work, all had a positive influence on how children viewed learning. Vezanni (2019) also investigated the conditions in which children were more participative and engaged and the types of classroom conversations which may contribute to this. The researcher found that the participant engagement was greater when teachers had open and authentic conversations with their pupils, showing that conversation and dialogue also play a role in relatedness.

Other factors associated with engagement are the quality and authenticity of teaching instruction (Bowen, 2003). Schlecty (2001) theorised that pupils are more likely to

engage more often if teachers provide high quality work for them to do. His WOW (Working on the Work) framework focusses on ways in which teachers can improve the quality of their practice at student, school and wider community level and has been utilised in many studies related to engagement. The WOW framework outlines ten design qualities of engaging work; content and substance, organization of knowledge, product focus, clear and compelling product standards, safe environment, affirmation of performance, affiliation, novelty and variety, choice, and authenticity. Work should have meaning and relevance to students and not given simply to keep them busy. Pupils learn best when they are actively engaged with their content and know what is expected of them. Pupils engagement also increases when the teacher provides appropriate materials and structure to their lessons (Rich Jr., 2018).

Challenge has also been described as a necessary component of engagement (ibid). Students who are bored are less likely to be authentically engaged and at risk of retreatism or rebellion (Schlecty, 2001). A study by Wasserstein (1995) found that pupils were more likely to choose challenging material over simple material, even if it involved more effort and describes challenge as the 'essence' of engagement. Other researchers also point out the importance of teachers providing pupils with opportunities to challenge themselves at an appropriate skill-level (Strati et al., 2016). If pupils feel a sense of accomplishment having completed a challenging task, their need for competence is fulfilled (Deci and Ryan, 2008).

Studies have shown the risks that are associated with disengaged pupils. Children who are not authentically engaged may learn little to nothing at all and in turn influence other children's levels of engagement (Schlecty, 2001). Disengaged pupils are also more likely to drop out or fail at school (Perdue et al., 2009). A Western Australian study (Angus et al., 2010) which tracked unproductive or disengaged students over four years, found that

they were on average one to two years behind their peers in literacy and numeracy. Several researchers have pointed out a perceived link between engagement and socio-economic background. A study by Sullivan et al. (2014) in South Australia found that schools in lower socioeconomic areas appeared to have higher rates of disengagement and low-level disruption. The Growing up in Ireland study however, found that levels of engagement were largely comparable across socio-economic groups in Ireland (McCoy et al., 2012).

Motivation and engagement are key factors in pupils learning. If children are not motivated to learn, they will not be authentically engaged (Schlecty, 2002). This is recognised within Irish educational policy. *Literacy and Numeracy for Learning and Life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011- 2020* (Department of Education and Skills, 2011b), states that positive attitude and motivation are vital for progression in literacy. Engagement and motivation and choice are also named as learning outcomes in reading within the new Primary Language Curriculum. It can be summarised that intrinsic motivation, pupil voice and autonomy, group and pair work and pupil-teacher relationship are all important factors for teachers to consider within their educational practice, and these recommendations were taken into consideration throughout this research project.

2.9 Educational Disadvantage

The Education Act 1998 (32:9) defines educational disadvantage as "...impediments or barriers to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools." As this research project took place within a designated disadvantaged school setting, it is necessary to

investigate the causes and impact of disadvantage on education, particularly within the context of early literacy development.

The Delivering Quality of Opportunity in Schools (DEIS) program was launched in 2005 with the aim of improving the educational outcome of pupils from disadvantaged communities (Department of Education and Skills, 2017). Schools which qualify for DEIS status are granted additional resources such as grants, home school community liaison services and lower pupil-teacher ratios. Although the DEIS program has brought about improvements in literacy, numeracy and attendance levels in disadvantaged primary schools (Department of Education and Skills, 2011a), criticisms exist regarding its ability to accurately identify children and schools in need of DEIS status. A recent assessment of schools found that the majority of schools in Ireland have pupils from disadvantaged areas. It was also reported that a number of non-DEIS schools had a higher proportion of children from disadvantaged areas than some DEIS schools (Department of Education and Skills, 2017). This puts many children from disadvantaged backgrounds at risk of exclusion from necessary supports and leaves many schools who do not have DEIS status struggling to meet the needs of disadvantaged pupils. Tormey (1999) has criticised the practice of designating schools as disadvantaged, referring to it as a 'disease' model which others can 'catch'. He argues that by using this model, governments can supply high-quality resources to only those most in need, therefore reducing cost. Hatherley (2011 cited in Frawley, 2014:5) however, believes that "...too often services which are reserved for poor people quickly become poor services". Frawley argues that a more universal approach would be more effective in supporting all children, would reduce stigma and create a more diverse social mix within schools. A more universalist or general model such as the model used within special needs allocation might go some way in achieving a more socially-just educational system, whereby high-quality services

are not reserved only for those deemed to have a 'deficit' but are available to all pupils, with extra supports in place for those who need them (Tormey, 1999).

Educational disadvantage can be described as a complex issue which can be both a cause and a result of poverty (Frawley, 2014). With 1 in 6 people in Ireland currently living in poverty (Central Statistics Office, 2016) the issue of disadvantage is of huge relevance to teachers in Ireland today. Many factors can contribute to educational disadvantage, including material and community deprivation (lack of money, resources, support etc.). The structure of our educational system and society in general can also represent a contribution to educational disadvantage through issues of power and hegemony. Many pupils from lower-socio economic backgrounds and social groups such as members of the travelling community or those with special needs can face barriers to meeting their educational potential due to lack of support, access to resources and discrimination (ibid).

2.10 Phonological Awareness and Disadvantage

There is substantial evidence that pupils from lower socio-economic backgrounds are more likely to experience literacy difficulties (Department of Education and Skills, 2011a). Within the context of this research study, it has been shown that a child's socio-economic background can have a significant impact on their phonological awareness development (Gillon, 2018). Research into factors affecting phonological awareness found that children of higher socio-economic backgrounds outperformed children of lower socio-economic backgrounds (Mc Dowell et al., 2007). The researchers hypothesized that this may not always be the result of lower capacity, but rather a lack of exposure to nursery rhymes, bedtime stories and other oral language and reading opportunities (ibid). Researchers have shown that structured early intervention in this

area, along with other factors such as family, cultural and community support (Gillon et al., 2019), can improve levels of spelling and reading in children of disadvantaged backgrounds, helping to overcome the gap between good and poor readers and ultimately helping to improve the learning trajectory of these children (Gillon et al., 2019).

2.11 Early Intervention

Due to the persistent nature of reading difficulties over time (Billard et al., 2010), general classroom reading instruction may be insufficient in resolving these difficulties. Gillon et al. (2019) warn against waiting to identify children who are falling behind in reading and writing before intervening, which can potentially have a negative impact on their confidence and motivation as readers. This highlights the importance of introducing specific early intervention in phonological awareness for all children, regardless of reading difficulties, particularly within a disadvantaged context.

2.12 Conclusion

In conclusion, the importance of phonological awareness to literacy acquisition has been well established. The predictive power of phonological awareness gives teachers an opportunity to identify those at risk of reading difficulties, implement intervention strategies and allow those children who may otherwise struggle to enjoy success in reading and writing. Due to its influence on literacy development, it is important for teachers to have an understanding of how to plan and teach phonological awareness in an effective and engaging way. The following chapter will outline the methodologies used within this research project, which have been informed by the literature outlined above.

Chapter 3 Research Methodology

3.0 Introduction

The purpose of this chapter is to outline the research process undertaken throughout this self-study action research project. The project's design, setting and methods of data collection will be examined along with ethical considerations, research participants and potential limitations to the project. This research takes place within an action research paradigm. A research paradigm can be described as the framework of methods, values and beliefs within which the research takes place (Cohen et al., 2011).

3.1 Action Research

Within educational research, action-research has emerged as a way for teachers and other professionals to study their own work with a view to improving it (Mc Niff and Whitehead, 2005). Working within this action research paradigm affords me an opportunity to work according to my own set of values and assumptions, taking into account the specific context that I work in. In this way, I can become what Hoyle (1975) describes as an 'extended professional', making judgements on my own practice and not leaving it to others to do so. Action research can be used to examine and change practice in a range of educational areas including teaching methods, learning strategies, management and control and continuing professional development (Cohen et al., 2011:34). It involves educators making critical analyses of their own classrooms, schools and the wider educational systems and making changes which may affect others. In this way, action research can be a 'meta-practice' which can change more than the researcher originally intended (Kemmis, 2009). Action research generally starts small with small groups of participants and small research cycles (Kemmis and McTaggart, 1992, cited in Cohen et al., 2011). Action research is also flexible and responsive to unintended or

unexpected consequences which may occur during the course of the research (Cohen et al., 2011), allowing for the ever-changing dynamics of a busy classroom. Researchers working within an action research framework are primarily concerned with improvement through implementing changes in their practice and examining the consequences of these changes (Sullivan et al., 2016; Cohen et al., 2011). It is therefore an appropriate methodology due to the project's main aim; to enhance my teaching of phonological awareness.

3.2 Self-Study Action Research and Critically Reflective Practice

Self-study action research can be described as "...an enquiry by the self into the self." (McNiff cited in Sullivan et al., 2016: 25). As the title suggests, self-study action research is taking an in depth look at ourselves. It is a subjective look at our *own* thoughts, ideas and actions, as opposed to us investigating others as is the case within an interpretive framework. As previously discussed, we do this with a view to educational or self-improvement. The development of self-study action research has been greatly influenced by writers on reflective practice, particularly Schon and Dewey (Lassonde et al., 2009). Reflective practice plays a key role in self-study action research as the researcher needs to be able to look at their own practice and reflect on why they act or think in the ways that they do (Mc Niff, 2002). This can be a difficult process to master for educators as Sullivan et al. (2016) point out. Figuring out the reasons why I act or think in the way that I do is challenging and can be overwhelming as it may throw up unexpected problems or consequences. Their description of "...slogging through a wet bog" (2016: 29) certainly resonated with me throughout the development of my research project at times of uncertainty. Many educational researchers (Moon, 2006; Brookfield, 2009; Sullivan et al., 2016) have advocated for the use of a reflective journal as an

important tool in the reflective process. Through jotting down notes while we teach, we are engaging in what Schön (1983) describes as reflection-in-action, while coming back to our thoughts later and critically reflecting on why we thought or behaved in the way that we did, we are reflecting-on-action. In this way we can notice patterns in our thinking or behaviour emerging which may provide evidence to corroborate our claims to new knowledge. We may also identify whether or not we are living towards our stated values.

3.3 Critical Theory

This action research project is grounded within a critical theory framework. Critically reflective theorists have rejected the more traditional positivist and interpretivist paradigms as 'incomplete' and 'neglectful' of the political and ideological contexts within which they take place (Habermas, 1984 cited in Cohen et al., 2011). Critical theory is concerned with social justice and equity and seeks to uncover hegemonic or power imbalances which may exist within education and the wider world. As I am working within a self-study action research framework, I aim to identify issues of inequality or exclusion within my own practice which may affect my pupils or the wider school community.

3.4 Critical Pedagogy in Action Research

Self-study action research has also been influenced by critical pedagogy. This is, like critical reflection, linked to identifying issues of power or hegemony. Freire (1972), a key figure in critical pedagogy, argued that education was not about 'transmitting' information from teacher to pupil but rather sharing in knowledge generation through a collaborative, dialogical approach. This view is reminiscent of Froebel's child-centred

philosophy of education. Another educational pedagogue, Kinechloe (2004) was strongly influenced by Freire and also believed in challenging oppression within education. He argued that action research should be deeply rooted to the context in which it takes place and tell the stories of those within those contexts (ibid). The ideas of Freire and Kinechloe among other critical pedagogues have helped me to question potential contradictions within my practice which may affect my research such as curriculum, policies and assessments.

3.5 Focus and Development of the Research

This research project focused on my own practice in the area of phonological awareness and how it could be enhanced. The research question grew from my previous experiences of teaching Junior and Senior Infants and my concerns around the low levels of early literacy exhibited by many of my pupils.

3.5.1 Research Cycle

While there are various ways to approach action research, this project followed the action–reflection cycle as set out by Mc Niff and Whitehead (2006). This was a cyclical process as illustrated in figure 3.1 below:

Fig.3.1 Self-Study Action Research Cycle

Within this action-reflection cycle, it was first necessary for me to review and reflect upon my current educational practice. Phonological awareness was identified as an area which I felt could be improved and following a review of the relevant literature, a classroom-based phonological awareness intervention was decided upon. This was implemented during the action stage of the research and took place over a period of ten weeks. The effectiveness of the intervention was monitored throughout its implementation and it was modified as necessary as a result of further reflection and observation. These stages of the research will be described in more detail within the following sections.

3.5.2 Values

The first step in the development of a research question was to identify my own values in the area of teaching and learning. This articulation of values is key when beginning any research project (Sullivan et al., 2016). Articulating and understanding the values that I hold as an educator was a difficult and at times frustrating experience for me. This involved critically examining my epistemological and ontological ideas and assumptions, many of which were abstract to me until I began to see them being lived out in my practice. Here, I was 'risking disturbance' (Winter, 1996), opening myself and my practice up to critique.

My ontological values, the way in which I view *being* or my relationship to others, around equality and social justice were central to the development of the research question. As discussed previously the school's disadvantaged context means that my pupils may not come to school with the language or literacy experiences that they need in order to fully access the Junior and Senior Infant curriculum. I see literacy as important not only in an educational setting, but also as a means of connecting with the wider world. This was

identified as an issue of inequality which I could help to address through my teaching of phonological awareness, a key factor in early literacy acquisition (Gillon, 2018).

Upon examination of my practice in the area of early literacy, I began to notice a dependence on prescriptive educational programmes such as Jolly Phonics, which I had been following without question for several years. I reflected in an early reflective assignment;

> "I had been following the prescriptive programme that had always been followed in the school, the way the manual told me to and had not given enough thought as to why I was teaching in the way that I was. My pupils had fallen victim to Dadd's 'Hurry-along-curriculum' (2001)- in an attempt to keep up with the overloaded curriculum, I was not focusing on how the children could learn most effectively, merely rushing through what I assumed would give me the result that I needed." (Finlay-Scott, 2018)

I realised that I was experiencing what Whitehead (1989) describes as a 'Living Contradiction'. Although I knew I valued equality in my practice, by teaching all of the children in the same way, using one synthetic phonics program with the whole class, I was not treating each child according to their individual learning needs; thus, I was not acting in a truly equal way. As Brookfield (1995:1) warns "...the sincerity of their intentions does not guarantee the purity of their practice." I began to look for ways in which I could address this inequality though differentiation and small group work.

My epistemological commitments, *the way in which I view knowledge and learning*, also shaped the way in which the research was conducted. I view knowledge as a process; it is constantly evolving and changing and is something which we can create for ourselves, rather than something which is 'separate' to us which we must acquire from somebody

else (Sullivan et al., 2016). Therefore, I view my role as a teacher to be a facilitator rather than a 'transmitter' of knowledge. I do not want my pupils to simply store information I have given them and retrieve it when necessary as per Freire's (1972) Banking Theory. While I believe that tests are important as a means of measuring progress, I also want my pupils to be able to form their own thoughts and ideas though activities which are meaningful to them.

Through this critical examination of my epistemological stance, it became clear to me that another major value was central to my research; engagement. As discussed within the previous literature review, key to children's learning in the area of phonological awareness is their enjoyment and engagement of the content being taught (Zgonc, 2010). Again, I was experiencing a contradiction between my values and my practice. Through my reliance on one synthetic phonics programme I had unwittingly become 'wedded' to the same teaching style every day (hooks, 2003) and was not teaching in a particularly engaging manner. I began to look for ways that I could improve this in my practice through incorporating music, movement, humour and novelty into my phonological awareness lessons.

3.5.3 Research Questions

Following this examination of my values and the identification of contradictions in my practice, two main questions emerged which helped to focus the research;

How can I teach phonological awareness in a more **engaging** way?	How can I be more **inclusive** within my phonological awareness instruction?

3.6 Research Setting and Research Participants

3.6.1 Research Setting

This research project was conducted within a suburban primary school with upwards of three hundred pupils enrolled and two bands of each class level. The school has a DEIS (Delivering Quality of Education in Schools) band 2 designation. This means that the school participates in the DEIS action plan for Education 2018 which aims to support children who are at risk of educational disadvantage (Department of Education and Skills, 2011a). A large number of pupils come from families with English as an additional language. The school places huge importance on early intervention and has numerous initiatives in place in the infant classes including Literacy Lift off and Ready, Set, Go Maths.

3.6.2 The Researcher

I am a female self-study action researcher who has worked in my current school for the past seven years. I have taught at junior and senior infant level for the past five years and have developed a strong interest in early literacy development as a result.

3.6.3 Research Participants

The research participants in this research project were the pupils in my senior infant class, critical friends and other colleagues whose input was used throughout the research. All 19 pupils, without bias, were invited to take part in the research on a voluntary basis along with critical friends and other colleagues who provided input to the project. One pupil left the school during the intervention; therefore their data was not included. The pupil's role in the research was to engage in classroom activities related to the research topic, providing data through the use of the outlined research instruments. Critical friends observed my practice on a regular basis, using a structured observation form to critique my practice and offer suggestions for further improvement. A validation group was also

set up, consisting of three colleagues. The aim of this group was to test the accuracy and reliability of the research and validate my research claims through group dialogue. Collaboration between myself and the research participants was an important element in the research process. This collaboration has been described by educational researchers Kemmis and Mc Taggart (1988) as crucial to the action research process.

3.7 Research Schedule

The research project took place over the course of a year. The timeline of the actions taken by the researcher is represented in table 1. Pre-research took place between September-December while the action research cycle began in January and concluded in early April. Details of the actions taken in each month can be found in appendix 1.

3.8 Structure of the Intervention

The intervention consisted of 3-4 phonological awareness lessons each week for ten weeks. Lessons were taught at a whole class, group and individual level. A new phonological skill was explicitly targeted each week and those who had been identified as requiring extra attention in this area were taken in a small group setting to work at a more appropriate level. Following reflection, the intervention was adjusted after the February mid-term so that any children who had not mastered the appropriate skill at this group level were taken on an individual basis for ten-minute periods as necessary. This tiered grouping system allowed for flexibility and ensured that each pupil received instruction at an appropriate level.

3.9 Data Collection

In order to say we believe something or have learned something new, we must be able to justify these claims to new knowledge (Mc Niff and Whitehead, 2006). This can be done through providing evidence of this knowledge and then making the knowledge public in order to for it to be critically evaluated by others (Sullivan et al., 2016). To find evidence of our claim we must gather data which supports it. Throughout this research project data was collected through a variety of research instruments.

3.10 Research Instruments

The research project employed a mixed method approach using both quantitative and qualitative methods of data collection. Educational researchers (Cohen et al., 2011., Mertens, 2007) have suggested that a mixed method approach to data collection can strengthen the research and lead to less biased conclusions. Quantitative data collection allowed for the pupil's progress in phonological awareness to be measured statistically, while qualitative data allowed for the recording of less measurable concepts such as opinions and observations. The research instruments utilised throughout the research process and their purposes are outlined in further detail below.

3.11 Quantitative Data

3.11.1 Phonological Awareness Screening Test (PAST)

All pupils in the class were assessed individually using the PAST (Phonological Awareness Screening Test). This is an informal diagnostic tool which is administered orally (Zgonc, 2010). The test took approximately 15-20 minutes to administer per child. A base phonological awareness score for each pupil was determined and the children were grouped into tiered groups based on these results. Pupils who scored over 60% in

the test were included in tier 1, receiving whole-class phonological awareness instruction. Five children who were identified as having scored less than 60% were placed in tier 2, which received both small group and whole class instruction. Following further reflection and review, it was decided that some of the children in tier 2 were still struggling at a small group level and another tier, tier 3 was created. Children in tier 3 were taken on an individual basis as necessary. The pupils were also post-testing using the PAST to monitor their progress in phonological awareness.

There are several benefits to using commercially produced tests such as the PAST. They have already been piloted and refined and are generally straightforward to administer. They also enable statistics to be administered which can provide an objective view of pupil progress (Cohen et al., 2011). There are also potential limitations to using these types of tests. They may not always be cost-effective (Howitt and Cramer, 2005), especially within large class sizes. They are also unlikely to be tailored to the specific context that the research takes place within (Cohen et al., 2011). The PAST was chosen in this research study as it was relatively easy to administer, was photocopiable and provided a clear overview of the phonological awareness levels of the pupils and the phonological skills which needed most input.

3.12 Qualitative Data

3.12.1 Observations

Observations were also used to collect data. These were recorded in the form of field notes and critical friend observations. Field notes were written using a semi-structured lesson log which recorded the tier level being taught, teaching methodologies used and my comments on the lesson. It also included the children's daily feedback on what was being taught. Three critical friends observed me teaching phonological awareness and

recorded their observations using a similar log which included 12 prompt questions. These questions served as a guide and they were free to answer any or none of them. These observation logs can be found in appendix 2. Using different forms of observation allowed me to gather data from multiple lenses; my own lens as teacher, my pupils' lens and that of my colleagues. Tracking my observations over the course of the research helped me to identify changes in my thinking and practice and determine whether my values of engagement and equality were bring lived out in my practice. Observations are useful for recording information in natural or contrived settings (Bailey, 1994) and can also provide an authentic, first-hand account of an event, (Cohen et al., 2011). They are also generally flexible and sensitive to context (ibid.) Ethical issues may arise, however, with the use of observations, such as bias, misrepresentation or inference (Shaughnessy et al., 2003).

3.12.2 Reflective Journal Entries

As discussed, reflection is a key aspect of any action research project (Moon, 2006; Brookfield, 2009). A reflective journal was kept throughout the research process in which I recorded events, observations and thoughts. This helped me to further monitor changes in my thinking and practice and identify whether I was living towards my stated values. By critically analysing the effectiveness of the phonological awareness intervention and other changes in my practice on a regular basis, I am better able to stand over what I am doing and explain these changes to others.

3.12.3 Post-Intervention Questionnaire

A post-intervention questionnaire was completed by each pupil in the class. The primary objective of this questionnaire was to gather further data about the children's experiences of the intervention, in their own words. The children were asked both open and closed questions regarding their enjoyment of the intervention, what they thought they have

learned from it and whether they believed they got to make choices throughout the project. This was done orally, and the pupils answers were recorded in writing by the teacher. Care was taken to transcribe the pupil's answers verbatim to maximise the authenticity of the data. Questionnaires are widely regarded as a cost-effective and fast method of gathering information about people's experiences, beliefs and attitudes about issues which may affect them (Cohen et al., 2011). However, researchers have pointed out that respondents may try to provide 'right', not honest answers to questions. (McKiernan, 1996). Careful attention was given to the wording of each question in order to ensure clarity and understanding and the number of questions was kept to a minimum to maximise the children's attention and minimise any potential stress. The post-intervention questionnaire can be found in appendix 3.

3.13 Data analysis

Upon completion of the research project it was necessary to examine the data collected to provide evidence of my research claims (Sullivan et al., 2016). It was first necessary to ensure that all data was carefully filed and dated for ease of access. Thematic analysis was used to code the qualitative data, identifying patterns or themes which had emerged within the research. Findings from this from this analysis will be discussed in the following chapter.

3.14 Ethical Considerations

This research project took place within my own school community and involved real-life participants who I have a duty of care towards as both a teacher and a researcher. It was important therefore that that stringent ethical procedures were followed throughout the research process. The research was carried out in adherence to Maynooth University's

Research Ethics Policy and the recent *Children First: National Guidelines for the Protection and Welfare of Children* (Department of Children and Youth Affairs, 2017). Ethical clearance was required from Maynooth University Froebel Department of Primary and Early Childhood Education's Ethical Board before any collection of data commenced. Written permission from relevant 'gate keepers' (Cohen et al., 2011) such as the Board of Management and Parents was sought along with permission from the children themselves. Other participants such as Critical Friends or validation group members who provided input to the project also gave written consent. In order to achieve informed consent, all participants were informed in clear and appropriate language of the purpose and processes of the research (Mockler, 2014). Information letters and consent forms can be found in appendix 4. An information afternoon was held to address any questions parents may have about the research process. Each participant was made fully aware of their right to withdraw at any stage without consequence. Confidentiality and anonymity were guaranteed to all participants with alphabetic codes being used in place of names used throughout and no identifiable information such as location or background being shared. All Data collected was kept in accordance to GDPR (2016) regulations and the school's data storage policy, in a locked cupboard in the classroom. Any media content such as recordings were kept on a password encrypted computer. Every effort was made to treat all participants with respect and care throughout the research. The pupil's voice was extremely important to this study and opportunities for pupil feedback was given after each lesson. This feedback was used to inform the planning of phonological awareness activities each week. This allowed for the pupils to have equal ownership over the project. It was important that each participant was treated with respect and dignity at all times, therefore every effort was made to carry out the research in a

threat-free environment. Pupils were encouraged to have a go, and mistakes were celebrated as valuable learning opportunities.

3.15 Validity, Credibility and Reliability

Validity, reliability and credibility are key features of an effective action research project (Cohen et al., 2011). Validity demonstrates whether the research has measured that which it set out to measure (Winter, 2002). In order to achieve what Habermas (1984) describes as social validity, the researcher must engage in dialogue with others in a comprehensible, truthful, authentic and appropriate manner. The aim of this dialogue is to come to a consensus that the research claims are valid. Reliability and credibility are concerned with how accurately the research has been conducted (Sullivan et al., 2016). In order to ensure reliability all data was signed and dated. Brookfield's (2006) reflective lenses were utilised throughout the research in order to ensure more than one perspective was being represented. My own perspective was represented through the use of observational data and my reflective journal entries. Several critical friends provided a collegial perspective by observing and critiquing my practice. A validation group also questioned my intentions and evaluated the research outcomes. The pupil's lens was represented using verbal pupil feedback after each phonological awareness lesson. This cross checking of my practice from different perspectives allowed for triangulation, which further demonstrated the validity and credibility of the project. As this research has been generated in a specific context and focussing on my own practice, it is not replicable or generalisable; it cannot be replicated in the exactly the same manner. Through communicating the research findings to others however, the research may have an application elsewhere with useful results (Lomax, 1994 cited in Sullivan et al., 2016). Initial findings of the research were presented to colleagues during a staff meeting and also to a public audience in partial fulfilment of the Master of Education degree. In this

way, the research has been subjected for scrutiny and critique by the public, which is another important step in proving a project's credibility and reliability (Sullivan et al., 2016).

3.16 Conclusion

The objective of this study was to examine and improve my teaching of phonological awareness. This chapter has presented an overview of the research methodology used during this self-study action research project. The study's context, data collection methods and structure have been discussed along with ethical issues which came under consideration. Chapter four will outline the data collected during the study and discuss these findings in relation to the literature discussed in chapter one.

Chapter 4 Data Analysis and Discussion

4.0 Introduction

This self-study action research project sought to generate knowledge about how my practice in the teaching of phonological awareness could be enhanced. While the previous methodology chapter outlined the research process which was undertaken, this chapter will provide an overview of the research findings. These findings will be discussed in detail and in the context of the literature outlined in chapter one alongside additional relevant literature.

4.1 Thematic Analysis

Thematic analysis was used to code and identify themes emerging from the data. This method of data analysis was chosen as it offered flexibility in terms of theoretical and epistemological approach (Braun and Clarke, 2006). Codes were generated through careful examination of each of the data sets. This involved attributing words or short phrases to text in the data which conveyed the same meaning. These codes were then further collapsed into broader headings and analysed further to identify themes. Two main findings emerged following analysis of the data as illustrated below:

A multi-modal and threat-free approach promoted pupil engagement.	Several factors influenced the inclusiveness and equality of the intervention.

4.2 Finding 1: A Multi-Modal and Threat-Free Approach Promoted Pupil Engagement

Pupil engagement during phonological awareness lessons was a clear focus of the research. As I scrutinised my values during the research development, engagement had

emerged as something which I wanted to see more of in my practice. It was important to me that the pupils enjoyed the intervention as much as possible and did not see it as 'work'. I began to identify methodologies which I felt would engage the students and create a sense of fun and enjoyment. Several strategies emerged from the data as particularly effective in promoting pupil engagement and learning during the 10-week phonological awareness intervention in the classroom. These strategies were; the use of a multi-sensory approach, incorporating novelty and humour into lessons and the promotion of a threat-free environment.

4.2.1 A Multi-Sensory Approach

A multi-sensory approach was taken during the intervention, in line with recommendations from the literature discussed in chapter one. While phonological awareness is a primarily oral and aural skill, opportunities for visual and kinaesthetic learning were also created. This allowed for children to learn in a sensory style that suited them best, thus increasing their engagement with the activities. Concrete materials, pictorial aids, movement and music were utilised throughout the intervention in order to promote multi-sensory learning.

Concrete Materials and Pictorial Aids

As part of this multi-sensory approach to teaching phonological awareness, concrete materials such as cubes, pom poms, lollipop sticks, Elkonin boxes and counters were used often within lessons. This allowed for both visual and tactile learning to take place. Concrete materials also served as visual aids to help the pupils blend and segment syllables and phonemes. Answers from the post-intervention questionnaire showed that the children enjoyed using concrete materials and found them helpful;

> "I liked it cos on the first time we got to use cubes. It was fun." (In response to: Did you like our sounds project? Why?)

"The cubes helped me."

"The boxes helped me break it up." (In response to: What helped you to learn?)

A particularly high level of engagement and motivation was noted when highly tactile materials were introduced. A lesson in which children were instructed to pop bubble wrap as they segmented the onset and rime of simple CVC words received positive feedback from both myself and the children:

"I really loved touching the bubble wrap. Can we play this again?" (11/3)

"Children absolutely loved sensory aspect of bubble wrap-novelty" (11/3)

The use of bubble wrap allowed for informal assessment as those who were popping the incorrect amount of bubbles were easily identifiable. Using concrete materials also benefitted the children's fine-motor skill development as they manipulated the small objects. Picture cards also proved to be an effective learning aid which kept the children engaged. Pictures helped the children to keep the word(s) they were manipulating in memory, a task I had not considered early in the intervention. During a small group lesson on rhyme completion I observed:

"Children finding it difficult to even remember the three words after me..."

"This lesson was a bit boring. Maybe I could have used pictures of the objects to help them remember the words." (Observation, 29/1/19)

The use of concrete materials and visual aids within infant education is widely supported in early childhood education literature and the Primary School Curriculum, as discussed within chapter 2. This finding is also consistent with recommendations by Lonigan et al. (2008), who suggest picture cards and concrete materials as a way to make oral and aural activities less abstract for pupils and help them to commit the words in question to memory. The researchers also suggest that it allows those with limited expressive language to actively take part while demonstrating mastery of a particular skill. This is

especially important within a disadvantaged context, where children are more likely to start school with lower levels of oral language than their more advantaged peers (Gillon et al., 2019). Thus, the use of concrete materials and visual aids can be described as an important element of phonological awareness instruction.

Movement

Movement also appeared to increase pupil engagement with lessons involving movement visibly promoting enjoyment and attracting positive feedback from the pupils noted at the end of each lesson:

> "I liked moving around" (29/1)
>
> "I liked lying down and jumping" (29/1)
>
> "I really wanted to play again cos I really liked it cos we did the dance" (21/3)

Movement was mentioned by the pupils several times in the post-intervention questionnaire"

> "...I liked whack a mole because we got to use a hammer and then we got to whack stuff." "I like the song of the snake cos we get to move around." (In response to: What was your favourite part of our sounds project?)
>
> "I didn't know how to clap the words out before." "We clapped the sounds out. We broke it up." (In response to: What did you learn during our sounds project?)

Incorporating movement into the lessons required each child to be actively engaged rather than simply passive observers. Common children's movement games such as Duck, Duck Goose, Musical Chairs and Simon Says were all easily adapted to allow specific phonological skills to be the focus. Segmenting words into syllables during a game of Duck, Duck Goose proved to be one of the more memorable activities of the intervention with several children mentioning it as their favourite part of our 'sounds project' in the post-intervention questionnaire:

> "Playing duck, duck goose cos we getted to run around the classroom in a big circle." "...we got to do duck, duck goose, we all got to switch places when we were running" "The game where we have to go around and tap people saying the words because it was funny when some people didn't get the people." (In response to: What was your favourite part of our sounds project?)
>
> "Great movement in this game-could be changed to suit other phonological skills e.g. Phoneme segmentation etc." (Teacher observation, 17/1)

The importance of movement to my teaching of phonological awareness was also noted several times throughout my diary:

> "Great movement in this game-could be changed to suit other phonological skills e.g. Phoneme segmentation etc." (Teacher observation, 17/1)
>
> "I am noticing that movement is so important for many of my children to stay engaged and focused. The lessons where we are moving seem to promote the most pupil engagement and many of the children's comments during feedback are already suggesting that movement is something that they enjoy and want more of." (Reflective Diary Entry, 16/1/19)
>
> "…through creating simple dance moves to the song, there was great opportunities for movement within the lesson." (Reflective Dairy Entry, 31/1/19)

Opportunities for movement were created as often as possible throughout the intervention due to its popularity with the pupils. This kinaesthetic way of learning suited many of the children and helped to anchor the new learning which had occurred. Movements such as stomping, clapping and jumping helped the students break up words into and gave them a clear strategy to use when working with sounds. Several children, particularly those in tier two and three were observed using several of these physical movements during the post-intervention Phonological Awareness Screening Test (PAST):

"Child Q used head shoulders movement to break up dinosaur, unprompted." (9/4/19)

"Child C clapping out syllables." (9/4/19)

This finding is consistent with the literature described in chapter 2, with kinaesthetic instruction such as the use of hand and body gestures recommended to accompany auditory phonological awareness activities (Gillon, 2018).

This finding also echoes Callcott et al.'s (2015) research on children's early literacy development, which investigated the impact of movement on children's phonological and spelling development. It concluded that those children who were exposed to a combined intervention of explicit phonological awareness and movement performed better in measures of phonological awareness than those who were only exposed to phonological awareness or movement. An interesting finding was that the children who had been exposed to phonological awareness and movement performed better in the movement test also.

Music, Rhythm and Rhyme

Lessons which included music, rhythm or rhyme also provided evidence of increased pupil engagement. Songs, rhymes and rap were used throughout the intervention which the children visibly enjoyed and responded positively towards:

"We got to sing. It was really funny." (Children's feedback, 31/1/19)

"I liked singing the basket song" (Children's feedback, 7/3/19)

"Children loved the tweety bird rhyme/rap at the beginning of lesson-sang it throughout the day. Clapping along with song" (Teacher Observation, 21/3/19).

The children's reactions to the songs and rhymes led me to reflect on my use of music throughout my practice:

> "The children remarked that they never hear me singing. I thought about it and realised that I rarely use my own voice when doing music or teaching songs and almost always rely on the CD player. The children found it such a novelty and almost immediately began to sing along with me and clap their hands. I will try to incorporate more rhymes and songs into my teaching of literacy in future as my class enjoyed it so much." (Reflective Diary Entry, 31/1/19)

Although the use of music and rhyme was mentioned several times within my own journal and observations, it came up just once in the post-intervention questionnaire. This suggests that while songs and rhymes promoted engagement at the time, they were not the most memorable aspects of the intervention. While it is well known that music and song are effective methodologies in early years education, and music is a feature of many synthetic phonics programmes, it did not come up often during the review of phonological awareness literature. Upon further investigation however, I came across a wealth of research which suggests that musical activities may contribute positively to early literacy development, particularly phonological awareness. Degé and Schwartzer's (2011) research into the effect of music on pre-schoolers phonological awareness made a connection between music and phonological awareness training, with children who received instruction in both scoring higher than those who received only phonological awareness instruction. Similarly, Thomson et al. (2013) concluded that music may be an effective remediator for improving phonology in children presenting with dyslexia. Slater, et al., (2014) also drew comparisons between children's ability to tap a beat and their reading ability and suggested that this could be strengthened by musical training. Music has also long been noted as promoting pupil engagement and creating a relaxed and therefore suitable learning environment (Thoma, 2013). This was an unexpected, yet exciting finding for me, as music was not something which I had given much thought to

when researching phonological awareness. This link between music and early literacy development is something which I would like to explore further within my practice.

4.2.2 Humour

Another interesting finding which emerged from the data was the highly positive impact humour had on pupil engagement. The children often rereferred to this during feedback time:

> "We got to say funny stuff." (31/1/19)
>
> "It was really funny. Those words were really funny." (31/1/19).

I noted in an observation following a lesson based around rhyming sentences:

> "Fantastic humour involved in this lesson; children tried to make theirs funny." (31/1/19)

Children began to request funny or 'rude' words within the lessons:

> "Can you make more rude words for the next time? They are funny." (31/1/19)
>
> "I like when you use those rude words teacher." (31/1/19)

A lesson in which the children exhibited particularly high engagement was when the song 'Down by the Bay' was introduced. The children found it hilarious to play with rhyming words and were encouraged to create their own funny rhyming sentences:

> "Children enjoyed the humorous aspect of this lesson-laughing a lot" (Teacher Observation 28/1/19)

Playing with words in a humorous way presented valuable oral language opportunities as the children discussed and created their own funny rhymes. Opportunities for informal observational assessment were also provided here as it was evident which children were using rhyming words and which were simply creating humorous sentences:

"Some children did not understand-used logic instead of rhyme to finish sentence-did you ever see a fly wearing a...t-shirt, coat etc." (Teacher Observation, 31/1/19)

"Child E - Did you ever see a bear sleeping in a...chest?" (Teacher Observation, 31/1/19)

The children's funny rhyming sentences included:

"Did you ever see a batman sitting on a fat man?"

"Did you ever see a bum sitting on a lum?"

"Did you ever see a tree doing a wee?"

Young children have long enjoyed humorous rhyming books from authors such as Dr. Seuss and Julia Donaldson. It is clear from the data that humour was something enjoyed by both the pupils and I and led to greater engagement with the phonological skill being taught. Humorous activities also proved to be memorable to the students within the post-intervention questionnaire:

"When we got to write the funny rhyming stuff because they were funny" (In response to: What was your favourite part of our sounds project?)

"...because some stuff was really funny with the parrot." (In response to: Did you enjoy our sounds project? Why?)

These findings echo that of Sambrani et al., (2014) who sought to determine the effect of humour on learning in an educational setting. The researchers found that exposure to humorous material correlated with better engagement with the material. They also concluded that the material presented in a humorous manner was more memorable to students than equivalent non-humorous material. While I had not specifically planned to use humour within the intervention, it became a simple, yet effective way to capture and maintain pupil attention and something which I feel contributed to positive and

meaningful teacher and peer interactions, another important factor in promoting engagement (Schlecty, 2002).

4.2.3 Novelty

The use of the above strategies also fed into another important aspect which promoted pupil engagement; novelty. Lessons which included novel and new ways of learning resulted in more memorable lessons in which the children demonstrated a higher level of engagement. The occasional use of props such as teddies and puppets during lessons instantly grabbed the children's attention and these props were mentioned several times within the post-intervention questionnaire:

> "...Sally sound snatcher cos I think she's cute."
>
> "...yes cos I liked when Parakay was in it cos he had fun with you."
>
> "Yes Because we did games like Sally the Sound Snatcher." (In response to: Did you enjoy the sounds project? Why?)

Connecting their names to the phonological skill being taught helped the children to remember the skill e.g. Sally the Sound Snatcher, Stretchy the Sound Snake. The children were observed during power hour literacy station using the name of one of the puppets to help themselves break up an unknown word:

> "...When asked how we could go about figuring out how to spell an unknown word, child K replied, 'we stretch it out, like stretchy sound snake', and demonstrated stretching the word family out." (Teacher Observation, 2/4/19)

A critical friend also noted the effectiveness of demonstrating the phonological skill of segmenting phonemes using Stretchy the Sound Snake:

> "Stretchy the word snake song allowed the children to see, hear and act out the stretching of the words all at once" (Critical Friend Observation, 9/4/19)

I often noted incidences where I felt novelty had been at play throughout the lessons:

> "I liked that we got to run'-novelty of running around the classroom" (Teacher Observation, 31/1/19)
>
> "The children found it such a novelty and almost immediately began to sing along with me and clap their hands." (Reflective Diary Entry, 17/1/19)

My reflections also show my thinking on the importance of novelty within my lessons:

> "...When asked for feedback a child commented that they 'liked that we got to run around the classroom, we're usually not allowed'. It was obviously such a novelty for them to be able to 'bend the rules'. I think that novelty is such an important aspect of learning, especially within this phonological awareness project...The children liked the novelty of using their toys as props. I was going to use a bird teddy I had found in the classroom, but child K excitedly suggested that I use their teddy instead. This immediately grabbed the other children's attention and the child who owned the teddy remarked "Ms. X is using my teddy! Look!...""
>
> "...The children howled with laughter when I sounded out /s/ /c/ /o/ /tt/ /ee/, their nickname for me. Connecting the content of my lessons to my students and their lives really gets them engaged and this is something to remember when planning my lessons." (Reflective Diary Entries, 20/3/19)

This new way of teaching early literacy through the inclusion of novel and new ways of learning was at odds with my former reliance on prescriptive programmes which followed the same pattern of teaching for each skill. By introducing unexpected or humorous elements to the lessons, my teaching became more enjoyable and my students exhibited higher engagement and motivation. This type of engagement has been described by Schlecty (2002) as high attention, high commitment learning-the content has meaning to the pupils and they are not simply engaging because they feel they have no other choice. While researchers such as Lonigan et al. (1998) advise against

introducing too much task variability within phonological awareness instruction in order to allow pupils to focus on the specific skill being taught, I would argue including a variety of games and learning activities was important in keeping both pupils and teacher engaged and motivated throughout the intervention.

4.2.4 The Promotion of a Threat-Free Environment

The threat of *being* wrong or *doing* wrong can significantly impede children's learning (Sousa, 2001). In order to encourage engagement, it was important that a safe environment, in which the children felt secure and supported, was created. The impact of modelling positive feedback, regardless of the child having answered correctly, became clear:

> "...The children are also actively encouraging each other in their learning which is fantastic to see. When another child got the answer wrong, the child beside them remarked 'good guess!'...The more I model positive, respectful interactions, the more I am seeing them from my pupils. If pupils feel that both I and their classmates will support them even if their answer is not what I'm looking for, the more they will be willing to engage...Pupils who had been previously reluctant to offer answers for fear of being wrong or because they 'didn't know' are now more often putting their hands up and answering, even if they are not sure. This is showing me that the children feel secure in the project and know that they will face no negative consequences if they do not answer correctly..." (Reflective Diary Entry, 26/3/19)

The children were frequently encouraged to stop and think for a moment before answering if they were unsure, and to allow others to think before shouting out. 'Think-time' became an important part of the intervention:

> "Something else that I have been noticing has been how well the children have been responding to the idea of think time. A child remarked to their partner today "I need to think for myself". They are now more likely to stop and actually think about the answer being answering and are going back and correcting themselves also." (Reflective Diary Entry, 20/3/19).

The children often referred to the usefulness of think-time during feedback and in the post-intervention questionnaire:

> "Think time helped me to think."
>
> "I learnt never to shout words out cos then everybody else doesn't have to think of the word."
>
> "Think time cos people don't shout out the answers they let you think." (In response to: 'What helped you to learn?').

Again, as with positive feedback, the pupils began to encourage each other to use think time:

> "Child P: 'Let him think for himself'- Encouraging think time." (Teacher observation, 6/1/19).
>
> "It was rewarding seeing them encourage each other and want their friends to succeed. When a child was struggling to break up the word motorcycle correctly, another child tried to tell him the answer but was quickly told by the person beside him to 'let them think first!' " (Reflective Diary Entry, 6/3/19).

The positive effect that 'think-time' and positive feedback was having on the children's mindset was evident throughout the data. A clear increase in their confidence and motivation to 'have a go' and not be afraid to ask for help when needed was observed:

> "Tell us the first sound, that will help!" "Can you give us a hint?" (Teacher Observations, 20/3/19).

Evidence of growth mindset was also noted by my critical friends in their written observations of my lessons which was highly encouraging:

> "Liked that the child responded, 'I'm still thinking' rather than 'I don't know' " (Critical Friend Observation, 7/3/19).
>
> "Children not afraid to ask for help-lovely working environment" (Critical Friend Observation, 2/4/19).

The importance of think-time has also spread to different aspects in my teacher where I have observed the children actively encouraging themselves and others to 'have a think'. Although I had always thought of myself as a patient teacher who encouraged my pupils toward a growth mindset, through a clear verbalisation of 'think-time' as a learning strategy, and by explicitly modelling positive feedback, I feel that my classroom has become a more encouraging and positive learning environment. Gillon (2018) has also outlined the importance of 'wait time' during phonological awareness instruction, which allows pupils to process the verbal and visual prompts and formulate a response. A safe learning environment and affirmation of performance are also mentioned within Schlecty's Working on the Work framework (WoW) which focuses on pupil engagement and motivation. Schlecty (2001) describes the importance of creating an environment in which pupils are confident enough to take risks without fear of failure or punishment.

4.3 Finding 2: Several Factors Influenced the Inclusiveness and Equality of the Intervention

Other values which I had identified as important to my teaching practice were inclusion and equality. This stemmed from my experiences as a Junior and Senior Infant teacher and my concern over pupils in my class who were struggling significantly with emergent reading and writing. I felt strongly that these children were unable to access early literacy

in a way that others could and began to notice contradictions in my teaching which may have contributed to this inequality. A main aim of the research, therefore, was to find ways in which I could be more inclusive within my phonological awareness instruction and ensure that each child was equally able to gain from the material being taught. Factors which influenced inclusion and equality became apparent early on in the research and these are discussed below.

4.3.1 Oral Language and Vocabulary

A factor which was evident throughout the data as influencing the pupils' ability to access the material being taught was their level of oral language and vocabulary. A correlation was noticed between limited oral language ability and vocabulary and difficulty interacting with the phonological awareness tasks. This was noted in early observations:

> "Some of the words were unknown to them-make sure to go over vocab before game." (Teacher Observation, 17/1/19)
>
> "Children finding it difficult to even repeat the three words back to me-work on memory?" (Teacher Observation, 29/1/19)
>
> "Several children copying my answers - I don't think they understand what is being asked" (Teacher Observation, 30/1/19)

It was clear that unless the children had the necessary vocabulary associated with the task, they would not achieve success within the lesson. Incidences where it was uncertain if the children did not have mastery of the particular phonological skill being taught, or simply did not have the required vocabulary to access the activity, were recorded during observations:

> "T: What does rhyming mean? No one in group able to answer. Child E: at the start? Need to go over what rhyming is, explicitly model it." (Teacher Observation, 29/1/19)

> "...difficult to assess whether child is truly lacking in p.a skill or if it is lack of vocab holding her back" (Teacher Observation, 22/3/19)
>
> "Needs to be clear on what exactly is being asked - (banana) I'm thinking of a word with /a/ at the end of it and it's a fruit. Child Q: apple. Concept of beginning/end/start etc." (Teacher Observation, 21/3/19)

Child B, who had little English struggled significantly throughout the intervention, and was noted often as not understanding in observations:

> "Some had difficulty repeating sentences over 3 words-child b,q,e copying others." (Teacher Observation, 14/1/19)
>
> "Child B found it difficult to identify final sound in hat, answered /a/. word needed to be clearly enunciated putting emphasis on t." (Teacher Observation, 21/3/19)
>
> "Child B's limited vocabulary is holding her back. Does not know a lot of the words in English." (Teacher Observation, 20/3/19)

I began to reflect on the difficulties this child was facing, having English as an additional language and thought about ways in which she could be accommodated within phonological awareness instruction:

> "Child B is really struggling...she cannot name many of the words which we are working on and is also finding it difficult to follow the instructions given. During a lesson using pictures today, this child repeatedly pointed at a picture of a cow and said camel. This is making it hard to assess where her difficulties lie-is it a phonological awareness issue or is due to English being her second language? It's important that I make sure she understands the vocabulary put in front of her before explicitly modelling task so that she has a better chance of achieving success..." (Reflective Diary Entry, 21/1/19)

It became clear that child B and others who were struggling would need explicit and targeted intervention and work around vocabulary in order to make progress. The decision was made after the February mid-term to provide extra support to these children by taking them individually for short periods of time in addition to group and whole-class lessons:

> "There are a few children who are still struggling significantly with the tasks...I am going to take some of them on their own for a while to see if this makes any difference." (6/2/19)

When selecting material for this small group, or individual lessons, I was careful to chose words which I felt these children would know. At the beginning of any activity we went over each picture or word that was going to be used to ensure understanding. This was an important part of each lesson, which not only increased the children's vocabulary but also increased their chance of success within the activities. A gradual change in mindset was noted within many of the students. Those who I was taking individually or in small groups began to express when they were unsure of a word:

> "Child S-I don't know what this is-asking for help. What's a ram?" (12/3/19)
>
> "We went over what each word on the page was to ensure understanding. Child b: What's this (pointing to picture of jet on page)-asking for help/clarification." (20/3/19)

During a lesson on final sound identification, an interaction with Child B again highlighted the importance of the children understanding the vocabulary being used;

> "Child B: jet /j/
>
> T(Teacher): The last sound, the sound at the end.
>
> Child shrugged shoulders.
>
> T: Do you understand what last means?

> Child B: No.
>
> We used 3 squares of paper to illustrate beginning, middle, end sounds. Also used children to form a queue to demonstrate ordinal number.
>
> T: do you understand now?
>
> Child B: Nodded head.
>
> T: So what's the last sound in jet (enunciated /t/)
>
> Child B: /t/.
>
> Visual very important here, moving finger to first, middle, last." (Teacher Observation, 28/3/19)

While it may have appeared that the child simply could not identify final sounds in words, this was not the case, and this is an important observation to make when carrying out phonological awareness assessments. The importance of explicit instruction is evident here, which is mentioned often throughout phonological awareness literature.

Here, I reflect on the importance of developing my pupil's oral language before beginning more formal literacy instruction:

> "…Coming from a disadvantaged background, many of my pupils come to school with low levels of oral language-they may not have been immersed in language and therefore launching into a programme which assumes they are ready to begin learning and remembering the letters of the alphabet. Were I to teach junior infants again in the future I would definitely delay the teaching of letter sounds until at least December/January in order to devote more time to fully immerse the children in listening, oral language and p.a skills so when it comes to phonics they are more ready." (Reflective journal entry, 9/1/19)

The importance of oral language development on future academic achievement has been well documented in literature and evidence suggests that children with limited oral

language ability are more likely to present with reading difficulties than their peers (Catts et al., 2001). Therefore, it is important that early years teachers spend time developing oral language skills with pupils so that they will be able to access phonological awareness and phonics instruction effectively. Phonological awareness has also been described as one of the 'universal elements' in literacy development across languages (Gillon, 2018). Therefore, it is important to encourage children with English as an additional language to also develop phonological awareness skills in their native language in order to understand whether difficulties simply relate to limited vocabulary and understanding or whether they may be presenting with a phonological delay or disorder (ibid).

4.3.2 Challenge

With six children scoring above 90% in the PAST pre-test, the importance of challenging these children became clear early on in the intervention. While it has been discussed often in the literature with regards to pupil engagement, I also noted it as a potential barrier to inclusion. Several of my observations showed that I felt the material was not challenging enough for all pupils, and therefore they were not being fully included in the project:

> "Too easy for some children" (17/1/19)
>
> "Too easy for some of the class" (29/1/19)
>
> "Some students reported that this was 'easy'-could I make it more challenging?" (28/1/19)
>
> "Slightly too easy-most children were well able, becoming bored." (30/1/19)

I found it difficult to cater for those less able and the class, while also keeping those with more advanced phonological awareness skills engaged and motivated. While small group and individual support had focused on those pupils who were struggling, I simply did not have the time to take those more able in similar groups. As the intervention progressed, however, I began to find ways in which I could challenge these children within whole

class instruction. By differentiating the number of syllables, phonemes or words presented in an activity, the tasks could be easily differentiated:

> "Words over 4 phonemes are difficult for most but present a good challenge for child c, f "(Teacher Observation, 12/3/19)
>
> "Easy to challenge those more able with more words per sentence" (Teacher Observation, 14/1/19)

The level of manipulation of a word required could also be subtly changed during whole class lessons, for example some children were asked to simply identify phonemes or syllables in words, others were asked to switch or substitute phonemes. The children were also given choices over how they wished to present their answers during lessons. Those children with more advanced phonological awareness skills often represented their answers in writing, with some writing full sentences to accompany their work, while others chose to draw or simply label theirs. The children themselves began to request more difficult material, showing that being challenged was something which they enjoyed and wanted more of:

> "Child L: Are we going to do super hard ones?" (Children's Feedback, 21/3/19)
>
> "Child C: you said you were going to give us hard ones today!" (20/3/19)
>
> "I like when you make the words really hard!" (2/3/19)
>
> "I want to change it for the middle. I liked it because it got harder and harder." (1/4/19)

This can also be seen as a move towards an increased growth mindset, as discussed in the previous section. It provides further evidence of the children becoming more active participants in their own learning experiences and feeling a sense of autonomy over the project.

My increased efforts to include more challenging material within the lessons was also reflected by my critical friends as they observed my practice:

> "Teacher used various level of challenging rhymes to meet the varying abilities in the class." (Critical Friend Observation, 1/2/19)
>
> "They even requested harder words to stretch out." (Critical Friend Observation, 4/4/19)
>
> "Teacher asked both higher and lower order questions to include all children in the lesson." (Critical Friend Observation, 2/4/19)
>
> "Teacher finished off lesson with digraph at end of word-challenging children at end." (Critical friend Observation, 2/4/19)

The importance of keeping the children challenged is clear from the data presented, and I suggest that there was scope for further challenge within this research project. Challenge has been described often within the literature presented in chapter 2 as a key factor in engagement.

Wasserstein (1995) found that pupils were more likely to choose challenging material when given a choice. Researchers have also argued the need for teachers to provide pupils with opportunities to challenge themselves at an appropriate skill-level (Strati et al., 2016). If pupils feel a sense of accomplishment having completed a challenging task, their need for competence is fulfilled, and engagement and motivation will increase (Deci and Ryan, 2008).

As a result of the difficulties I encountered with adequately differentiating lessons, while also taking into account time constraints and resources, I propose that a tiered station teaching approach to phonological awareness would be more effective in meeting all children's abilities. This would allow for more targeted instruction at each skill level and could be done with the support of a learning support teacher or Special Needs Assistant

so that children receive that maximum amount of explicit instruction at a level suitable to them. This has been echoed by researchers Lonigan et al. (2008) and Gillon (2018) who recommend that children are grouped into flexible subgroups, in order to focus on the appropriate level of the continuum for each group.

4.3.3 Pupil Feedback and Choice

In an effort to ensure that the children felt as though they were equal partners throughout the project, pupil feedback became one of the most important aspects of the intervention. This also promoted pupil engagement, as the children felt a sense of autonomy over their 'sounds project'. Following each lesson, the children were given time to feedback on what they liked/disliked about the lesson and whether they would like to change or repeat any of the activities. This proved difficult initially, as the children did not have the appropriate vocabulary to give meaningful feedback other than "it was good" or "I liked it." The children often referred to what they liked about the lessons without going into more detail:

"I liked that we got to run." (17/1/19)

"I liked moving around" (29/1/19)

"I liked working with my partner." (28/1/19)

With encouragement that it was O.K to tell me what they did not like, or wanted to change, the children gradually became more assertive in their feedback and began to make requests:

"Can you make it so we can go outside?" (17/1/19)

"Can we do it again the next day?" (31/1/19)

"I really loved touching the bubble wrap, can we play this again?" (11/3/19)

"I wanted to change it because I wanted to make it harder by doing it on our own."(21/3/19)

"next time maybe we change it, we get to keep the card forever." (27/3/19)

Feedback became a useful way to view the lessons from the pupils' lens, rather than just my own and was an important tool in gauging whether the children were actually enjoying the lessons, enjoyment and engagement being values which I had claimed to hold. The children's feedback provided valuable information which helped me to plan the content of the lessons going forwards.

Another way in which I tried create a more inclusive and equal atmosphere was to offer the children choices regarding where they wished to sit, the level of difficulty the activity or questions were to entail, whether they would like to draw or write their response to the questions being asked. By offering these choices I also wanted to reinforce the idea that the children were co-researchers in the project, with autonomy coming up often in the literature as important to pupil engagement.

When asked in the post-intervention questionnaire, 'Did you get to make choices during our sounds project? What choices did you get to make?', all except two children were able to give examples of choices they made:

> "I got to make some decisions. I got to pick which partner I got. In the funny writing thing I got to pick what I writed."
>
> "Yes I got to make choices like the last sound or the middle sound or the first sound. I got to make choices when you asked us did you like it or did you not like it and you made the words harder for me."
>
> "Yes. We got to pick what words we wanted, easy and hard. We get to choose where we sit in the circle." (Post-Intervention Questionnaire, 2019)

By allowing my teaching to be more child-led, I was able to create a more inclusive and equal partnership between myself and the children, an assumption I had made was already

happening, but perhaps had not been the case. As I reflected in a critical reflection assignment:

> "..Although I value equality and fairness and thought I had been sincere in my efforts to teach in an engaging manner, in this small way I was exerting power over my pupils by prescribing them weekly activities that I assumed they would want to do, rather than asking them what they would like to do. Identifying these contradictions or tensions in my practice is vital to the reflective process." (Critical Reflective Essay, February 2019)

The children's answers suggest that they were aware of being given choices and that they did in fact feel a sense of autonomy over the intervention through the choices they were given. This provides evidence of a more equal and inclusive classroom environment emerging throughout the intervention.

The importance of educators engaging with the pupil voice has been a much-discussed topic within the Irish Education System in recent years. Drawing on the United Nations Convention on the Rights of the Child (United Nations, General Assembly, 1989) which requires that pupils are provided with opportunities for their voices and opinions to be heard on education matters, the Department for Children and Youth Affairs has created a National Strategy on Children and Young People's Participation in Decision Making. The strategy identified that; "Children and young people will have a voice in decision-making in early education, schools and the wider formal and non-formal education systems […] as a priority objective for action." (Department of Children and Youth Affairs, 2015:11). The National Council for Curriculum and Assessment also advises that; "Young people need to know they have been heard and to have their input and opinions acknowledged." (Flynn, 2017:4).

This finding is also consistent with Deci and Ryan's (2008) work on self-determination theory (S.D.T) which acknowledge autonomy, along with relatedness and competence, as factors necessary for authentic engagement. It is also aligned with the new Language Curriculum's increased emphasis on pupil choice, with motivation and choice named as specific learning outcomes within the strand of reading.

Through making sincere efforts to differentiate my teaching and by providing the children with choices regarding their own learning, I feel strongly that I have lived towards my values of inclusion and equality during this research project and will continue to include these elements in my future practice.

4.4 Phonological Awareness Screening Test Results

As discussed, the pupils were pre and post-tested using the PAST This allowed me to gather baseline data about the children's phonological awareness, identify those who may need extra support and measure any progress made following the intervention. The pre-test revealed varying levels of phonological awareness within the class. It also revealed a relatively high level of phonological awareness in many pupils, seven of whom scored over 80% in the test. Interestingly, several of these children had already mastered phonological awareness skills such as adding and substituting phonemes which would typically be seen in older children (age 7-8). The results also indicated that several children displayed a low level of phonological awareness and were unable to attempt tasks such as syllable blending or rhyme identification which would be typical of their age group. Pupils B and O scored just 16% in the pre-test, while child Q scored 34%. These children were taken on a group and individual basis in addition to whole-class instruction in order to increase their phonological awareness and reduce the potential risk of reading difficulties in the future.

The post-test indicated that each child had made progress in phonological awareness and all had improved their scores. The biggest improvement was in those children in tier 3 (Child B, O and Q). Child Q's score increased significantly from 34% to 82%, while Child B and O also

This provides evidence that explicit and intensive small-group and individual instruction can be effective in increasing children's phonological awareness. Pre and post-test results are presented for further reference in graph form in appendix 6.

4.5 Conclusions

This chapter has presented and discussed the main findings that arose from the research. Through the use of a multi-modal approach, engagement, motivation and enjoyment were promoted. A threat-free environment, in which the children were encouraged to 'have a go' also promoted engagement and led to a growth mindset becoming evident within the pupils. Factors important to inclusion included oral language ability, level of challenge and pupil feedback and choice. These findings were somewhat interlinked, as engagement promoted inclusion and vice versa.

Through the examination of the data collected, I now claim to know how to teach phonological awareness in a more inclusive and engaging manner, two educational values which I had stated from the outset. Due to the fact that each child made progress in phonological awareness as measured by the PAST, I am satisfied that the intervention was successful in improving the phonological awareness levels in my class.

The next and final chapter will again summarise these findings, discuss the strengths and limitations of the study and outline suggestions for further research within the area of phonological awareness instruction.

Chapter 5 Conclusions

5.0 Summary of Research

This self-study action research project sought to create new knowledge about how my practice in the area of phonological awareness could be enhanced. Working within an action research paradigm required me to critically reflect on my practice, notice contradictions and make changes towards improvement. My teaching of phonological awareness was identified as an area which I felt could be improved and following a review of the relevant literature, a 10-weeek classroom-based phonological awareness intervention was introduced which was multi-sensory in approach.

Findings of the study indicated that a multi-modal, multi-sensory approach to teaching phonological awareness was effective in engaging pupils and increasing their motivation and commitment to learning. Several factors also emerged as influential to pupil inclusion and equality within the project. These were: oral language and vocabulary, challenge and pupil choice. Pupils presenting with low levels of oral language struggled to access some aspects of the lessons which made it difficult to assess their level of phonological awareness. Similarly, if more phonologically aware pupils were not challenged according to their ability, they were not authentically engaged and were therefore not being truly included in the project. All of the pupils progressed in phonological awareness with an average rise of 21.8% in the PAST These results are illustrated within appendix 8. This provides evidence that the intervention had a positive impact on the children's learning.

Perhaps the most interesting finding for me, was the children's increased growth mindset throughout the project. Through clearly verbalising 'think time' as a learning strategy, and modelling positive feedback, the children became increasingly willing to 'have a go', without fear of being wrong. This was not an explicit goal of the intervention, yet it is

something which has made a positive change to many other aspects of my teaching practice.

5.1 Limitations of the Study

While every effort was made to ensure validity and reliability in this research study, limitations exist. The participants of this study included mainly Irish children, with only one child who spoke English as an additional language and one child with diagnosed speech and language difficulties. The results may have been different within a more diverse classroom sample. It must also be acknowledged that with 19 pupils, the pupil-teacher ratio was relatively low compared to Irish classroom standards (OECD, 2018). This small class-size allowed for small-group and individualised attention which may not be the case in larger classes. As this study took place within a DEIS context, the results may also be different within an alternative school setting.

Finally, unintentional bias may be present in both the questionnaire design itself and in the information gathered which would affect the validity of this data. As the information was gathered on a one-to-one basis, pupils may have felt pressured to choose the 'right' answer rather than the truthful one, therefore producing biased results. Similarly, critical friends may have felt the need to provide only positive feedback during their lesson observations.

While this study's results are not generalisable or replicable due to the specific context in which it took place, the results may be adapted and applied to other educational contexts.

5.2 Suggestions for Future Practice

In light of the findings presented, a number of recommendations can be made. A key theme which emerged was the importance of oral language and vocabulary on a child's ability to access phonological awareness instruction. As already stated, children from disadvantaged backgrounds are more likely to come to school with lower levels of oral language ability than their more advantaged peers (Gillon et al., 2019). The Primary Language Curriculum (NCCA, 2015) acknowledges the central role oral language plays within every aspect of the curriculum and I would reiterate the need for teachers to spend time explicitly targeting this important skill alongside phonological awareness instruction.

Given the success of the intervention in improving all pupils' phonological awareness levels, I agree with the findings contained within the literature review that phonological awareness instruction should be taught:

1. In a systematic and explicit manner, with short, intensive periods of instruction ranging from 10-14 weeks
2. Using concrete materials, visual aids and props
3. As a pre-curser to phonics instruction before being taught alongside it as part of a balanced approach to literacy

In order to promote authentic engagement and inclusivity, instruction should provide opportunities for pupil feedback and choice, a suitable level of challenge and create a safe and threat-free learning environment where mistakes are valued. In consideration of the difficulties faced with differentiation, I also suggest a station teaching approach to phonological awareness be taken at infant level, which might better cater for varying levels of phonological awareness in the class.

5.3 Recommendations for Further Research

This study sought to improve my knowledge of phonological awareness and my practice in this area. Due to the importance of phonological awareness within early literacy development, it may be considered necessary to conduct more generalised research into current practices of phonological awareness instruction and teacher knowledge and understanding on a larger scare within an Irish context. As this study was conducted within a specific school setting, it may also be of interest to conduct a similar study within other types of schools.

5.4 Conclusion

This study sought to generate new knowledge about how I could teach phonological awareness in a more effective way. I now claim to know how to teach phonological awareness in a more pedagogically appropriate, engaging and inclusive manner. In this way, I am better able to live towards my educational values. These claims to new knowledge are backed up by the evidence provided in the previous chapter.

While this research has answered several questions for me, it has raised many more. As Greene (2001) proposes, I am slowly 'learning to love' these questions. The professional learning which has resulted from this research has not only changed my teaching of literacy but has permeated every aspect of my practice.

Through giving my pupils a solid foundation in phonological awareness, I believe that I am some way in ensuring that they will have equal access to reading and writing and therefore society as a whole as they continue on their learning journey.

5.6 Final Thought

"...if you can sound it out then you can write it and if you can write it you can read it" (Post-Intervention Questionnaire, 2019).

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Appendices

1. Research Schedules

Pre-Research Schedule (September-December)

August	Considered research question, looked at research methodologies and principles of action research
September	Submitted research proposal Reflective Journal Entries
October	Received board of management permission Reflective Journal Entries Ethical considerations form Information afternoon with parents Begin to gather literature for literature review Met with supervisor to discuss research proposal
November	Reflective Journal Entries Gather and examine literature for literature review Ethical permissions received Received permission from parents, children and critical friends
December	Reflective Journal Entries Consider methodologies, methods of data collection, etc.

Phonological Awareness Intervention Schedule (January-April)

Week	Action
7th-11th January 2019	Pre-test all student using Phonological Awareness Screening Test (15 minutes per test) Correct and analyse tests Group Children in Tier 1 and Tier 2 groups based on test results Journal entries Observations
14th-18th January 2019	Begin Phonological Awareness Intervention P.A Skills: Revise Syllabic Awareness (counting, blending, isolation) Word Work Journal Entries Observations
21st-25th January 2019	P.A skill: Rhyme Recognition Journal Entries Observations
28th January- 1st February 2019	P.A skill: Rhyme Completion Journal Entries Observations Critical Friend Observation
4th-8th February 2019	P.A skill: Rhyme Production Journal Entries Observations

21st -25th February 2019	MID-TERM
28th February- 1st March 2019	P.A skill: Rhyme Production (Continued from previous week) Journal Entries Observations
4th-8th March 2019	P.A skill: Phoneme Blending Journal Entries Observations Critical Friend Observation
11th-15th March 2019	P.A skill: Phoneme Isolation (Initial, medial, end) Journal Entries Observations
19th- 22nd March 2019	P.A skill: Phoneme Deletion Journal Entries Observations Critical Friend Observation
25th -29th March 2019	P.A skill: Phoneme Segmentation Journal Entries Observations
1st-5th April 2019	P.A skill: Phoneme Addition and Subtraction Phonological Awareness Screening Post Test Journal Entries Observations Critical Friend Observation
8-12th April 2019	Phonological Awareness Screening Post Test

	P.A Skill: Phoneme Substitution Journal Entries Observations

2. Observation Logs

Teacher Observation Form

<table>
<tr><td>Date:</td><td>P.A
Skill:

Tier Level:

Children Involved:</td><td>Methodologies used (tick):
Music, rhythm, rhyme
Humour
Movement
Concrete materials
Pair work
Group work
Link with literature (Big Books)</td></tr>
<tr><td rowspan="2">Child (by letter):</td><td colspan="2">Comments:</td></tr>
<tr><td colspan="2">Pupil’s Feedback on Lesson:</td></tr>
</table>

Critical Friend Observation Form

Date:	Lesson Tier:
Prompt questions Was the lesson fun? Were the pupils engaged? Did the pupils understand what was being taught? Were all pupils included in the lesson? Were the pupils given 'think time' before being asked to answer? Were multi-sensory methodologies used during the lesson? E.g. were movement, music, rhythm, etc. evident in the lesson? Which methodologies used do you think were effective/ineffective? Was the targeted phonological skill explicitly modelled for the pupils? Were the pupils given the chance to give feedback on the lesson? Would you change anything about the lesson? Did you notice any examples of equality/inequality being displayed during the lesson? Comments:	

3. Post-Intervention Questionnaire

Name: _____

1. **Did you enjoy our sounds project? Why?**

2. **What was your favourite part of our sounds project?**

3. **What did you learn during our sounds project?**

4. **What helped you to learn?**

5. **Do you think what we learned in our sounds project will help you with your reading and writing? How will it help you?**

6. **Did you get to make choices during our sounds project? What choices did you get to make?**

4. Information Letters and Consent Forms

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas
Ollscoil Mhá Nuad.

Date:_____

Dear Chairperson,

I am writing to you to seek permission from the Board of Management to undertake a self-study action research project in order to reflect on and enhance my teaching skills and approaches. This is part of the Master of Education (Research in Practice) degree that I have enrolled in for this academic year. The Action Research may entail the following elements:

Observations of children in the classroom

Collection of samples of a child's work

Audio recordings of children speaking

Video Recordings of children working (no faces or identifying features will be shown)

The focus of the study will be on how my teaching of phonological awareness can be improved in order to benefit the children in my class. Phonological awareness is the ability to identify and manipulate sounds in words and is a strong indicator of reading success in the future. The school or children's names or any other identifying information will not be used in any aspect of the study and anonymity and confidentiality will be maintained. Data will be kept in a locked cabinet and on a password protected computer in the classroom and will be destroyed after a period of ten years in accordance with Maynooth University's Ethics Policy. The research will be carried out in a sensitive and non-stressful manner. All participants will have the right to withdraw at any stage of the research. I would be grateful if you could give permission for me to seek consent from the children and their parent(s)/Guardian(s) to undertake this work. If you need any additional information, please do not hesitate to contact me through the school's secretary on _____ or through email at alice.finlayscott.2019@mumail.com.

Yours sincerely,

Alice Finlay-Scott

Pupil Assent Forms

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

Child's name: _____

Date: _____

I am trying to find out how I can improve my teaching of sounds in our classroom. I would like to watch you and see how I can help you learn best. I would like to listen to you when you are in school and write down some notes about you.

Would you be ok with that? Pick a box

Yes ☐ no ☐

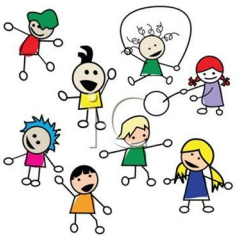
I have asked your Mum or Dad or Guardian to talk to you about this. If you have any questions, I would be happy to answer them. If you are happy with that could you sign your name below?

If you change your mind after we start, that's ok too.

Signed: _____

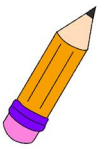
Maynooth University Froebel Department of
Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas
Ollscoil Mhá Nuad.

Child's assent to participate



My parent/guardian has read the information sheet with me and I agree to take part in my teacher's research.

Name of child (in block capitals): _____



Signature: _____

Date: _____

Parental Information Letters and Consent Form

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

Maynooth University
National University of Ireland Maynooth

Information Sheet

Parents and Guardians

Who is this information sheet for?

This information sheet is for parents and guardians.

What is this Action Research Project about?

Teachers undertaking the Master of Education in the Froebel Department of Primary and Early Childhood, Maynooth University are required to conduct an action research project, examining an area of their own practice as a teacher. This project will involve an analysis of the teacher's own practice. Data will be generated using the methods outlined below. The teacher is then required to produce a thesis documenting this action research project.

What are the research questions?

'How can I more effectively develop phonological awareness in my pupils?'

What sorts of methods will be used?

Observations, reflective journal, questionnaires, discussion, children's work samples, multi-media recordings and lesson plans

Who else will be involved?

The study will be carried out by me, Alice Finlay-Scott, as part of the Master of Education course in the Froebel Department of Primary and Early Childhood Education. The thesis will be submitted for assessment to the module leader Dr Bernadette Wrynn and will be examined by the Department staff. The external examiners will also access the final thesis.

What are you being asked to do?

You are being asked for your consent to permit me to undertake this study with my class. In all cases the data that is collected will be treated with the utmost confidentiality and the analysis will be reported anonymously. The data captured will only be used for the purpose of the research as part of the Master of Education in the Froebel Department, Maynooth University and will be destroyed after a period of ten years in accordance with University guidelines.

Contact details: Student: Alice Finlay-Scott **Email:**

alice.finlayscott.2019@mumail.com

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

Date:_____

Dear Parent(s)/Guardian(s),

I am a student on the Master of Education programme at Maynooth University. As part of my degree I am doing a research project. The focus of my research is based on my teaching of phonological awareness and how it can be improved. Phonological awareness is the ability to identify and manipulate sounds in words and research has shown that it is a significant indicator of future reading success.

In order to do this, I intend to carry out research in the classroom by implementing a variety of approaches to teaching phonological awareness. A range of strategies will be explored to discover how I can best meet the varying learning styles and abilities in the class.

Data will be collected using teacher observations, samples of the children's work, a daily teacher reflective journal, pupil test scores and multi-media recordings of the children working in class. The children will be asked their opinions through teacher designed questionnaires and discussion.

The research will be anonymous and no child's name or the name of the school will be included in the thesis that I will write at the end of the research. You have the right to withdraw your child at any stage during the research without consequence. The research will be conducted in a non-stressful and sensitive manner.

All information will be confidential, and information will be destroyed after a period of ten years in accordance with the University guidelines. The research will not be carried out until approval is granted by the Froebel Department of Primary and Early Childhood Education.

I would like to invite you and your child to give permission for him/her to take part in this project.

If you have any queries on any part of this research project feel free to contact me by email at alice.finlayscott.2019@mumail.ie or through the school's secretary on _____.

Yours faithfully,

Alice Finlay-Scott

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

PARENTAL CONSENT FORM

I have read the information provided in the attached letter and all of my questions have been answered. I voluntarily agree to the participation of my child in this study. I am aware that I will receive a copy of this consent form for my information.

Parent / Guardian Signature: _____

Parent / Guardian Signature: _____

Date: _____

Name of Child: _____

Date: _____

Critical Friend Consent Form

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

Critical Friend Consent Form

You are being asked for your consent for your comments and observations to be used as data for the purpose part of a self-study action-research project conducted by me, Alice Finlay-Scott into how I can more effectively develop my pupil's phonological awareness. This data will be will kept in a locked cabinet and on a password protected computer in the researcher's classroom. Only the researcher and examiners will have access to this data archive, and it will be destroyed after a period of ten years in accordance with University guidelines. All data will be reported anonymously and treated with confidentiality. You have the right to withdraw from the research at any stage, without consequence. Please contact me at alice.finlayscott.2019@mumail.com if you require any further information regarding any aspect of the research.

I give my permission for my comments and observations to be used as data in this self-study action research project.

Signed: _____

Date: _____

5. Researcher Declaration

Maynooth University Froebel Department of Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath- Oideachas Ollscoil Mhá Nuad.

Declaration by Researcher

This declaration must be signed by the applicant(s)

I acknowledge(s) and agree that:

a) It is my sole responsibility and obligation to comply with all Irish and EU legislation relevant to this project.

b) I will comply with Irish and EU legislation relevant to this project.

c) That the research will be conducted in accordance with the Maynooth University Research Ethics Policy.

d) That the research will be conducted in accordance with the Maynooth University Research Integrity Policy.

e) That the research will not commence until ethical approval has been granted by the Research and Ethics committee in the Froebel Department of Primary and Early Childhood Education.

Signature of Student: Alice Finlay-Scott

6. Phonological Awareness Screening Test Results