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An analysis of the Phonics Dance in a semi-rural Midwestern elementary school

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by

Amy Kathleen Mullins

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the

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An Abstract of

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This study examines the characteristics and effectiveness of the Phonics Dance, a program developed to assist students in learning how to identify letter names, letter sounds correspondences and rhyme patterns through the use of multiple modalities such as chants, movement and visual cues. Twenty-two first grade children who were taught through the Phonics Dance approach and fifty-two first grade children that taught phonics with a well-respected publisher's basal phonics program were recruited as samples for this study. In the school where the Phonics Dance was used the student population was designated as a high poverty status elementary and in the school where the basal program was used the student population was designated as medium-low poverty elementary. The AIMS web assessments (Achievement Increase Monitoring Management assessments) were used to measure student progress in the areas of letter naming, letter identification, phoneme segmentation and non-sense word identification at three time points, in early August, October and December. In addition, observations, field notes and artifacts were collected to better understand the classroom contexts and actual phonics-related instruction that occurred. These data will provide evidence that both the Phonics Dance

and basal phonics groups benefited from systematic phonics instruction. However, the Phonics Dance program supported quicker acquisition of word recognition skills.

Scott, your wisdom and sacrifices provided an opportunity for me to pursue and earn my doctorate. I truly married my best friend.

Cade and Lauren, this is for you. Always remember to work hard and when you think you can't, you CAN!

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List of Abbreviations

AIMS .....Achievement Increase Monitoring System
ANOVA .....Analysis of Variance
BP .....Basal Phonics
IDEA.....Institute for the Development of Educational Achievement
IRA .....International Reading Association
ITA.....Initial Teaching Phonics
LN.....Letter Name
LS .....Letter Sound
MORE.....Mentoring Ohio for Reading Excellence
NW.....Non-sense Word
PALS.....Peer-Assisted-Literacy-Strategies
PD .....Phonics Dance
PS.....Phoneme Segmentation
RAZ .....Reading A to Z
ZPD.....Zone of Proximal Development

Chapter One

Introduction

Many Children Struggle to Decode Words

The problem addressed in this study is that many children struggle to decode words, learning to decode words in English entails knowing the alphabet as well as being able to associate sounds with specific letter and groups of letters. Eighty-four percent of the words in English language are phonetically regular and therefore relatively readily decodable once a child becomes proficient at making graphophonemic correspondences (Moats, 2000). However, students who are taught phonics without a sound methodology or aren't taught phonics at all are at high risk for failure to become literate. Many children have difficulty learning to apply the phonics rules of the English language and remembering the exceptions. When this happens, learning to decode words becomes a struggle. Students who can't decode with relative ease become frustrated and apathetic toward the entire reading process and often become non-readers or fall behind their peers in their ability to read (Stanovich, 1994).

Phonics, according to Stahl (1992), refers to the various approaches used to teach children the orthographic code of a language and the relationships of spelling patterns to sound patterns. The strategies for teaching phonics are varied. For many, teaching phonics involves the use of traditional methods such as work-sheets and skill and drill practice (Stahl, 1992). Yet, many researchers agree that effective phonics instruction must be scaffolded and methodically implemented to meet the needs of each learner (e.g., Adams, 1990; Dahl, Scharer, Lawson, Grogan, 2001; National Reading Panel Report,

2000). Added to the need for systematic phonics instruction, is the need for instructional methods that engage learners.

Turner and Paris (1995) indicated that classroom tasks affect students' motivation for literacy. Students who are taught phonics with methods that are considered boring "skill and drill" worksheets- that are unappealing to teachers and students alike have a negative effect regarding motivation for literacy (Turner and Paris 1995). As Turner and Paris argue, literacy tasks must provide appropriate challenges, choices, opportunities to collaborate with others and build meaning through reading and writing (1995). Given that the research is quite clear that systematic instruction about the graphophonemic structure of English is vital, there is also a need for systematic phonics instruction that is engaging and provides students with meaningful learning opportunities. In this study, I examine the use of an instructional approach called the "Phonics Dance," that is purported to both systematically introduce and help learners practice phonics skills, as well as to be engaging and motivating to learners.

In 2000, an Ohio school teacher named Ginny Dowd created a program she called the Phonics Dance. Since the creation of the Phonics Dance program teachers all over the country in states including California, Texas, Indiana, Oklahoma, Alabama and Kentucky have implemented this approach for phonics instruction. In addition, the Phonics Dance has been adopted by a teacher in Gahanna and a military mom in Japan. Thousands of people have viewed videos on YouTube that feature segments of the Phonics Dance. As its creator has explained, "the Phonics Dance is a multileveled program that provides success for all students with reading and writing skills," (Dowd, 2010). However, little is known about the Phonics Dance curriculum and how it aligns with current research-based

notions about best-practices for phonics instruction. Although there is anecdotal evidence that teachers and students experience success with reading and writing skills when using the Phonics Dance, in this dissertation, I address the need for a systematic examination of the effectiveness of the Phonics Dance approach as compared to approaches used in classrooms that do utilize a more "traditional" approach that includes using materials from basal phonics programs.

In this study I examine Mrs. Dowd's curricular program called the Phonics Dance. I analyze the constituent parts of the program and present information about first-grade students learning outcomes after sixteen weeks of phonics instruction using the Phonics Dance, as compared to those of students who were taught using materials from a basal reading program. In the rest of this chapter, I make a case for why the examination of phonics instruction approaches, like the Phonics Dance is important. I will begin with an overview of some of the fundamental skills children need in order to learn to decode written English.

The Building Blocks of Learning to Read

Phonemic awareness, the ability to identify and manipulate the individual sounds in word is often a difficult task for many children. Stanovich (1994) indicates that phonemic awareness plays an important role in children's learning to make letter-sound correspondences. In addition, several studies indicate that student performance on phonemic awareness tasks in kindergarten and first grade are more reliable predictor of later reading achievement than IQ tests (Stanovich, 1986). Students must have the ability to hear and manipulate sounds in words that prepare them for understanding phonics: the

ability to match the sounds of each word to the letters that comprise the word. Students lacking phonemic awareness are at a significant disadvantage in their ability to use phonics and become fluent readers (Adams, 1990).

According to Ehri (1998) children progress through a series of four phases as they learn to read: pre-alphabetic, partial alphabetic, full alphabetic and the consolidated phase, by which time they are able to recognize larger chunks of words and are moving into more advanced phonics work with word families and compound words. Children must have a substantial level of phonemic awareness before transitioning from the pre-alphabetic to the partial alphabetic phase. It is during the partial alphabetic phase that children explore a number of letter sound correspondences and must have the ability to segment the beginning or the beginning and final sounds in words (Ehri, 1998). Indeed, children must have sufficient levels of phonemic awareness to understand the alphabetic principle and break the spelling to sound code.

Phonemic awareness instruction trains the learner to hear and manipulate the individual sounds of a word so opportunities to develop phonemic awareness are important. Bradley and Bryant (1985) conducted a study that provided strong evidence suggesting that early detection of phonemic awareness deficits followed by phonemic awareness training can compensate for reading deficits displayed by children with delayed phonemic awareness skills. Although there is no amount of specific phonemic awareness prescribed, most children benefit from some phonemic awareness instruction that is playful in nature such as games and songs that focus on listening to the sounds within words (National Institute of Child and Human Development, 2000).

The National Reading Panel Report (2000) indicated that students benefit from systematic phonics instruction citing studies that concluded that, introducing a predetermined set of phonics elements sequentially to children provided them with a quicker start to learning to read as compared to nonsystematic or no phonics instruction at all. Some students simply do not recognize the alphabetic principle and its link to reading without assistance and require systematic direct instruction regarding the alphabetic principle, phonological analysis and alphabetic coding (Stanovich, 1994). There are several approaches that have been used to teach phonics systematically including synthetic phonics, analytic phonics, analogy phonics and phonics through spelling. Spelling involves the student applying knowledge of letter sound relationships. The student must hear the sounds that comprise the word and recall the letter or letter patterns associated with the sound and then write them. Synthetic phonics and analytic phonics are considered more traditional methods of teaching phonics compared to analogy phonics and phonics through spelling, which are regarded as more contemporary (Stahl, Duffy-Hester, & Stahl, 1998).

Children do not begin recognizing words by analogy until after they are knowledgeable of individual letter sound associations. Reading by analogy is a more advanced form of word recognition than sequentially decoding because it requires the reader to remember visual alphabet forms, process regularities of the spelling of the word and knowledge of lexically based patterns (Ehri, 1998). Recognizing words through analogy may be more common among more advanced readers.

The Matthew Effect

Derived from the Gospel of Matthew, Stanovich (1994) uses the term "the Matthew effect" to describe how the rich-get-richer and poor-get-poorer in regard to reading development. That is, children who are initially successful in the process of reading acquisition continue to make significant gains. In contrast, children who struggle initially make gains at a significantly slower rate and eventually do not experience the same growth in their skill levels as their peers. According to Stanovich (1994) children who enter school with very little or no phonemic awareness ability struggle to acquire alphabetic coding skills and this leads to difficulty recognizing words. When children expend so much cognitive capacity recognizing words, reading for meaning is greatly compromised because so few cognitive resources are available for processing the meaning of the words they are decoding. Reading can become frustrating, exhausting and unrewarding causing the child to avoid it and thereby participate in fewer reading related activities. The development of automaticity and speed in word recognition is further delayed because of a lack of exposure and practice with print. The activity of reading becomes extremely difficult as the student struggles to read for meaning and does not find the experience rewarding. Thus, the student avoids practice and the negative implications amplify. Given that the amount of print exposure is a predictor of vocabulary growth, knowledge acquisition and many other verbal skills, students who participate in less practice with print are at a great disadvantage (Stanovich, 1994).

Systematic Phonics Important yet Absent From Many Classrooms

How to instruct early readers has been an important point of discussion in US educational circles for many decades. Though many studies have been conducted, there were still many controversies regarding instructional practices concerning beginning

reading. In the mid-1960s, the Cooperative Research Studies in First-Grade Reading Instruction were launched and included 27 individual studies exploring the effects on early reading growth of several approaches to beginning reading instruction under similar experhymental conditions. Each study had a project director who analyzed the data and then made the data available to the Coordinating Center, enabling an analysis across individual projects. These studies, now known as "the First Grade Studies," definitively showed the importance of systematic phonics instruction. From the more recent National Reading Panel Report (2000) we have additional evidence demonstrating that students benefit from systematic phonics instruction. The authors of that report cite studies concluding that introducing a predetermined set of phonics elements sequentially to children provided them with a quicker start to learning to read as compared to nonsystematic or no phonics instruction at all. In addition, there is no specific type of systematic phonics instruction that is superior to others.

However, systematic phonics instruction is still absent from many elementary classrooms. Bowey (2006) indicated that roughly 40% of New Zealand adults that were taught to read at a time when the whole-language approach was dominant, lack the literacy skills needed to manage the text they encounter in daily life and work. The most effective instruction implements systematic synthetic phonics. Children should be taught letter sound patterns explicitly and introduced to a large range of words containing these patterns within a variety of rich meaningful text. Phonics should not be taught in isolation. Rather phonics lessons should be well designed and with some creativity to provide students with enjoyment.

Mesmer and Griffith (2005) conducted a survey that solicited teachers' opinions regarding phonics instruction. Teachers were provided a list of descriptors to choose from regarding their views of phonics instruction. Over 50% of the participants responded to descriptors that contained the words "systematic phonics." Another 20% responded to the "word family" descriptor. Five percent of the respondents indicated that phonics should be taught on an "as needed basis." Considering what we know about the benefits of systematic phonics instruction from the results of the First Grade Studies and the more recent National Reading Panel Report, these results are surprising.

Barriers

As mentioned above, a large body of evidence indicates that students benefit from systematic phonics instruction. However, other studies indicate that systematic phonics instruction is lacking in many elementary classrooms. A few factors that may contribute to the absence of systematic phonics instruction in many elementary classrooms are (a) lack of materials, (b) a lack of teacher knowledge and (c) the history of phonics instruction over the last thirty years, in particular the whole language verses phonics debate. Next, I will examine each of these in turn.

Lack of materials. Many teachers associate phonics instruction with traditional worksheet-based instruction. Stahl (1992) indicated that, depending on the person, the word phonics has many implications such as "worksheets." However, there are, in fact, many non-worksheet based activities that are interactive and engaging that can help students learn to decode words. Among these are Cunningham's (2000) "Making Words," activity, and many word study phonics games such as those in the classic

textbook "*Words Their Way*" by Bear, Invernizzi, Templeton and Johnston (2007). Although there are various phonics activities available and many available without cost, many teachers do not have or do not take the time to acquire them. This may be in large part due to the second possible barrier, a lack of teacher knowledge.

Lack of teacher knowledge. Many teachers are confused about the meaning of the term phonics and lack fundamental knowledge regarding systematic phonics instruction and how to incorporate it into their classrooms. Messmer and Griffith (2005) assert that the word phonics has multiple meanings. One meaning of the word "phonics," is a system for encoding speech sounds into written words. Another is that "phonics," is a method of teaching learners relationships between letters and sounds and how to apply the code to recognize words. Thus educators may be somewhat confused when both the method of teaching and the content of what is to be taught are described using the same word. To add to the possible confusion, Reggie Routman (1996) indicated that educators are teaching phonics behind closed doors and are not talking about it. Stahl, Hester and Stahl (1998) suggested that phonics is now talked about but that there is a great deal of confusion about how to implement it. Considering the multiple meanings of the word phonics, the reluctance of educators to discuss phonics and the lack of clarity regarding how to teach phonics, it should not be unexpected that teachers lack basic knowledge of phonics, both phonics the system and the methods of teaching phonics. In addition, Messmer and Griffith (2005) reported that up to 20% of the over three thousand elementary school teachers they surveyed were unclear about the terms "systematic" and "explicit" when applied to phonics.

Whole language vs. phonics debate. In the late 1970s and 1980s, a huge debate about what was the most appropriate approach to early literacy instruction overwhelmed the literacy world. In one camp were the proponents of phonics instruction who believed that children benefit from early literacy instruction that emphasized learning the code. On the other side of the debate were whole language proponents who argued in favor of an approach that stressed meaning, using the text to decode along with some visual cues introducing phonics on an as needed basis. Whole language is an approach that teaches a moderate level of letter sound correspondences non-systematically and is considered an embedded approach that teaches phonics in response to individuals' needs in the context of teaching reading and writing (Stahl, Duffy-Hester & Stahl, 1998). For example, a student may be reading and encounter an unknown word. The teacher would take a few minutes and conduct a brief informal phonics lesson to help the child decode the word. This approach to phonics instruction is "ad-hoc" and completely in response to individual student's needs.

The rhetoric from the argument convinced many educators that whole language and phonics were opposed to each other. Thus, the phonics verses whole language debate created opposition between teachers who supported phonics instruction and those who believed in the whole language approach. Many teachers adopted the whole language philosophy and abandoned teaching letters in isolation (Stahl, Duffy-Hester and Stahl 1998). However, whole language advocates acknowledged that whole language teachers should be teaching phonics because decoding should, and has always been, a part of whole language instruction (Stahl, Duffy-Hester and Stahl 1998).

One consequence of the whole-language vs. phonics debate has been that instead of focusing on how best to teach children the code, the rhetoric from the whole-language movement created opposition between whole-language and phonics. As a result many teachers were left with the notion that those who utilized the whole-language approach did not implement systematic phonics instruction. Although, the reality was that teachers who implemented the whole-language approach also included phonics in their repertoire of approaches to teaching beginning reading. However, teachers who implemented the whole-language approach felt that they should not teach words in isolation and should only provide phonics instruction when students demonstrated a specific need. Thus the whole-language vs. phonics debate was a barrier for many teachers regarding the implementation of systematic phonics instruction.

More recently, the National Reading Panel Report (2000) suggested that students benefit from a balanced approach to literacy that includes phonemic awareness, phonics, vocabulary and comprehension. More specifically, systematic phonics is more beneficial and provides children with a quicker start to reading than phonics that is offered in response to need or not teaching phonics at all. Additionally, the National Reading Panel Report advocated implementing some type of systematic phonics program to guide phonics teaching.

A Need for Engaging Phonics Materials & Methods

There are several studies that have been conducted to examine phonics programs that provide a systematic, motivational approach to teaching phonics. For example, Callinan and Zee (2010) conducted a study to compare two systematic, motivational approaches to teaching phonics Jolly Phonics (JP) and Teaching Handwriting, Reading,

and Spelling Skills (THRASS). The JP approach systemically introduces 42 of the 44 English phonemes and 46 of the most common graphemes daily in 15-minute sessions (Callinan and Zee, 2010). Students participate in movements and chants that are associated with phonemes. For example, students weave their hand in a /*s*/ shape like a snake and chant /*sssss*/.

Another systematic, motivational phonics program is THRASS. This program is implemented for three years and introduces 44 English phonemes and 120 common graphemes through the use of pictures (Callinan and Zee, 2010). For example, a card may have a picture of a bird and under the bird would be the word *bird* with the letter /*b*/ in a colored font.

Callinan and Zee (2010) reported that student's ability to read words and non-words and their short-term memory regarding words and phonemes increased in the schools that implemented JP and THRASS. In addition, reading ability improved more in a JP school compared to the school that implemented the THRASS approach. However, the improvements in short term verbal memory skills could not be linked to the method of instruction (Callinan and Zee, 2010).

This study explores the Phonics Dance, a program developed to assist students in learning how to identify letter names, letter sound correspondences and rhyme patterns through the use of multiple modalities such as chants, movement and visual cues. My interest lies in exploring the effectiveness of the Phonics Dance method of teaching phonics compared to a basal reading program. Therefore I will examine the following question:

How does the use of the Phonics Dance curriculum impact first graders' letter name and letter sound identification, phoneme segmentation and non-sense-word reading skills compared to students taught with a basal reading program?

Chapter Two

Literature Review

Introduction

This study examines the Phonics Dance a program designed to help young children learn how to identify letter names and letter-sound correspondences, as well as to begin to learn about word families that share certain rhyme patterns. There are several components of the Phonics Dance program such as chants, rhymes, visual cues and movement. In this chapter, I will discuss literature related to the conceptual underpinnings of the Phonics Dance program. In this study, I compare the phonics' knowledge development of children in classrooms where different instructional materials were used. Therefore, in addition to examining dimensions of the Phonics Dance materials, I will also examine the components of the Scott Foresman publisher's basal phonics curriculum that was used in the comparison classrooms.

All phonics instruction is intended to increase children's acquisition of print literacy skills. Thus, I will explain more about what is known about young children's early acquisition of print literacy skills and describe current ideas about the importance of a "balanced literacy" approach that can include phonics-specific elements such as the Phonics Dance. I will explain how the Phonics Dance fits within two commonly used balanced literacy models the Four Blocks and Daily 5.

To begin this chapter, however, I will begin with a description of the theoretical perspectives that guides this research. Then I will examine theories about young children's development of word-level decoding.

Sociocultural Theoretical Perspectives on Learning Instruction and Development

Vygotsky (1978) indicated that effective instruction is the kind that advances ahead of development and leads it. Additionally, in Vygotsky's view, all learning and development occurs within and is influenced by the sociocultural context in which it occurs. Within such contexts, learning depends on people more knowledgeable about the norms and conventions of a particular practice, for example, learning to read, to model and guide still less knowledgeable participants. Key to this process is Vygotsky's notion of the Zone of Proximal Development (ZPD).

According to Vygotsky's theory a child has two developmental levels, an actual developmental level and a potential level of development. The actual level of development can be determined by analyzing what the child can do independently. This is usually done with a test or a variety of tasks varying in difficulty. The potential level of development is what the child can do with the assistance of others. For example a child may have difficulty reading a particular book, or solving a problem, but with some assistance could be successful. "It is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, pp. 86).

Another key component of Vygotsky's theory of learning and development is the importance of social interaction. Within instructional contexts, social interactions are constantly creating opportunities for learning. For meaningful learning and development

to occur, it is essential that children interact with people in their environment and collaboratively with their peers and more knowledgeable others.

Social Interactions in a Child's Zone of Proximal Development Fosters Learning

Children learn to use tools and skills from interacting with their peers and more knowledgeable others in their lives. In an ideal situation, a child should be partnered with peers who are not equal in knowledge level but close enough for a symbiotic relationship, or with a much more knowledgeable person who is able to adjust their ways of working with the child to be just a bit more advanced that the child's current independent capabilities.

The notion of a ZPD is related to the idea of scaffolding in that the instructor or more knowledgeable other provides supports for the learner as the learner constructs knowledge (Driscoll, 2005). One way of thinking about scaffolding is as having five characteristics:

1. Provides support
2. Serves as a tool
3. Develops the scope of the worker
4. Permits the worker to achieve a goal not otherwise possible
5. Is used selectively to assist the student as needed

Scaffolding should be employed to help bridge the gap between a child's actual development and their potential development, but this is a dynamic process. Specific

types and degrees of scaffolding should be changed or jettisoned altogether as learners become more proficient.

Another important idea in a sociocultural perspective is the notion of intersubjectivity. In essence, this idea concerns the need for the agents involved in a task to have some shared idea about the purpose of the task they are performing. This becomes very important in classrooms. Children and their teachers need to understand the objectives and purpose of the activities in which they are engaged.

The notion of intersubjectivity is evident in the Phonics Dance classroom. Students led by their more knowledgeable other or instructor, engage in learning concepts that are transferred across the curriculum. For example, the instructor facilitates students' learning of hunk and chunks during a phonics lesson. Then during a social studies lesson students apply their knowledge of letter patterns as they decode unfamiliar words. Students understand the importance of learning letters, letter sounds and letter patterns and they transfer the knowledge into other content areas.

Social View of Learning

Students often learn when teachers strategically mediate social interactions among groups of children. According to Moll (1990) the intellectual skills that children acquire are associated with how they interact with others in problem solving environments. The social system is reciprocally created by the teacher and students and the interdependence of adults and child is fundamental to a Vygotskian analysis of instruction.

According to (Moll, 1990) Vygotsky asserted that social interactions are mediated through ancillary means with speech being predominant. Humans use cultural signs and

tools such as speech, literacy and mathematics to facilitate their interactions with each other and the environment. An essential property of these signs and tools is that they are social and are primarily used to communicate and negotiate with others. These signs and tools come to facilitate our interactions and help us think as we internalize their use (Moll, 1990).

From a Vygotskian perspective a primary role of school is to mediate social interactions for mastery and awareness of cultural tools. Through mastering these tools needed for oral and printed representation and communication, individuals develop the capacity for higher order intellectual activity. This suggests a significant connection between social interaction facilitated by cultural tools such as speech and individuals' intellectual activity (Moll, 1990). Below I explain how this theoretical perspective is an important one to consider when examining early reading instructional approaches such as the Phonics Dance.

Reading Instruction is a Highly Socially Mediated Activity

Early reading instruction is a socially mediated activity. Teachers interact with children modeling their language in both spoken and written forms.

Children develop word recognition skills as they progress through phases participating in socially mediated activities. These activities provide interactions between the instructor as the more knowledgeable other and their peers. Children develop the capacity to decode words in print as their instructor mediates social interactions through the use of tools such as speech and symbols. In addition, other socially mediated experiences provide scaffolding and opportunities for collaboration. These and other

socially mediated experiences are vital for children to develop the capacity to decode print.

The Phonics Dance, in particular, is a program that facilitates social interaction through the use of chants, visual cues and movement. In the Phonics Dance classroom, the teacher, or more knowledgeable other, mediates social interactions with the children providing an environment in which children interact with their peers. Children become familiar with the code through listening to and then performing letter name and sound chants with their peers. Several components of the Phonics Dance such as the alphabet sound review, word association, and hunk and chunks (all explained in more detail later in this chapter) facilitate social interactions through the use of tools such as speech, symbols, chants, movement and images. Visual cues provide scaffolding reminding children of letter names and letter sounds.

In the next section of this chapter, I turn to the literature about how children learn to recognize words.

Development of Word Recognition

There are several theories regarding the development of word recognition as proceeding through various numbers of stages. Frith (1985) suggested that word recognition is a three phase process that includes a logographic phase, alphabetic phase and orthographic phase. In the logographic phase children can identify familiar words through salient graphemic features. For example, the two circles in the middle of the word *book* or the tail at the end of the word *log* are graphemic features that assist children

in identifying the words. During this phase students do not use phonology (i.e. the sound system of a language) to recognize printed words, rather they use distinctive visual cues.

However, this strategy is unreliable. A child who relies on distinctive visual cues may experience difficulty reading words that share a particular visual cue. For example, a child who relies on the tail at the end of the word *log* may confuse the word *dog* for the word *log.*

In the alphabetic phase students focus on sequential letter sounds in the word and sound them out (Frith, 1985). For example, students would sound out the word *tap,* /*t*/, /*a*/, /*p*/. In this phase, students rely on their abilities to identify letter sounds and blend them together.

In the final or "orthographic" phase students quickly identify new words through focusing on their distinctive spelling patterns. For example, a student in this phase may recognize the word *b-ank* by chunking the /a/, /n/ and /k/. According to Frith's theory of word recognition phonemic awareness, the ability to recognize, isolate and manipulate individual sounds of a word is not required for the logographic phase. However, phonemic awareness is essential for the alphabetic phase but is not developmentally useful in the orthographic phase. This is because students are now so automatic with phonemic awareness they are not consciously aware of each individual sound in a word.

Gough and Juel (1991) indicated that word recognition is a two stage process with a "selective association" and "cipher" stage. During the first or "selective association" stage children do not rely on knowledge of letter-sound correspondences. Rather they use other sources of information such as partial visual cues to discriminate one word from

another. Children eventually build a repertoire of words that they can identify through partial visual cues.

Children develop phonological awareness and learn to decode the letters of words as they enter into the cipher stage. As children encounter words that look similar such as "mouse" and "house," the associated cues that were once sufficient become inadequate because these two words are too visually similar (Gough and Juel, 1991).The cipher stage is essentially the same as Friths' alphabetic stage. Children rely on recognizing individual letters and then blending them together. Once in the cipher stage, children can combine their understanding of letter-sound correspondences especially in initial sounds, to figure out words like "mouse" and "house."

In another stage theory, Ehri (1998) indicated that there are four phases involved in word recognition: pre-alphabetic, partial alphabetic, full alphabetic and consolidated alphabetic. Within Ehri's model of word recognition there is no entirely visual stage (Rayner, Foorman, Perfetti, Pesetsky and Seidenberg, 2001). Rather, in Ehri's view, the progression of reading acquisition encompasses creating entire word representations that include both phonological and orthographic components (Rayner, Foorman, Perfetti, Pesetsky and Seidenberg, 2001).

Pre-alphabetic. In Ehri's pre-alphabetic phase, students recall words by establishing connections between specific visual attributes of words and their pronunciation and meaning and then store the associations in memory (Ehri, 1998). For example, a child may recall the word "Disney" from the image of a mouse. This concept is known as "visual cue reading" (Ehri, 1998, p. 18). Many students come to school with

a repertoire of words attained through visual cue reading. It is also in this phase that children use simple cues such as the tail in the word *ball* or more complex cues to recognize words (Stahl, Duffy-Hester & Stahl, 1998). In addition, during this phase children do not yet use a systematic decoding process. Thus children in this phase find it challenging to commit new words to memory and keep old ones when words that are visually similar are encountered (Morris, Bloodgood, Lomax & Perney, 2003). Since children rely on visual cues during this phase the occurrence of making mistakes is common (Ehri, 1998). The pre-alphabetic phase is one that occurs by default as children have a desire to remember words and lack the ability to use systematic relations between letters and sounds (Ehri, 1998). However, visual cues are unreliable and children experience difficulty remembering the words because the cues reoccur in several words or are often inconsistent.

Partial alphabetic. The next phase of word recognition according to Ehri (1998) is the partial alphabetic phase. In order for children to move from the pre-alphabetic phase to the partial alphabetic phase, they must be familiar with a number of letter sound correspondences and have the ability to segment the beginning or the beginning and final sounds in words (Ehri, 1998). Phonemic awareness skills must be employed in the partial alphabetic phase since students use some letter-sound correspondences in this phase. Because the initial and final letters of words are salient features of words children often utilize them as the letters to be remembered (Ehri, 1998). Ehri (1998) also indicates that this is called "phonetic cue reading" (p. 20). This is a more reliable and sophisticated method utilized to decode words than the visual cue reading system employed in the pre-alphabetic phase. Children begin storing words in memory through making connections

between one or several letters in a printed word and corresponding sound or sounds identified in the word's pronunciation (Ehri, 1998). For example, children in this phase would use their knowledge of the letter name of the letters B and E to help them make a good guess about how to say the word "bee."

Children in the partial alphabetic phase are not relying only on visual cues. Instead they begin using the phonetic cue reading system that is a more constant and dependable approach. According to Morris, Bloodgood, Lomax and Perney (2003) children in the partial alphabetic phase can now utilize a moderate and predictable system of letter sound relationships to assist them in processing new words and storing them in memory. Because phonetic cue readers have a system available for support, they remember words much better than visual cue readers.

Full alphabetic. The third phase of word recognition is the full alphabetic phase. Morris, Bloodgood, Lomax and Perney (2003) indicate that as children's phonemic awareness increases they progress into the full alphabetic phase where they recall how to read specific words by constructing entire connections between letters viewed in the written word and phonemes identified in the word's pronunciation. For example, in reading the word "stem." The beginning reader in this phase can attend to the two letters in the initial consonant blend /st/, the medial vowel /e/ and the ending consonant /m/. Another aspect of the full alphabetic phase compared to the partial alphabetic phase is that children have the ability to decode words that they have not encountered, through blending letters into a pronunciation (Ehri, 1998). Children must have more advanced letter/sound association and phonemic awareness skills to achieve success in this phase. In addition, children in the full alphabetic phase have the ability to read new words by

analogy from known words and identify words more accurately than children in the partial alphabetic phase (Ehri, 1998). For example, a child in the full alphabetic phase would be less likely than a child in the partial alphabetic phase to misread words that are similar such as "step" and "stem."

Consolidated alphabetic. The final phase of word recognition is consolidated alphabetic. In this phase the neophyte reader begins to identify multi-letter patterns that are prevalent within many words he or she has within memory (Ehri, 1998). For example, the beginning reader may recognize the "ank," pattern in the words "tank," "bank" and "sank." Instead of processing each letter in a word the child can now combine letters into recognizable chunks making word identification and storing the words into memory more efficient (Ehri, 1998). Chunking letters within words is specifically beneficial and more efficient when reading longer multi-syllable words. For example, a child that could identify the "tion" chunk in the words "question," "addition" and "emotion" will be more efficient at processing these words.

Many researchers have noticed a pattern in which learners transition from using mostly visual cues to adding more awareness to of how letter-name and letter-sound knowledge can be used within their repertoire of word-attack skills. Additionally, all of these stage models recognize the importance of children coming to recognize larger "chunks" of words. Also, the role of phonemic awareness is recognized as playing a large role during the intermediary stages in particular.

It is to a more in-depth look at the role of phonemic awareness in learning to read that I turn next.

Phonemic Awareness

Pinnell and Fountas (2011) define phonemic awareness as the ability to recognize, isolate and manipulate individual sounds in words. It is an auditory skill. Each word is composed of individual sounds or phonemes. For example the word "chin" has four letters but is made up of three phonemes the digraph /ch/, short vowel /i/ and consonant /n/. Children must have the ability to consciously recognize the sounds in words. A child's level of phonemic awareness is a primary predictor of reading achievement (National Reading Panel Report, 2000; Stanovich, 1994).

The ability to identify the individual sounds of a word is often a difficult task for many children. It does not happen automatically as children get older but develops with reading, spelling and phonemic awareness instruction and practice (Goswami, 2003). Phonemic awareness is an essential building block and depends on the child's conscious consideration of the sounds of the words (Adams, 1990).

Beginning at a considerably young age we become familiar with the phonemes of our language, giving them conscious attention in order to play with oral language, such as through reciting nursery rhymes and later when learning to read the alphabetic script. One of the earliest forms of phonemic awareness is evidenced in young children's ability to recognize and enjoy making rhymes. I explain this particular aspect of phonemic awareness next.

Rhyme and Phonemic Awareness

Children have the ability to reproduce the number of syllables in words and the "onsets" (the initial consonant sounds of a syllable) and "rhymes" (what comes after the

initial consonant sound of a syllable) of individual syllables at the early age of 1 or 2 (Goswami, 2003). Numerous nursery rhymes emphasize segmental phonology through rhythms that accentuate syllabification and contrast rhyming words in a manner that emphasizes the onset and rhyme (Goswami, 2003). For example in the following portion of the nursery rhyme, *Jack and Jill went up the hill; Jill* and *hill* are emphasized and rhyme.

There are many studies that indicate a strong relationship between reading acquisition and the ability to rhyme. Chaney (1992) suggested that there is a relationship between early rhyme awareness and later phonological skills predictive of literacy. Rhyme may contribute to reading acquisition because rhyme awareness is a predictor of children's ability to develop phonemic awareness. Also, in English, rhymes often represent a consistent spelling pattern (Goswami, 2003). For example the words *tall, mall* and *fall* rhyme and have a consistent rhyme spelling pattern.

As infants' and toddlers' attunement to rhyme evidences, early phonemic awareness is a vital part of learning one's native language. By the time children become quite proficient at speaking their native language; their attention to phonemes has become quite automatic. When they begin to learn to read and write, however, they must develop another level of conscious awareness of how their language sounds can be divided and (eventually) matched to graphic representations of those sounds (letters). Ultimately, the ability to encode phonemes with automaticity allows children to devote attention to higher order aspects of reading and writing such as the actual meaning of words they are decoding or encoding as well as the nuances of words (Goswami, 2003). Researchers have identified that the major difference between pre-readers who receive high scores on

reading readiness tests compared to those who receive low scores, is their ability to consciously analyze the sound structure of syllables (Adams, 1990). Therefore, having an understanding of a child's level of phonemic awareness skills can provide information to help guide instruction.

Assessing Phonemic Awareness

Most students would benefit from instruction to build phonemic awareness skills (Yopp, 1995). When reading instruction is methodically taught with phonemic awareness training the results are substantial (Adams, 1990). Explicit phonemic awareness training is clearly helpful in teaching children to read. Tasks have been developed to better assess children who may struggle with phonemic unawareness. There are several categories of phonemic awareness tasks including phonemic segmentation tasks, phoneme manipulation tasks, syllable splitting tasks, blending tasks, oddity tasks and knowledge of nursery rhymes (Adams, 1990). Below I look at each of these types of tasks in turn.

Phonemic segmentation tasks. Phonemic segmentation tasks were developed to determine if the child can deconstruct a syllable into its component phonemes. In this category of tasks the tapping task is popular and was developed by Isabelle Liberman (1977) and her colleagues. The tapping task invites a child to tap out the phonemes in a word, usually consisting of one to three phonemes using a wooden dowel stick. Children that could accurately tap the phonemes of six consecutive words were considered successful (Adams, 1990).

Phoneme manipulation tasks. Phoneme manipulation tasks are used quite extensively and in these tasks, as the title suggests, students are instructed to manipulate

phonemes in each test word. For example, the child may be asked to say the word *ball* without the /*b*/. Other varieties of this task include instructing a child to add or change the order of the phonemes in the syllable (Adams, 1990).

Syllable splitting tasks. There are a few versions of the syllable splitting task such as asking a child to pronounce the first phoneme of a syllable or a word. For example, the instructor may say "leak," and the child says "l-l-l-l." Another version may ask the child to say the remainder of the word after the initial phoneme.

Blending tasks. In blending tasks the instructor provides the segments of the word and a child is asked to put them together (Adams, 1990). For example the instructor may say */h/, /ae/, /t/* and the child would put the phonemes together and say */hat/.* A child must be aware that the sounds can be pushed together to create a word. Also, a child who is familiar and comfortable with phonemes in isolation will find it much easier to blend multiple phonemes (Adams, 1990). How much phonemic awareness is needed for blending has not been determined but students must have some.

Oddity tasks. Oddity tasks invite a child to determine which word out of three to four does not belong. Often the anomaly is based on the initial phoneme of the word. For example a child may be presented with words *cat, pin, and cut* and then asked to determine which word does not belong. Other versions of this task could include asking the child to determine which word does not belong based on the middle or final sound of the words (Adams, 1990).

All of the tasks explained above are examples of ways teachers can both assess children's capacities to hear and manipulate individual speech sound of words.

Within the hundreds of studies examining phonemic awareness, some have focused particularly on how having musical experiences has impacted children's phonemic awareness skills. I examine this aspect of phonemic awareness instruction next because the Phonics Dance curriculum depends a great deal on various musical experiences such as on chants and rhymes to help children learn to decode words.

Musical Experiences and Phonemic Awareness

Students benefit when instructors incorporate musical experiences into daily literacy instruction. Wiggins (2007) suggested that the integration of music into literacy learning environments may support language development and promote music development simultaneously. Many of the skills required for reading and music are similar including auditory and visual discrimination, vocabulary development and fluency.

Lamb and Gregory (1993) conducted a study to explore the relationship between an awareness of musical sound changes and phonemic awareness. Participants (18 children ranging from 4 years 9 months to 5 years 4 months) completed reading, phonemic awareness and musical assessments. The results indicated that students who scored high on the reading assessment scored high on the phonemic awareness and pitch discrimination assessment as well. Thus indicating a relationship between awareness of musical sound change and phonemic awareness.

The International Reading Association (IRA) has identified musical experiences and read alouds as necessary for literacy development in phase one, or the preschool years of the literacy development. Varied activities are recommended to reach the

diversity of learners in today's classroom and support students' interest in reading. The IRA indicated that students benefit from experiences that include phonemic awareness, through participation in singing, finger-plays, games, poems, and stories that have phonemic patterns such as rhyme (Wiggins, 2007).

Paquette and Rieg (2008) authored *Using Music to Support the Literacy Development of Young English Language Learners* that provided evidence concerning adding movement to music to make songs more memorable and fun for the children. In addition Paquette and Rieg (2008) suggested that songs can be used to practice and reinforce concepts including letter sounds and comparing words. Students have less difficulty remembering information when it is put to music.

Of course, incorporating music is not the only way in which teachers try to make manipulating phonemes of words interesting and memorable. Teachers also build upon these oral skills to help students learn to match speech sounds with letters and groups of letters. Once letters are involved in the process of learning to read and write the tasks shift from purely involving phonemic awareness (which is an auditory/oral skill), to involving "phonics."

In the next section of this literature review, I examine some pivotal studies related to early phonics instruction.

The History of Phonics Research

Every year millions of children begin the complex task of learning to read. For many this task is executed with relative ease and for others this task is incredibly difficult. The best method for teaching children to read has been a topic hotly debated by

experts and the general public for many decades. In the early decades of the 1900s how best to teach reading was researched in many ways, but the results were inconsistent and contradictory. Below, I describe some of the work done between the mid-1920s and the mid-1960s related to early reading instruction, particularly early phonics instruction.

Rudisill (1957) indicated that students' knowledge of phonics is a considerable asset to achievement in reading. In addition, Tiffin and McKinnis (1940) suggested that phonics ability and reading ability are related and all reading programs should include phonics instruction. Some researcher reported results that contradicted the notion that phonics instruction and reading ability were related. Tate (1937) posited that his research suggested that too much emphasis on phonics hindered comprehension and argued that formal phonics instruction was undesirable.

Results from research that investigated individualized methods of reading instruction have been contradictory as well. Sperry (1961) indicated that classes receiving individualized reading instruction outperformed classes grouped by ability. Carline (1960) found that when comparing basal instruction to an individualized method that there were no significant differences. However, Zirbes et al. (1925) argued that slower children benefited from individualized instruction but higher-ability students profited more from self-selected reading.

Researchers have also examined whether girls and boys exhibit differences in acquiring print literacy. Much of the research regarding gender differences in reading achievement favored girls. Balow (1963) indicated that girls were superior to boys in reading readiness skills. Pauley (1951) suggested that the second grade boys in her study,

though physically two months older than the girls, were two months below the girls in terms of reaching achievement. Heilman (1961) reported that a higher percentage of boys are referred for remedial reading classes than girls.

In the early 1960s there were also several studies conducted to analyze the Initial Teaching Alphabet (i.t.a.), which had been designed to assist children in their initial stages of reading. The i.t.a. approach to teaching reading was developed by Sir James Pitman and was originally called Augmented Roman Alphabet (Bond & Dykstra, 1967). Students that learned to read using the i.t.a. method were introduced to text containing a unique alphabet consisting of 44 letters, each one corresponding with a unique phoneme in English. Downing (1963) suggested that children using i.t.a. identified more words in print, comprehended more continuous prose in print and read faster with more accuracy. Rebecca Stewart (1965) indicated that there were no significant advantages for students who were taught reading with the i.t.a. method. However, Chasnoff's (1965) study indicated that students who were taught with the i.t.a. method scored significantly higher than students who were not taught using the i.t.a. method. However, this method was criticized because of the large number of characters for children to remember and the difficulty involved in forming the characters.

As described above, the research that was conducted between the mid-1920s and the mid-1960s had inconsistent and often contradictory results. In the mid-1960s a group of researchers decided to try to put the question of how to best teach phonics to beginning readers to rest by conducting what has become to be called the *First Grade Studies* (Bond and Dykstra, 1967). These were pivotal pieces of research that continue to influence the field. I describe these next.

The first grade studies. The Cooperative Research Studies in First-Grade Reading Instruction were launched in the mid-1960s. *The First Grade Studies* consisted of 27 individual studies that examined which approach to initial reading instruction produced the most superior reading and spelling acquisition at the end of the first grade. In addition, they were conducted to make a contribution to the existing research and overcome the inconsistences in the research methodologies used up until that time. In too many of the studies that preceded the *First Grade Studies*, research methodological issues such as instruments used, factors controlled for, research designs, evaluation of post-instructional reading ability, length of experhymental periods and experhymental populations had often been inadequately described.

Common procedures for data collection, analysis and experhymental procedures were established. This enabled the Coordinating Center to analyze and make comparisons among the 27 participating studies. The data were collected using several instruments such as the Gates-McKillop Reading Diagnostic Test, the Fry Phonetically-Regular Word List, the Gilmore Oral Reading Test and the Stanford Achievement Test (Bond & Dykstra, 1967). Each study had a project director who analyzed their own data but made the data available to the Coordinating Center (Bond & Dykstra, 1967).

The results of the studies indicated that the single best predictor of reading achievement was the ability to recognize letters of the alphabet prior to reading instruction. Students who learned the alphabetic code were more advanced than those who did not learn the alphabetic code in terms of their abilities to decode words in isolation as well as in their capacities to encode spoken words by the end of second grade (Dykstra, 1967). The results of the First Grade Studies also indicated that non-basal

instruction programs were superior to basal programs measured by word recognition skills one year after first grade (Bond and Dykstra, 1967). The non-basal programs included in the studies were Initial Teaching Alphabet, Basal plus Phonics, Language Experience, Linguistic and Phonics/Linguistic. Each non-basal program had unique characteristics. For, example the Initial Teaching Alphabet approach introduced students to a 44-character alphabet to encode the sounds of the English language. The Language Experience approach involved the teacher recording the child's stories that were then utilized for instruction until the child was able to write their own. Though the non-basal programs have their own distinctive nuances, the common aspect is that they all focused on letter-sound correspondences. An additional finding was that students who were taught with a code-emphasis approach were more advanced regarding word recognition and comprehension skills involved in silent reading after one and two years of instruction (Dykstra, 1967).

Similar to the *First Grade Studies,* this study contributes to the existing large body of research concerning how best to teach beginning readers. More specifically I examine which instructional approach is most effective concerning word recognition, the non-basal Phonics Dance program or the basal Scott Foresman approach. The Phonics Dance program has unique characteristics including the use of chants, rhymes, movement and visual cues to assist students in learning letter sound correspondences.

The great debate. Though there have been thousands of research studies and scholarly debates it has been problematic for researchers to suggest with confidence that one particular method to teach beginning reading is superior to another. Chall (1967) indicated that there are periods of time when there is a consensus regarding when and

how to best teach beginning reading and then there are periods of confusion and disagreement.

During this same period of time educators in England began to experience a similar controversy. J. C. Daniels and Diack (1956) suggested that their new method for teaching beginning reading called the "phonic word method" would produce better results than the mixed method (sight, phonics) that was currently being used in England.

In the fall of 1959 the National Conference on Research in English held a conference to discuss what reading programs needed research. They believed that the research available was confusing, incomplete and contradictory. A committee decided that a large-scale cooperative study was needed and could provide proof regarding the most effective approach to reading instruction. This study became the Cooperative Research Program in First Grade Study. Chall decided that the guiding principles used for the Cooperative Research Program in First Grade Study could be used to critically analyze existing data. She began her study in 1962 and her analyses were published in a volume called *Learning to Read: The Great Debate* (1967).

Chall collected data through interviewing 25 authors and proponents of different beginning reading programs. The objectives were to clarify underlying assumptions contained in the reading programs and to learn of their views regarding the issues that were being debated (Chall, 1967). The interviewees were asked about their judgment of the definition of reading and the ways reading development may change considering skill, age or experience (Adams, 1990). Next, they were asked their philosophies about reading readiness and what they thought would be a proper balance between reading for

meaning and learning the code in terms of instructional practices and student interest (Adams, 1990). They were asked about many issues regarding vocabulary, content, illustrations, and aspects of reading (oral and silent) and writing in reading instruction (Adams, 1990). Finally, they were asked about parental involvement and to explain why some children fail to read (Adams, 1990).

After collecting data from authors and proponents of reading programs, Chall investigated teachers' manuals and classroom materials. She examined 22 programs including two popular basal programs. In addition, she studied at least one representative of each prominent alternative approach of that time.

Next, after examining the views of the authorities and the content in the programs Chall began collecting data in the classrooms. She visited more than 300 kindergarten, first, second-, and third-grade classrooms representing all levels of socio-economic class and located across the United States, England, and Scotland. She was interested to observe first-hand how the programs were delivered in the classroom and how effective they were with the students (Adams, 1990).

The fourth and final source of data Chall examined was the research on beginning reading instruction. Because the studies did not clearly indicate the method of treatment she categorized a method as "look say," if the researcher indicated no phonics at all and "systematic phonics," if phonics was taught early and systematically and "intrinsic phonics," if phonics was introduced later (Chall, 1989). She analyzed the data after it was organized in a table and grouped regarding grade level and outcome measure.

The answers to the questions that Chall had asked of the authors and proponents of the beginning reading programs revealed that the respondents did not feel that reading instruction had weakened or that children were reading less than before. They felt that the change was the result of social and cultural requirements (Adams, 1990). The respondents indicated that the problem was that it had become necessary for children to read more and better than before (Adams, 1990). The instruction that had been successful in the past was no longer as effective given the increased amount or reading and the level of skill required of children (Adams, 1990).

As a result of Chall systemically analyzing the classroom materials, she discovered that the emphasis had been on which works better instead of what aspects of an approach or reading program leads to success (Adams, 1990). Chall classified significant instructional variables, noting similarities and differences of each program (Adams, 1990). She anticipated that this information would help future researchers in designing clearer empirical studies (Adams, 1990).

The data collected after visiting 300 classrooms all over the United States, United Kingdom and Scotland revealed some unexpected information. Chall found that the primary factor for student engagement was not a particular method or program but rather the ability of the classroom teacher to set high expectations and provide a positive atmosphere for the students (Adams, 1990). She also suggested the teachers who were implementing new programs were generally more ambitious, independent, intelligent and hopeful (Adams, 1990).

Chall discerned a pattern in the data collected indicating that children who were taught phonics had an advantage in word recognition, more specifically being better at decoding unfamiliar words as compared to children who were taught the look say method (Adams, 1990). After further analyzing and comparing the studies, Chall found that programs that included a systematic approach to phonics instruction resulted in greater word recognition, spelling, vocabulary, and reading comprehension (Adams, 1990). Empirical and scientific evidence suggests that, when phonics is part of a beginning reading program, children can read and enjoy more challenging books-and books of higher quality-at an earlier age (Chall, 1967). Evidence from Chall's research clearly supports the benefits of including phonics instruction as a component of a beginning reading program.

Contemporary Phonics Instruction

Despite the *First Grade Studies*, the issue of how best to teach phonics continues to be debated. Among the many aspects of phonics instruction that have been argued in the last three decades is whether to teach phonics with a systematic or nonsystematic approach. The National Reading Panel Report (2000) indicated that students benefit from systematic phonics instruction citing studies that concluded that, introducing a predetermined set of phonics elements sequentially to children provided them with a quicker start to learning to read as compared to nonsystematic or no phonics instruction at all. There are several approaches that have been used to teach phonics systematically including synthetic phonics, analytic phonics, analogy phonics and phonics through spelling. Synthetic phonics and analytic phonics are considered more traditional methods

of teaching phonics compared to analogy phonics and phonics through spelling which are regarded as more contemporary (Stahl, Duffy-Hester, & Stahl, 1998).

Approaches to Phonics Instruction

Synthetic phonics. The synthetic phonics approach teaches students particular sounds for letters and then students blend the sounds together to create words. Students are then exposed to "decodable text," i.e., text that only includes those sounds and sight words they have been taught (Cunningham & Cunningham, 2002). For example, students may be taught the sounds for the letters A as well as D, T, and B. Students would then learn to decode text that would include words such as dad, Tad, at and bat. Text that the student would be exposed to would include words that contained these sounds that have been introduced and other sight words in the student's repertoire.

Beginning readers often utilize the consonant plane method, an extension of synthetic phonics for which the students use multiple sources of information to decode text. Students that use this strategy focus on the consonants and ignore the vowels. When using the consonant plane method the student decodes by focusing on the consonant sounds in a word and utilizing information they can find from other cues in the text such as the pictures (Cunningham & Cunningham, 2002). For example, a student might have a book about jungle animals and quite readily be able to figure out the word "tiger," even if they only concentrate on the letters T, G, and R, particularly if there are pictures of tigers in the text.

Analytic phonics. Analytic phonics is a whole-to-part approach to decode words. This strategy begins with teaching students a word and then using the known word and

separating it into individual parts (Stahl, Duffy-Hester & Stahl, 1998). An example of this approach would include the instructor presenting the class with a word such as "hat" and reviewing the sound of the letter A in that word (/ae/). Students would then be asked to identify words with the same middle sound from a list of words. Some of the words would contain the /ae/ sound and some would not for example, "cat," "hot," "ham," and "hit." The analytic approach to teaching phonics dates back to the early 1970s and was utilized in most basal reading programs.

Phonics through analogies. Analogic phonics is based on words students already know and word patterns. Rather than teaching students phonics rules, they are instructed to identify patterns in words and use those patterns to identify other words (Cunningham, 2000). For example, students would be taught that if they know how to read the word "hot," they should be able to read the words "pot," "not," "cot," "dot," and other rhyming words that use the rhyme pattern "-ot." Goswami (1986) indicated that children who are not yet reading have the ability to make analogies between the ends of words orally suggesting that analogy may play an important role in early reading development. Students that are in the full alphabetic phase of word recognition often use this strategy to identify words.

Phonics through spelling. There are several approaches to teaching phonics through spelling including Word Study, Making Words and Meta-Phonics. Word Study is an approach that is based on how orthographic knowledge develops (Stahl, Duffy-Hester & Stahl, 1998). Students examine words and word patterns through approaches such as sorting words with corresponding pictures and placing them into categories based on orthographic features (Stahl, Duffy-Hester & Stahl, 1998). For example, in Word Study

the teacher would chose words that the student is studying and may find confusing such as the long /eIa/ in the words pane and pain.

The Making Words approach provides students with six to eight different letters. The teacher calls out a word and the students make the word with the letters that have been provided. The lesson begins with a three-letter word and the level of difficulty increases as the lesson continues. At the end of the lesson the students are asked to create a word using all the letters provided. Making Words is an approach to phonics instruction in which children learn how to look for patterns in words and how one letter can change the entire word (Cunningham & Cunningham, 1992). Also, Making Words is a modified Building Words approach in which students learn individual letter sounds and letter sound associations.

Meta-phonics is an approach that incorporates reading, spelling social interaction and problem solving (Stahl, Duffy-Hester & Stahl, 1998). Students are taught sounds through phonemic awareness lessons. Consonants are instructed as popping sounds and vowels are instructed as glue letters (Stahl, Duffy-Hester & Stahl, 1998). For example, within the word wigwam, /w/, /g/ and /m/ would be instructed as popping sounds and the vowels /i/, and /a/ would be glue letters. Students are given letters and asked to make words through adding consonants and vowels.

Whole language. An alternative to systematic phonics is the whole language approach that teaches a moderate level of letter sound correspondence non-systematically. Whole-language is considered an embedded approach that teaches phonics in response to individuals' needs in the context of teaching reading and writing

(Stahl, Duffy-Hester & Stahl, 1998). For example, a student may be reading and encounter an unknown word. The teacher would take a few minutes and conduct a brief informal phonics lesson to help the child decode the word. Contrary to the rhetoric that purported whole-language proponents are against phonics instruction, phonics is a component in the whole-language approach to reading and writing instruction (Dahl & Scharer, 2000). However, this approach to phonics instruction is ad-hoc and completely in response to individual students' needs.

Reading as a complex Activity

More recently reading is viewed as a complex activity requiring a skilled reader to fluently execute word recognition and text comprehension skills in tandem. In the diagram below, you can see a representation of the many components that must be coordinated simultaneously for a reader to obtain meaning from text. Word recognition consists of phonological awareness, decoding and sight-word recognition (Snow, Griffin & Murray, 2005). Text comprehension includes utilizing background knowledge, vocabulary, language structures, verbal reasoning and literacy knowledge (Snow, Griffin & Murray, 2005). Typically the strands involved in recognizing individual printed words and those involved in comprehending the meaning of the strings of words are considered separately though they operate interactively rather than independently (Scarborough, 2003). See figure 1.

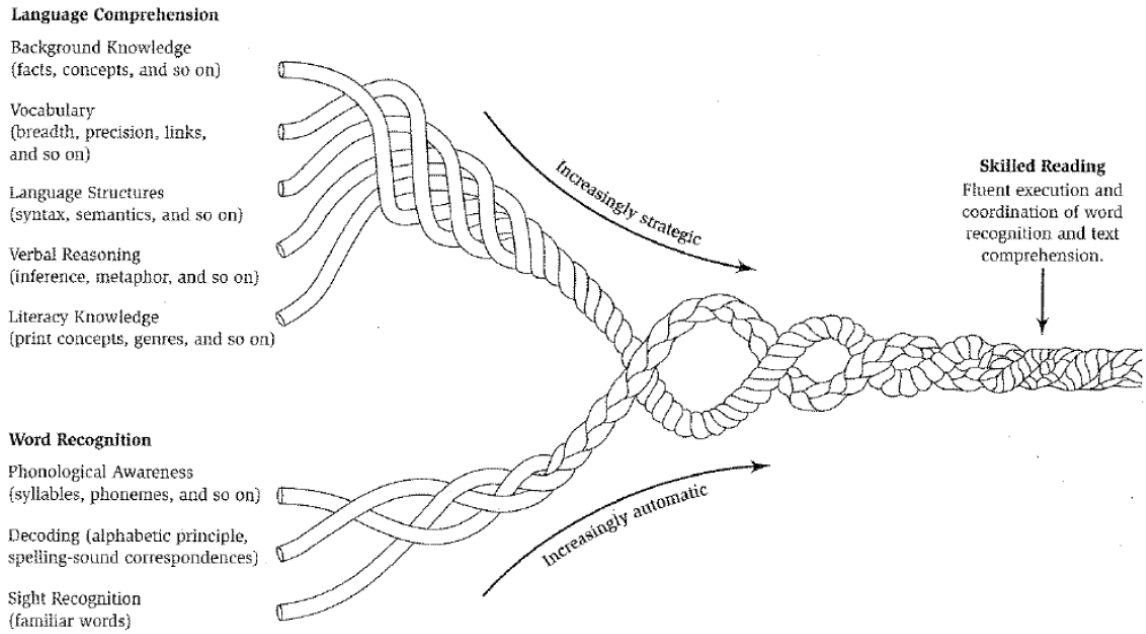


Figure 1. The strands that are woven into skilled reading

Source: Scarborough, 2003.

Many children who struggle with learning to read have difficulty recognizing words. Children must understand that the written symbols (letters and graphemes) systematically represent phonemes that compose the pronunciation of words and without phonemic awareness the child cannot actually understand what letters represent (Scarborough, 2003). The child must then have the ability to phonologically decode words through applying the correspondences between letters and phonemes. Skilled reading requires that children have the ability to recognize words with automaticity to free up cognitive resources for comprehension.

Though most reading disabilities are associated with phonemic awareness, decoding and sight-word recognition deficits, reading skills can be delayed by difficulty in comprehension strands as children get older and begin to read more challenging text.

The text will not be well comprehended if the child does not know the words in spoken form, does not have the ability to analyze the syntactic and semantic associations between words and if the child lacks sufficient background knowledge. Despite remedial efforts to help strengthen the skills of low achievers 65-75% of children who are identified as struggling readers early continue to read poorly throughout their school careers (Scarborough, 2003). Clearly, early systematic instruction in phonics is essential, and programs like the Phonics Dance may be important parts of an early literacy curriculum. However, phonics-related instruction is not the only important aspect of literacy instruction and lest readers of this dissertation think otherwise, I present below more information from the literature about comprehensive literacy instruction frameworks.

Contemporary Frameworks for a Balanced Literacy Program

As important as it is for young children who are just beginning to learn to read to receive high quality phonics instruction, phonics instruction alone is not sufficient. Researchers and practitioners today agree that children in the primary grades should have a "balanced" literacy curriculum that includes attention to "word level" components of learning to read and write as well as motivational, affective, and "higher-order" aspects of reading and writing such as literal comprehension, analysis, inference making and so on. The reason for including information about these curriculum frameworks is to show readers how programs such as the Phonics Dance, the major focus of this study, do not constitute a complete literacy program, but can be one approach used within a more comprehensive balanced literacy approach. Programs like the Phonics Dance should not be the sole approach to teaching children early literacy skills, but it has potential to fit

within other commonly-used early literacy frameworks such as the "Four Blocks" and the "Daily 5" models, both of which are examples of "balanced" approaches to literacy.

Balanced Literacy

There are many factors that can impact student's early school based success with print. A key factor is a classroom environment that supports a balanced literacy approach to literacy instruction. The National Reading Panel Report (2000) asserted that students benefited from a multifaceted balanced approach to reading instruction that included phonemic awareness, phonics, oral reading fluency, vocabulary and comprehension strategies. There are several ways to incorporate a balanced literacy approach in your classroom, and the Four Blocks and Daily 5 models are two commonly used today.

The Four Block approach to balanced literacy. The Four Blocks model for balanced literacy instruction was created by Cunningham, Hall and Defee in an effort to provide students with a multileveled, multimethod approach to first grade literacy instruction. Cunningham, Hall and Defee (1991) asserted that the Four Blocks approach to literacy instruction meets the diverse needs of all students. The Four Blocks approach consists of a guided reading block, self-selected reading block, working with words block and a writing block. See table 1.

Table 1.

Four Blocks Approach to Balanced Literacy

Four Blocks Model of Literacy Instruction	
30-40 minutes	Guided Reading
30-40 minutes	Self-Selected Reading
30-40 minutes	Working With Words
30-40 minutes	Writing

During the guided reading block, students are introduced to multiple genres and shared reading activities such as choral reading and echo reading. Also, during the guided reading block students participate in reading comprehension activities. Often book clubs are employed during this time. The guided reading block is conducted daily for 30-40 minutes.

The self-selected reading block often begins with the instructor reading aloud. It is during self-selected reading that students choose books that match their reading levels and interests. Also, teachers use this time to conference with individual students. Self-selected reading takes place daily for about 30-40 minutes.

The working with words block includes students participating in activities that improve their ability to decode words such as Making Words, Rounding up the Rhymes and Guess the Covered Word. Many classrooms have word walls posted and incorporate

them into the working with words activities. The working with words block is often implemented daily for 30- 40 minutes.

The final block included in the Four Blocks approach to balanced literacy is writing. Often this block is implemented as a writer's workshop and begins with a 10-minute mini-lesson regarding writing such as when to use capital letters or punctuation correctly. Students work on their own pieces of writing progressing through the writing process as the instructor conferences with individual students. The writing block takes place daily for 30-40 minutes.

The Daily 5 approach to balanced literacy. The Daily 5 approach to balanced literacy was created by two sisters, Gail Moser Boushey and Joan Moser (2006), in an effort to meet the needs of all students and assist them in becoming independent learners. This approach to balanced literacy has 5 components: reading to self, reading with someone, listening to reading, working with words and writing. In addition, whole class focus lessons are implemented before each of the 5 components. See figure 2.

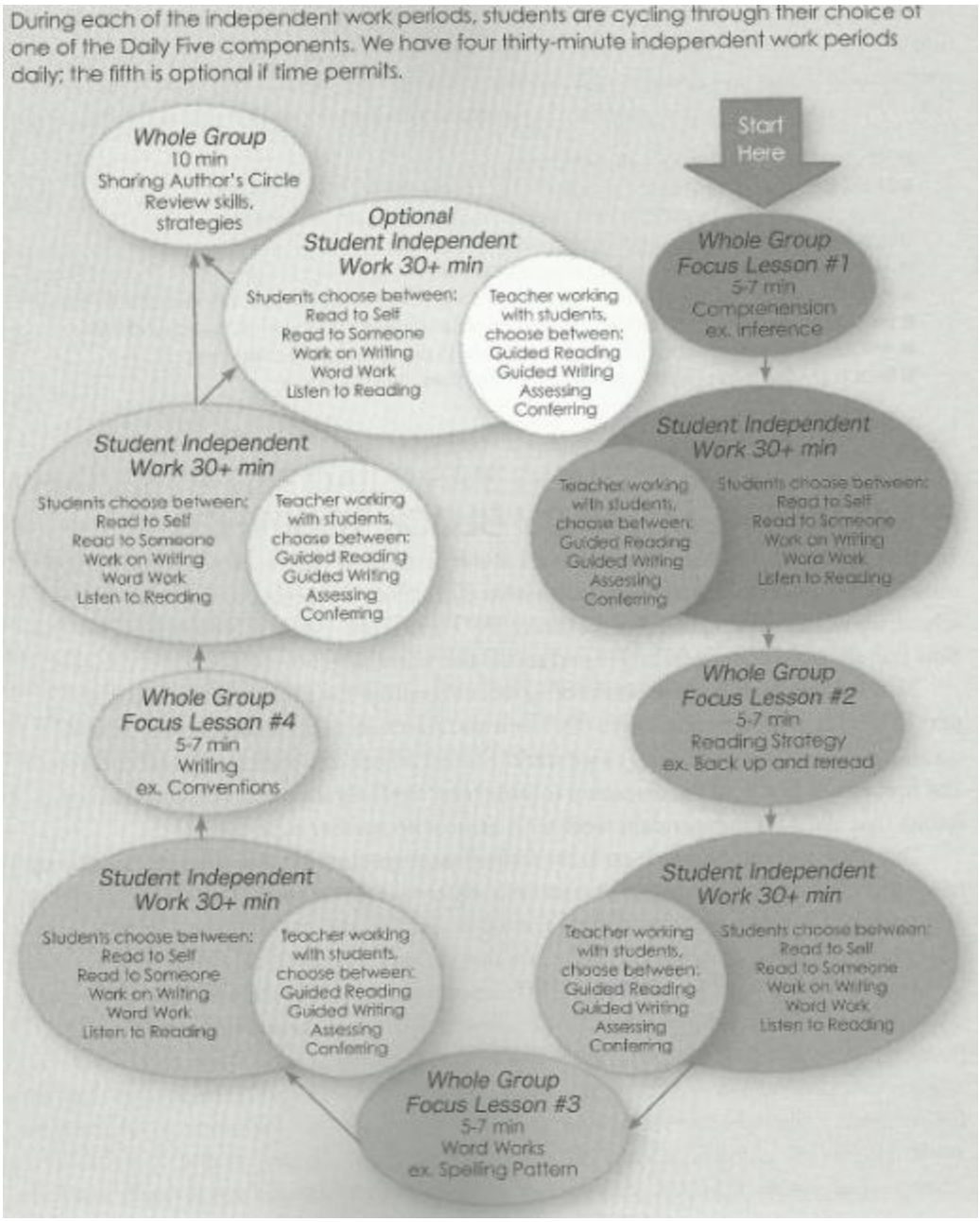


Figure 2. Daily 5 approach to balanced literacy

Source: Boushey & Moser 2006

The Daily 5 approach to balanced literacy begins with a 5-7 minute whole group focus lesson that addresses an aspect of comprehension, word work or writing. After the

whole group focus lesson students chose to work independently on one of the following activities, read to self, read with someone, listen to reading, word work or work on writing for 30 minutes. The class engages in a focus lesson between each independent work session.

The reading-to-self component involves students choosing and reading books that they find interesting and at their reading level. This component of the Daily 5 is similar to the self-selected component of the Four Blocks approach except that the child decides when and how often to engage in this activity.

Students who choose to read with someone find a partner and engage in buddy reading, choral reading or take turns reading short books. Also, in some instances students take turns retelling a story or part of a story they have read. This component is unique to the Daily 5 approach to balanced literacy. The Four Blocks approach integrates these strategies in the guided reading block. However, they are only one aspect of guided reading.

Listening to reading is another independent work activity. This activity provides students with the opportunity to hear what fluent reading sounds like. Resources such as CDs, websites and books on tape are available for students.

Another independent work activity is word work. Word work includes activities that focus on decoding, vocabulary and spelling. This component of the Daily 5 is different from the working with words block of the Four Blocks' approach. Students perform the word work tasks independently. The teacher does not interact or lead but prepares the activities in advance.

The final component of the Daily 5 approach is writing. Students may choose to work independently on writing activities including reader response journals, writing prompts and grammar activities.

There are several similarities and differences between the Four Blocks and the Daily 5 approaches to balanced literacy. The primary difference is that the Daily 5 approach provides students with a significant amount of independence and choice. However, both approaches provide the essential components of balanced literacy, a key feature of classroom environments that support student success with print. See figure 3.

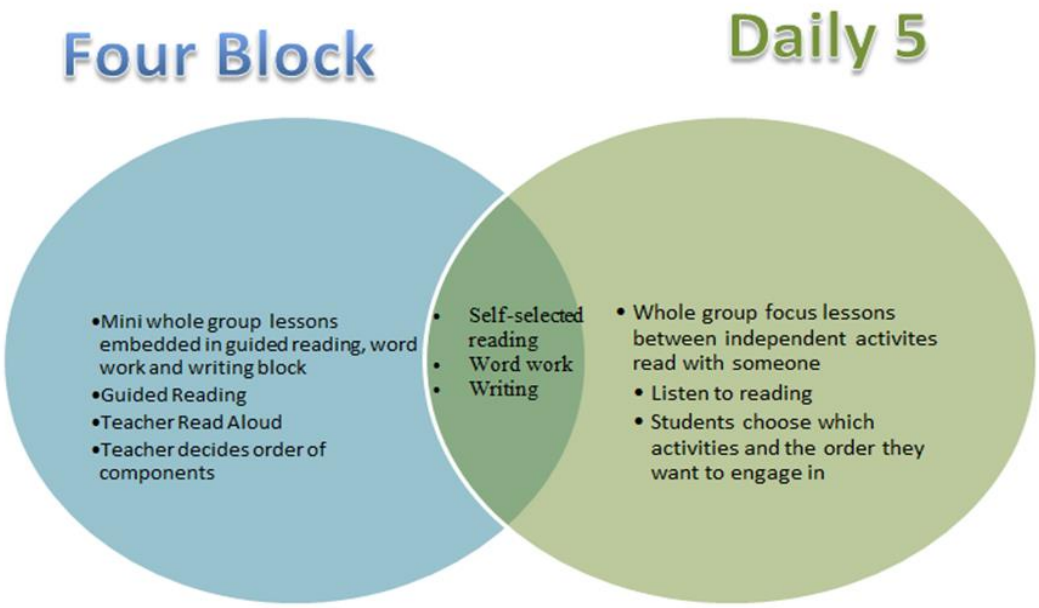


Figure 3. Comparison of Four Blocks and Daily 5 approaches to balanced literacy

The Phonics Dance program would augment the working with words component of both the Four Block or Daily 5 approaches to balanced literacy. The working with words component of the Four Block approach provides students with opportunities to

engage in activities that improve their ability to decode words. The Daily 5 approach provides a working with words component that is completed independently without the instructor or more knowledgeable other and peer modeling. However, in both balanced literacy approaches, the addition of a program like the Phonics Dance might contribute an engaging approach for students to learn to decode words.

It is to a more detailed description and explanation of exactly what the Phonics Dance program is, that I turn next.

Background about the Phonics Dance

Ginny Dowd, a first grade teacher in Ohio created the Phonics Dance, in 1999. After teaching first grade for several years and observing that some of her students had difficulty decoding words. She was inspired to create an engaging approach to learning strategies to sound out words. The Phonics Dance offers a variety of materials to assist teachers in implementing the program such as manuals, compact discs, alphabet sound review cards and hunk and chunks cards. Mrs. Dowd facilitates professional development seminars for teachers interested in learning the Phonics Dance. Teachers can read reviews and dialogue with other educators about the Phonics Dance on Facebook. Examples of the Phonics Dance can be viewed on You Tube.

Components of the Phonics Dance

The Phonics Dance is a 20-minute phonics lesson that has several components including alphabet sound review, word association, hunks and chunks, monster words, Mean Old Uncle Mario and magic sound sprinkles. Each component is introduced in a specific sequence for a particular number of days. See figure 4.

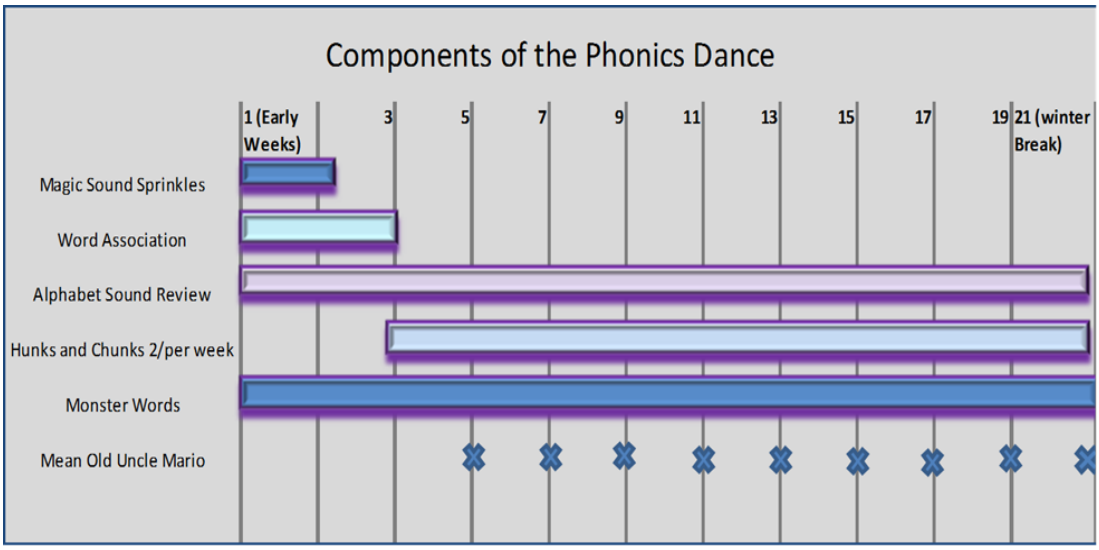


Figure 4. Components of the Phonics Dance

In the following sections I describe each component.

Magic sound sprinkles

Description of magic sound sprinkles. The magic sound sprinkles are simply cake sprinkles used with a chant to help the students build self-efficacy. The instructor uses magic sound sprinkles every day for the first five days of school and then every two or three weeks before a test or introduction to a difficult hunk and chunk. The instructor waves a magic wand over the sprinkles and says, "Oh, magic sound sprinkles make these first graders smart. Help them tell all these letters and sounds apart." The instructor places a few cake sprinkles in each student's hand. The students take their empty hand and wave it over their magic sound sprinkles and repeat, "I am smart, I am smart, I am smart." Students do not eat their magic sound sprinkle until everyone has some.

Underlying skills of the magic sound sprinkles. The magic sound sprinkle component of the Phonics Dance program does not include specific research based word recognition skills.

Learning theories associated with magic sound sprinkles. Bandura (1977) indicated that a strong source of motivation comes from one's beliefs and perceptions regarding their ability to perform a task. Students that perceive themselves as having the ability to perform a task are more motivated to accomplish the task. Perceived self-efficacy is a student's belief regarding their ability to accomplish the essential steps in attaining a specific outcome (Bandura, 1977). The magic sound sprinkle activity engages students in verbalizing that they are smart. This activity may assist students in developing perceived self-efficacy in relation to phonics skills.

Alphabet sound review

Description of the alphabet sound review. Beginning with the first day of school, students in classrooms that use the Phonics Dance program start their phonics lesson with the alphabet sound review. They will do this every day for 22 weeks. The instructor leads the class through the alphabet with a chant and moves for each letter. Each picture card contains a letter and a corresponding picture. The picture card for the letter P has a picture of a tub overflowing with popcorn and the letter P is written below. See figure 5.

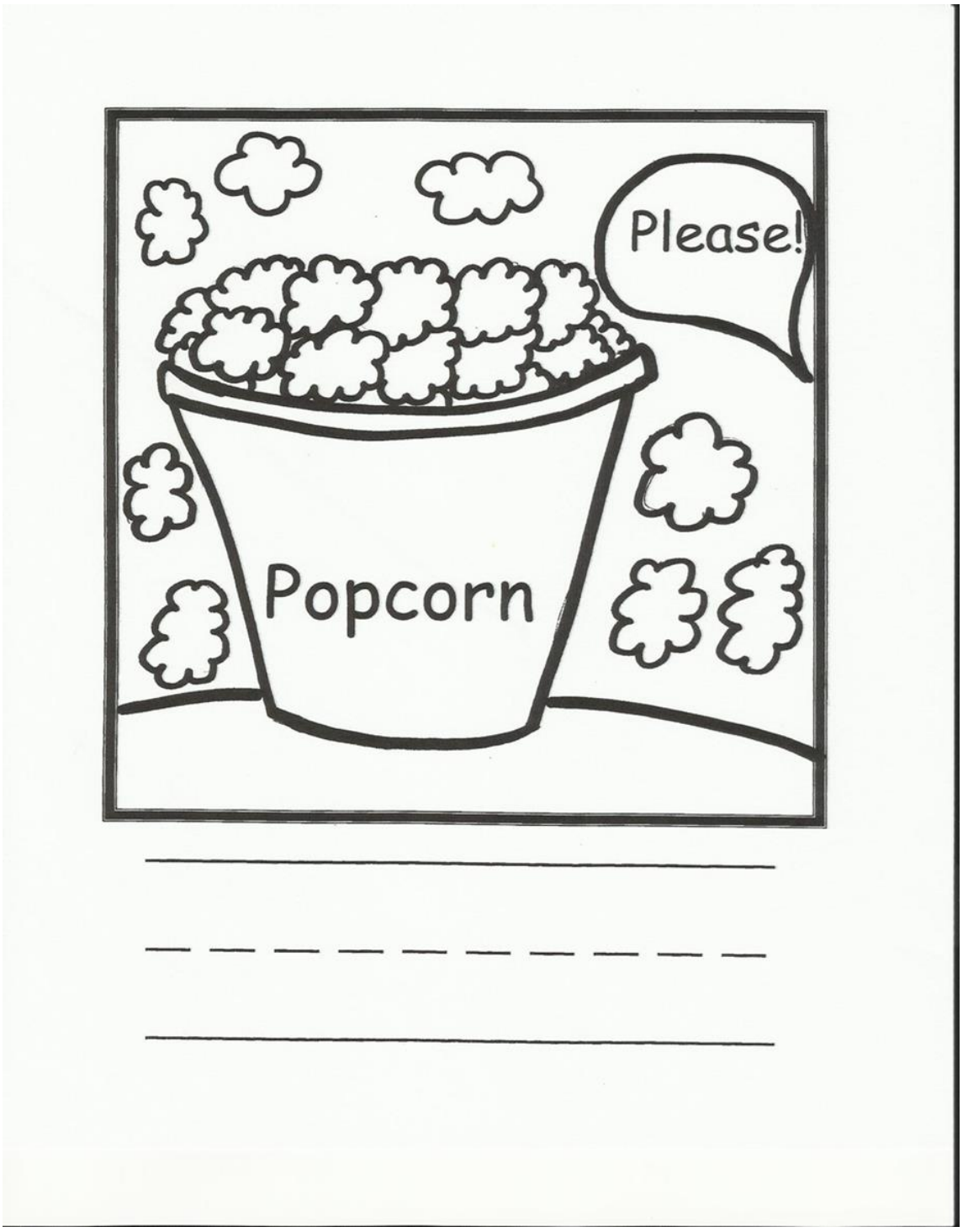


Figure 5. Alphabet sound review picture card

As an example, the chant for the letter P goes like this: P, P, P popcorn please!

The class personalizes the two letters T and U. For the letter T chant the class inserts their teacher's name. Also, each day a student is invited to insert their name in the letter U chant and choose between chanting about their umbrella or underwear.

In addition, to the initial alphabet sound review the phonics dance includes a special Halloween alphabet sound review. This chant is implemented during the month of October. Included in this chant are ghosts, jack-o-lanterns and witches. The picture cards follow the same format as the original alphabet sound review with each letter and corresponding picture. For example, the picture card for the letter J has a picture of a jack-o-lantern and the letter J written below. The alphabet sound review cards are available without color or letters written below, providing an opportunity for the teacher to allow students to color the pictures and to represent the letters in whatever handwriting system is used in a particular district.

Underlying skills of the alphabet sound review. During the alphabet sound review students chant letter names and letter sounds as the instructor points to each letter. Through this activity students learn the alphabetic principle. The principle is that letters represent sounds in a systematic way and there is a predictable relationship between letters and their sounds. Beck (2006) indicated that many students will not figure out the alphabetic principle independently. This activity facilitates students understanding of the alphabetic principle. Knowledge of the alphabetic principle is necessary in order for students to progress in word recognition skills.

Additionally, it is essential that children are familiar with a number of letter sound correspondences to move from the pre-alphabetic phase to the partial alphabetic phase of

word recognition (Ehri, 1998). In the partial alphabetic phase students use some letter sound correspondences to decode words. Reading words by decoding and blending individual sounds is one way children learn to read words. Through participating in the alphabet sound review each day, students rehearse each letter name and letter sound. Once letter names and letter sounds are mastered the alphabetic sound review becomes automatic. The ability to rehearse letter names and letter sounds with automaticity allows the student to utilize more cognitive processing on other tasks (LaBerge and Samuels, 1974). Thus, students who know individual letter sounds with automaticity can focus on blending several letter sounds together to decode words.

Learning theories associated with the alphabet sound review. The alphabet sound review is a unique way to review the alphabet with chants and moves that correspond to each letter. Hallam (2010) indicated that engagement with music contributes to increased phonological awareness. Students who have phonological awareness can identify and make rhymes, can clap the number of syllables and can identify initial sounds of words. Phonemic awareness is a predictor of reading achievement and involves the ability to work with individual sounds in a word.

Through enactive representation, meaning representations of ideas built through action such as movement or manipulating objects, children develop their understanding of letter names and sounds (Bruner, 1964). The alphabet sound review involves students using their muscles as they perform movements that correspond with each letter and letter sound. These movements mediate enactive representation as they assist the students in recalling specific letter names and letter sounds.

As mentioned previously during the alphabet sound review the teacher leads the class pointing to each picture card, as they chant and move through the alphabet. Colorful picture cards representing the alphabet are posted in the classroom where they can be readily viewed by students. Iconic representation is facilitated through the use of images that assist children in developing an understanding of their world (Bruner, 1974). Thus picture cards mediate iconic representation assisting students in recalling letter names and letter sounds.

In addition, the alphabet sound review provides the learner with scaffolding. Scaffolding is related to Vygotsky's notion of the Zone of Proximal Development (ZPD) in that the instructor or more knowledgeable other provides supports for the learner as they construct knowledge (Driscoll, 2005). As students learn letter names and letter sounds they can refer to the picture cards for assistance. The teacher performs the alphabet sound review with the students serving as a model for students that may not have mastered a chant or motion. Similarly, other students who have mastered the chants and motions serve as peer-models for students who are still learning them.

Word association

Description of word association. After the class chants and moves through the alphabet sound review they work on word association[1]. Word association includes the "What letter is it?" activity and is implemented during the first ten days of school following the alphabet sound review. Adams (1990) suggested that programs that include

[1] Mrs. Dowd refers to this component as word association. However, it is really introducing and practicing short vowel sounds.

a systematic approach to phonics instruction result in greater word recognition, spelling, vocabulary, and reading comprehension compared to nonsystematic approach to phonics instruction. Beck (2006) suggested that since every word in the English language has one vowel sound, children should be introduced to them early. During this activity short vowel sounds are systematically introduced individually and reviewed for two days. See figure 6.

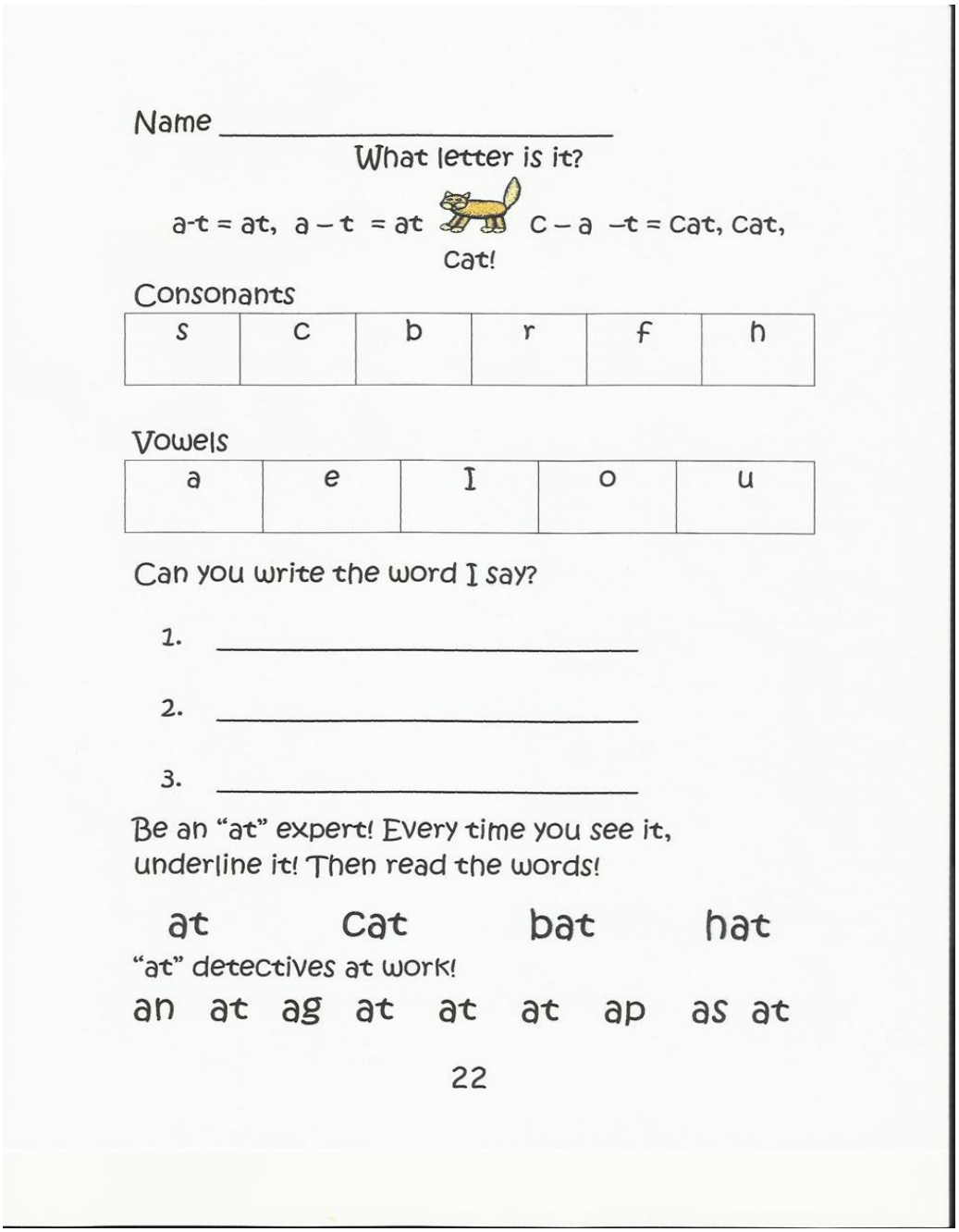


Figure 6. Word association worksheet

Students are given the word association worksheet. They are asked to identify specific consonants through coloring the consonant as the teacher says the letter name, makes the consonant sound or indicates that it is the beginning or ending sound of a

particular word. Next, the class reviews the correct answer for each consonant. The class points to each of the vowels in the boxes and reviews their motion and sounds. Next, students are asked to identify specific vowels through coloring the vowel as the instructor says the vowel sound. The last vowel reviewed is the vowel of the day and the teacher indicates that all the words that they write will contain the same vowel sound.

The next component of the "What letter is this activity?" involves writing words. The teacher calls out a simple, consonant vowel consonant word that contains the vowel sound and rhyme of the day. Next, the teacher draws lines on the board to indicate how many letters the word contains. The teacher says each sound in the word and points to a specific line. The students write the letters.

After the word is written the students become word detectives underlining the rhyme of the day. The class practices reading the word in two parts, first saying the initial sound (onset) and then they read what comes after the initial sound (rhyme). Finally, they read the whole word. If a word contains a consonant cluster they read the blend and then the rhyme. Beginning with the first word, the class underlines the rhyme of the day in each word. Students are reminded that a good reader gets their mouth ready to make the first sound that is in the word and then looks for parts of the word that they know. Students work independently reading each word and writing a check mark next to the ones they have read successfully. The teacher randomly asks students to read the words.

The teacher leads the class reading the words that are on the sheet under the "be an expert" section. After reading the words the class breaks them down into two parts, the onset and rhyme. For example, they would read /b/ and then /at/ for the word bat.

Students are then asked to look at the rhymes at the bottom of the page, underline the common rhyme of the day and put an x through any ending that is not the common rhyme. This activity culminates with the class placing words on the word wall that corresponds with the rhyme of the day.

Underlying skills of word association. Initially, students practice letter sound relationships as they are asked to identify letters that correspond to the sound that the instructor says. Letters are printed in separate boxes. The concept of printing letters in separate boxes was developed by Elkonin (1973) as a concrete way to demonstrate that each letter has a specific sound or phoneme. Elkonin boxes assist students understanding of the alphabetic principle and decoding.

Next, students write words as the instructor says each letter sound. Encoding is occurs when students apply their knowledge of letter-sound relationships to identify letters needed to compose a particular word (Beck, 2006). Encoding is the opposite of decoding, whereas decoding involves identifying sounds associated with letters written on paper. Encoding is a more difficult tasks requiring the student to identify and write letters that are needed to make a particular word.

Throughout this activity students must employ phonemic awareness skills including segmenting and blending. Gaskins (2004) indicated that there is a relationship between success in learning to read and the ability to segment words into their component sounds and match the sounds to appropriate letters and letter patterns. Students identify letters that make a word and blend them together. For example the class may be learning the letter pattern *ump*. Students may be instructed to write the word *lump*. This would

involve segmenting skills as the letter pattern *ump* and the letter L must be identified and then blended. The last section of this activity involves segmenting words through identifying specific letters or letter pattern and underlining or circling them.

The word association component of the Phonics Dance program culminates with the students instructed to become "word detectives." Gaskins (2004) indicated that the term "word detectives" is an approach to teaching decoding by analogy. Decoding by analogy requires the student to make an analogy to a known site word. Analogic phonics is based on words students already know and word patterns. Rather than teaching students phonics rules, they are instructed to identify patterns in words and use those patterns to identify other words (Cunningham, 2000). For example, students would be taught that if they know how to read the word cat, they should be able to read the words pat, rat, hat, sat and other rhyming words. Goswami (1986) indicated that children who are not yet reading have the ability to make analogies between the ends of words suggesting that analogy may play an important role in early reading development. Students that are in the full alphabetic phase of word recognition often use this strategy to identify words.

Learning theories associated with word association. The word association component of the Phonics Dance begins with a work sheet. The worksheet is interactive in that the teacher replicates the worksheet on the board and completes it with the class. A key component of Vygotsky's sociocultural theoretical perspective on learning is the importance of social interaction. Children experience meaningful learning and development when they interact with people in their environment and collaborate with their peers and more knowledgeable other. The word work component of the Phonics

Dance program mediates social interaction between students and their more knowledgeable other, the instructor.

Another notion in a sociocultural perspective is scaffolding. According to Driscoll (2005) scaffolding occurs when the instructor or more knowledgeable other provides assistance for the learner as they construct knowledge bridging the gap between their actual developmental level and their potential developmental level. Completing the word association tasks as a class led by the instructor scaffolds student learning beyond their actual developmental level into their potential developmental level.

Hunk and chunks

Description of hunk and chunks. After ten days of word association students are introduced to hunk and chunks after the alphabet sound review. The Phonics Dance is comprised of 40 hunk and chunks that are introduced systematically. Systematic phonics instruction provides students with a faster start to reading acquisition compared to responsive instruction or no instruction at all (National Reading Panel Report, 2006). Each hunk and chunk has a corresponding chant with moves. For example, the chant for the hunk and chunk /tion/ is t-i-o-n, tion, tion, t-i-o-n, tion, tion. While chanting the class claps their hands over their head and moves from side to side trying "to grab the potion that gives them the motion."

As hunk and chunks are introduced to the class they are added to the Phonics Dance. Their corresponding colored picture cards are added to the Phonics Dance bulletin board. For example, the hunk and chunk /igh/ is written on a card with a picture of a light bulb. See figure 7 and table 2.

Figure 7. Hunk and chunk –igh picture card

Table 2.

Progression of hunk and chunks

	Hunk and Chunks
Week 3	sh, ch
Week 4	th, ing
Week 5	all, eigh
Week 6	oo (school), ew
Week 7	oo (book), ar
Week 8	or, ow
Week 9	ou, ee
Week 10	ea, aw
Week 11	ai, ay
Week 12	oa, ow (long o)
Week 13	ir, ur
Week 14	er, oi
Week 15	oy, wh
Week 16	ice, ace
Week 17	kn, wr
Week 18	ph, tion
Week 19	sion, ion
Week 20	ui, au
Week 21	aught, ought
Week 22	ed, at the end of a root word

The students are given a worksheet containing the hunk and chunk for the day. The teacher replicates the worksheet on the board. Students are asked to circle and say the sound of the hunk and chunk of the day each time they see it in isolation or within a word. The ability to combine letters into recognizable chunks makes word identification and storing the words into memory more efficient (Ehri, 1998). After circling the hunk and chunk of the day students are asked to write two words that contain the hunk and chunk on the lines provided. Next, students are then asked to spell and write two more words containing the hunk and chunk and then to circle the hunk and chunk and

underline consonant clusters and common rhymes. If the word has a prefix or suffix students are asked to bracket the root word. The final word the students write contains the hunk and chunk from the lesson and becomes the Word Wall, word of the day. See figure 8.

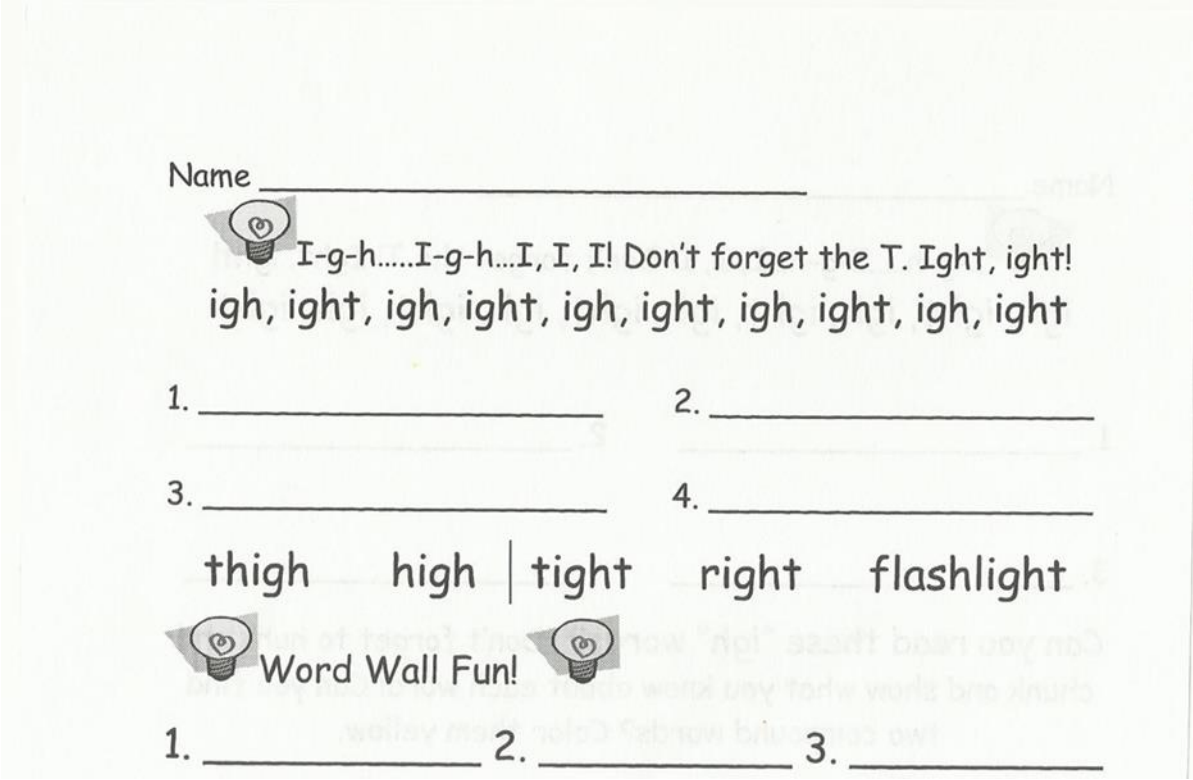


Figure 8. Hunk and chunk worksheet

Next, the teacher dictates words and asked the students to indicate if the word contains the hunk and chunk they have been studying that day. This is implemented with a two to one ratio with two words containing the hunk and chunk. The teacher writes each word on the board. The lesson ends with the students reading the words on the worksheet and circling the hunk and chunks.

Day two of a new hunk and chunk

Description of day two of a new hunk and chunk. Day two of a new hunk and chunk is a review of the hunk and chunk introduced on day one. Students are given a worksheet and are asked to say and circle the hunk and chunk each time they see it. The instructor introduces the Word Wall word of the day that is new but the hunk and chunk contained in the word is a review from the previous day. The class writes the word on the line numbered one. Three more words are introduced that contain the hunk and chunk that is being reviewed and the students write the words on the lines provided. After the students have written the words they circle the hunk and chunks, bracket the root words and underline common rhymes and consonant clusters.

The lesson ends with the students reading the words they have written that contain the hunk and chunk of the day. Students place a check mark next to each word they read correctly. The teacher observes the students and listens as they read their words.

Description of day five of hunk and chunks. In the Phonics Dance classroom students are introduced to a new hunk and chunk in Mondays and Wednesdays. On day five (usually on Fridays) the hunk and chunks that have been introduced during the week are reviewed. Students are given a worksheet and are asked to look at the top of the page and circle and say the hunk and chunks they have worked with during the week. Next, students are introduced to the Word Wall, word of the day that contains a hunk and chunk that was studied during the week. Students write the word of the day from the Word Wall on the first line. The teacher calls out three additional words that contain the hunk and chunks that have been studied during the week and the students write them on the next three lines provided on their worksheet. Finally the lesson culminates with the students reading the words on their worksheet as they circle the hunks and chunks, and underline

consonant clusters, common rhymes and bracket root words. Students place a check mark next to each word they read correctly. The teacher observes the students and listens as they read their words.

Underlying skills of hunk and chunks. Students practice identifying letter patterns in the hunk and chunks component of the Phonics Dance program. Initially students are asked to circle the hunk and chunk they are learning each time they see it in isolation or within a word. Ehri (1998) indicated that as students encounter words that they have not seen, that contain spelling patterns they have learned, then they can pronounce the units without needing to subdivide them into graphophonemic units. For example, students that are familiar with letter patterns such as *oa* and *ing* would find it easier to recognize longer sight words such as *roasting*, *soaking* and *toasting*.

Next, students are asked to spell and write words containing the hunk and chunk of the day. There is a reciprocal relationship between learning to read and spell. Spelling instruction supports word reading ability because it helps students acquire knowledge of the alphabetic system, which helps reading development. Students that can read words remember word-specific information and then access this information to spell the words (Ehri, 1998). The ability to produce spellings of words is more difficult task than decoding words.

Lastly, the hunk and chunks component of the Phonics Dance program invites students to identify words that contain common rhymes. The instructor asks students to identify and circle rhymes in the words they have written on their worksheet. Goswami (1990) suggested that students can use their knowledge of rhyming words to read words

by analogy. Therefore students can apply the rhymes they have practiced to assist them in identifying additional words through analogizing.

Learning theories associated with hunk and chunks. Each hunk and chunk has a corresponding chant. Students begin the hunk and chunks component of the Phonics Dance program reviewing the chants of the hunk and chunks they have learned. Hallam (2010) suggested that there is a large body of evidence that supports the notion that engaging in music is a major factor in developing perceptual processing systems which assist the encoding and identification of speech sounds and patterns. Incorporating chants into learning letter patterns may benefit students regarding word recognition skills.

As previously mentioned Bruner's (1964) theoretical perspective regarding enactive representation, involves representations of ideas built through action such as movement and manipulating objects. Children build an understanding of letter patterns through performing actions that correspond to specific letter patterns. Bruner (1964) indicated that iconic representation is the use of images that assist children in developing an understanding. Picture cards mediate iconic representation assisting students in learning letter patterns.

In addition to Bruner's enactive representation and iconic representation, Vygotsky's sociocultural theoretical perspective of learning underpin the hunk and chunks component of the Phonics Dance program. During the hunk and chunks component students complete a worksheet collaboratively with their peers and more knowledgeable other their instructor. This scaffolding provides support for the learner as they construct knowledge.

Monster words

Description of monster words. Words that students often find confusing or tricky to spell are called "Monster Words." Each monster word has a specific chant. For example, the chant for the word /want/ is w-a-n-t, I want to go on a picnic but I don't want ants. Each monster word is introduced as a Word Wall word of the day and is posted on the Word Wall for students to reference. Several spelling words each week are monster words.

Underlying skill of monster words. The monster word component of the Phonics Dance assists the students in learning words by sight. Recognizing words by sight is one way that readers process text. Students as early as first grade have the ability to retain sight words to memory after reading the words as few as four times. Once students know sight words well enough they can read them with automaticity, without putting effort into pronunciation or decoding (Ehri, 1998). Reading words with automaticity allows students to read text more fluently and devote cognitive efforts to other tasks including comprehension.

Learning theories associated with monster words. Again the Phonics Dance employs Bruner's iconic mode of representation as the word is written on a card with a picture of a monster mummy on top. See figure 9.

Figure 9. Monster word card

Mean Old Uncle Mario

Description of Mean Old Uncle Mario. Mean Old Uncle Mario is a character represented by a man who looks like Albert Einstein. See figure 10.

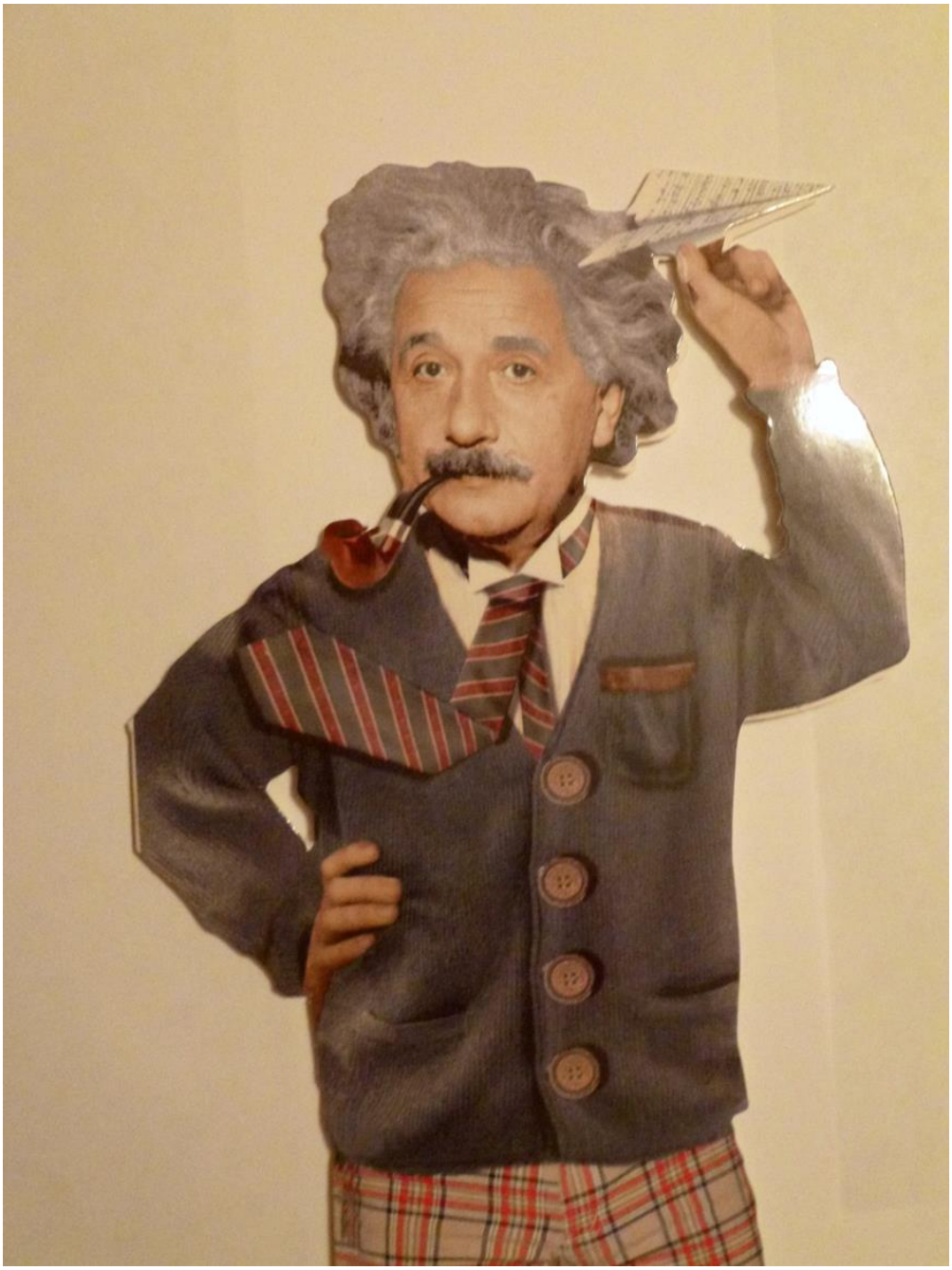


Figure 10. Mean Old Uncle Mario

Mean Old Uncle Mario is the class villain and taunts the students in letters the class receives from him. In his letters he states that a particular hunk and chunk may be too hard for the students to learn. At this point in the Phonics Dance program students

have been successful at learning letter names and letter sounds and several hunk and chunks. Mean Old Uncle Mario's letters arrive once every two to three weeks, as the hunks and chunks get harder and the class has experienced some success with hunk and chunks that have not been as challenging.

A picture of Mean Old Uncle Mario is posted in the classroom. The students are told that he is responsible for all the inconsistencies of our language because he had trouble reading and gets jealous when boys and girls read better. Mean Old Uncle Mario is a picture of Albert Einstein. As letters are received and read to the children they are posted in the classroom. See figure 11.

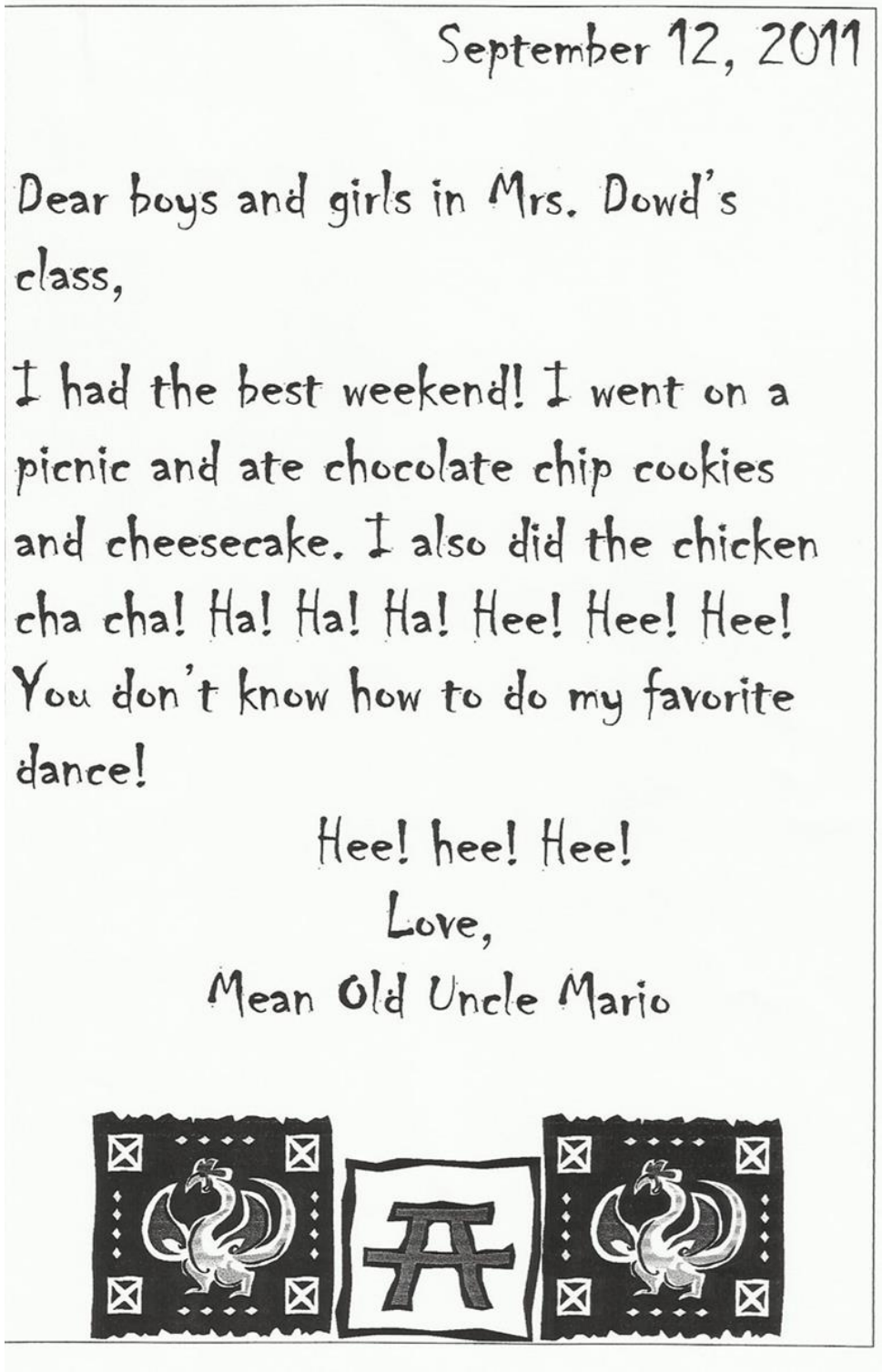


Figure 11. Mean Old Uncle Mario letter

Underlying skills of Mean Old Uncle Mario. The Mean Old Uncle Mario component of the Phonics Dance program provides students with decoding, sight words and practice in reading words in context. The letters from Mean Old Uncle Mario contain sight words and words that include the hunk and chunk that the students are learning. Students use the phonics skills they have learned and are learning to decode the text. Messmer (2005) indicated that students apply more phonics skills when reading decodable text, were more accurate and relied less on their instructor for assistance.

Learning theories associated with Mean Old Uncle Mario. Mean Old Uncle Mario is a picture of Albert Einstein. Hidi (1990) indicated that the content students find intriguing or interesting helps increase motivation. Students may find him interesting and possibly scary and this may increase their motivation. First grade students do not recognize him as a theoretical physicist.

In addition, Bandura and Schunk (1981) indicated that success motivates, frequently increases student self-efficacy and bolsters student's belief that they can achieve an important academic task. Letters arrive from Mean Old Uncle Mario at strategic points as students become proficient with letter knowledge and several hunk and chunks have been mastered. Mean Old Uncle Mario becomes the class villain. Since students have experienced some success with hunk and chunks, they may have increased self-efficacy which may motivate them to learn the more difficult hunk and chunks.

Overview of the Phonics Dance components.

As described for the various components, students often engage in social interactions that are mediated by their teacher or more knowledgeable other. Vygotsky

(1978) suggested that meaningful learning and development occur when children interact with people in their environment, their peers and more knowledgeable others. Guided by the teacher or more knowledgeable other, the students utilize the tools such as speech, symbols, movement and images to interact and establish a language that supports them as they become readers.

Many of the components of the Phonics Dance have similar elements that correspond to the notions of "enactive representation," "iconic representation," "the zone of proximal development," "scaffolding," "self-efficacy," and the use of various signs and symbols to mediate learning experiences. These elements include teacher modeling, movement, chants, writing, environmental print and graphic representations. Additionally, several of the Phonics Dance program components engage students in word recognition skills. These skills include phonemic awareness, letter knowledge, decoding, analogizing, spelling and sight word recognition.

Now that the readers have a better understanding of the components of the Phonics Dance, I will describe the curriculum program used within the comparison classrooms involved in this study.

See Appendix A for an analysis of the official Phonics Dance teachers' manual.

Scott Foresman First Grade Basal Phonics Program

The Scott Foresman first grade basal reading program includes oral language, word work, reading, and language arts lessons. The word work component is comprised of several sections including phonemic awareness, phonics, spelling and high-frequency words. Instructors choose which sections or combination of sections to include in their

classrooms. For example, the phonics section can be implemented without the phonemic awareness section or an instructor may choose to include the phonics and spelling sections only.

The phonics section is a 30-week program that is implemented beginning the first week of school. Initially short vowel sounds are introduced one per week. After several weeks of instruction long vowel sounds are introduced followed by consonant diagraphs and blending strategies. One letter sound, letter patterns (digraphs, diphthongs and word endings) or blending strategies is introduced and the concept from the previous week is reviewed within a five-day cycle. Lessons are approximately 20 minutes in length and are comprised of five components including connect (an introduction to the target concept), sound spelling cards, time for the instructor modeling the skill, group practice and review. See table 3.

Table 3.

Implementation of basal phonics program components

	Day 1	Day 2	Day 3	Day 4	Day 5
Connect	**X**	**X**	**X**		
Sound Spelling Cards		**X**			
Model	**X**	**X**	**X**		
Group Practice	**X**	**X**	**X**		
Review	**X**	**X**		**X**	**X**

Description of the Basal Phonics Program Components

Connect. Beginning with the first week of school students in the basal phonics classroom begin each phonics lesson on days one, two and three of a five-day cycle engaging in the connect component. During the connect component students review a letter sound, letter pattern or strategy that they have previously learned and then are introduced to an additional letter sound or strategy. For example, on day one of a 5-day sequence focusing on the letter Y, the instructor would write the words *hide* and *these* on the board and remind the students that they have studied words that are similar. Next, the instructor would ask the students to indicate the vowel sounds they hear in the words. The connect component would culminate with the instructor informing the students that they will learn another letter (the letter Y) that can symbolize the /i/ and /e/ sounds. See table 4.

Table 4.

Sequence of Scott Foresman basal phonics letter, letter pattern and strategy introduction.

	Sequence of Basal Phonics Letter and Strategy Introduction
Week 1	Short a, final ck
Week 2	Short i, final x
Week 3	Short o, –s plural
Week 4	Inflected ending s, Inflected ending Ing
Week 5	Short e, initial blends
Week 6	Short u, final blends
Week 7	Digraphs sh and th, Vowel sounds in ball
Week 8	Long a (cvce), c/s, g/y
Week 9	Long i (cvce), Diagraphs wh, ch, tch
Week 10	Long o (cvce), Contractions n't, 'm, 'll
Week 11	Long u, Long e (cvce), Inflected ending E
Week 12	Long e: e, ee, Syllables (vccv)
Week 13	Vowel sounds of y, Long vowels (cv)
Week 14	Final ng, nk, Compound Words
Week 15	Ending – es Plural –es, r- Controlled or, ore
Week 16	Inflected endings –ed, -ing, r- Controlled ar

Underlying skills of connect. The connect component of the Scott Foresman basal phonics program was designed to introduce or review a letter, letter pattern or phonics strategy that has previously been instructed. In order for students to reach the full alphabetic phase of word recognition they must learn major grapheme-phoneme

correspondences (Ehri, 1998). The connect component assists students in learning letter names, letter sounds and phonics strategies.

Learning theories associated with connect. During the connect component the instructor or more knowledgeable other interacts with the students and mediates the learning experience through the use of tools including speech and symbol. Vygotsky's sociocultural theoretical perspective underpins the connect component of the basal phonics program. According to Vygotsky (1978) in order for meaningful learning to occur students must interact with a more knowledgeable other, their instructor. The connect component of the basal phonics program provides an opportunity for meaningful learning, as the instructor communicates with the students concerning letters, letter sounds and phonics strategies.

In addition the connect component of the basal phonics program invites students to activate background knowledge. The connect component begins with a review of a letter, letter pattern or phonics strategy previously learned and builds a connection to the information that the students are going to learn. Johnson and Pearson (1984) indicated that a student's memory contains information previously learned and when the students is introduced to new information they draw from the information previously learned.

Sound spelling cards. The sound spelling card component is implemented on day two of the basal phonics program after the connect component when students are introduced to a new letter sound or letter pattern. The sound spelling cards have a picture of a word that begins or ends with the new letter or letter pattern introduced. For example, the instructor would show the students a sound spelling card with a picture of a

book. Next, the instructor would tell the students that the picture they are looking at is a book and the sound they hear in the middle is /oo/. Students would then practice saying the /oo/ sound. See figure 12.

Figure 12. Sound spelling card

Underlying skills of sound spelling cards. Similar to the connect component of the basal phonics program the sound spelling card component reviews letters and letter sounds. Students must have letter knowledge skills in order to become proficient at word recognition. Progression through the partial alphabetic phase into the full alphabetic phase and eventually into the consolidated alphabetic phase depends on the students' letter knowledge and phonemic awareness skills (Ehri, 1998).

Learning theories associated with sound spelling cards. Again Vygotsky's sociocultural theoretical perspective theory on learning and development is employed in the sound spelling component of the basal phonics program. The instructional contexts of this component provide students with social interactions and are consistently creating opportunities for learning. Moll (1990) indicated that from a Vygotskian perspective social interactions are mediated through the use of cultural tools such as speech, literacy

and mathematics. During the sound spelling card component of the basal phonics program the instructor interacts with the students through the use of picture cards that represent a letter or letter pattern.

In addition to Vygotsky's sociocultural theoretical perspective, Bruner's theory of iconic representation is involved in the sound spelling component of the basal phonics program. As previously explained the sound spelling component of the basal phonics program utilizes colorful picture cards that correspond to a specific letter or letter pattern. Iconic representation is mediated through the use of images that assist children in developing an understanding of their world (Bruner, 1974). Therefore picture cards facilitate iconic representation assisting students in learning letter names and sounds.

Model. The model component of the basal phonics program is implemented on days one, two and three. This component begins with the instructor writing a word on the board that contains an example of the letter sound, letter pattern or phonics strategy that was introduced during the connect component. Next, the instructor says the words and instructs the students to listen and then say the words together. For example, the instructor would write the word *go* on the board and explain to the students that when a word has a vowel at the end then the vowel is usually long. The instructor would then say the word and then ask the students to say the word together.

Underlying skills of model. During the model component of the basal phonics program the instructor models and the students rehearse the sounds of the letter and letters patterns and blend them to decode words. Beck (2006) indicated that blending is an essential part of decoding and many young children have difficulty with this task that

includes segmenting the word into phonemes and then blending them together. Thus the strategy of blending letter sounds is an essential skill for decoding words.

Learning theories associated with model. The model component of the basal phonics program is associated with the learning theory of scaffolding. Driscoll (2005) indicated that the notion of scaffolding is that the instructor or more knowledgeable other provides supports for the learner as the learner constructs knowledge. During the model component the instructor provides supports for the learner through saying the words that are written on the board as the students listen. The instructor provides additional support saying the words with the children.

Group practice. Students engage in the group practice component of the basal phonics program on days one, two and three. This component involves the instructor and students rehearsing words that contain examples of the letter, letter patterns or phonics strategy that were introduced during the connect and model components. For example, if the students were introduced to the short vowel /a/ during the connect component the instructor would model saying words with the short vowel /a/. Next the instructor would have several words on the board that would contain the short vowel sound /a/ and the class would say the sound of each letter and blend them together.

Underlying skills of the group practice. Similar to the connect and spelling sound components of the basal phonics program the group practice component provides students with practice concerning letter knowledge skills and blending. As previously stated, letter knowledge is crucial in order for students to progress through the phases of word recognition. Students that have the ability to recognize chunks of letters or letter

patterns in words are in the final phase or consolidated phase of word recognition (Ehri, 1998). As students become proficient with letter sounds and are introduced to letter patterns, they become more confident and begin adding letter patterns to their repertoire of letter knowledge. Thus decoding becomes more efficient as students identify and decode letter patterns within words instead of individual letter sounds.

Learning theories associated with group practice. An underpinning theory associated with the group practice component of the basal phonics program is Vygotsky's sociocultural theoretical perspective. Vygotsky (1978) suggested that instructional contexts must provide students with social interactions. The group practice component involves the class rehearsing letter sounds led by their instructor or more knowledgeable other.

Review. The review component of the basal phonics program is implemented on days one and two as part of the phonics lesson routine. During the review component the instructor asks the students about the words that were presented in the group practice component. For example, if the lesson focused on contractions, the instructor would ask the students what they know about reading contractions. A scripted response is provided suggesting that students includes indicate that when you see a contraction it is a shorter way of writing two words. Additional review activities include, blending words, sorting words and a practice book worksheet are provided on days one and two.

In addition to the review component of the phonics lesson, routine review activities are provided each day of the basal phonics program. These activities include, making words, sorting words, word reading, reading words in context and practice book

worksheets. Students practice a letter, letter pattern or phonics strategy that was introduced during the week or that day. See figures 13 and 14.

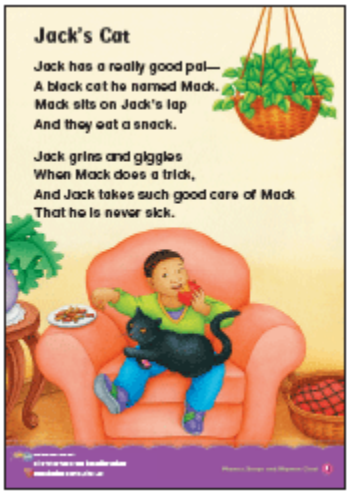
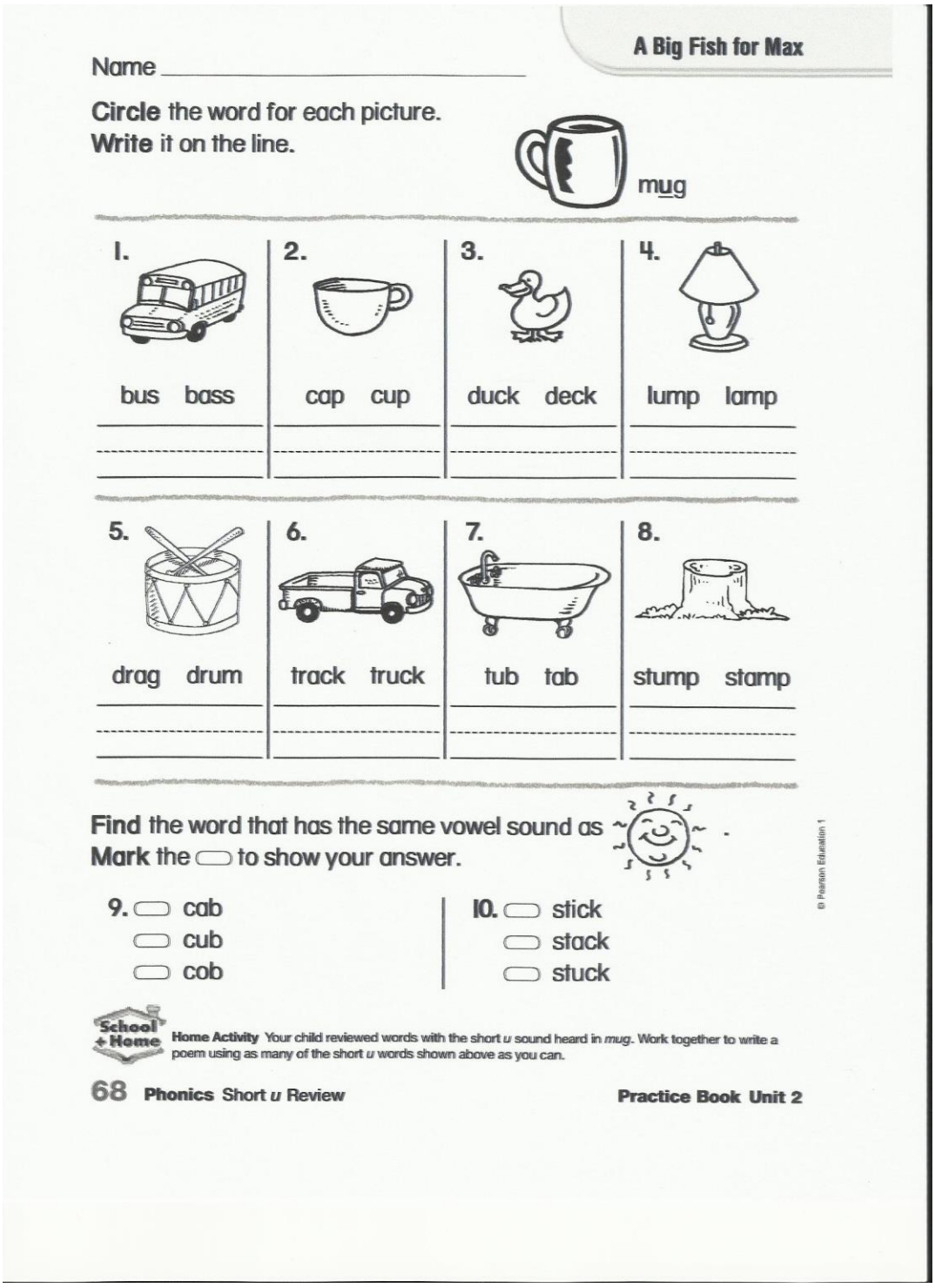


Figure 13. Word reading songs and rhymes chart



A Big Fish for Max

Name _____

Circle the word for each picture.
Write it on the line.

mug

1. bus bass
2. cap cup
3. duck deck
4. lump lamp
5. drag drum
6. track truck
7. tub tab
8. stump stamp

Find the word that has the same vowel sound as .
Mark the ⬭ to show your answer.

9. ⬭ cab
   ⬭ cub
   ⬭ cob
10. ⬭ stick
    ⬭ stack
    ⬭ stuck

School + Home **Home Activity** Your child reviewed words with the short *u* sound heard in *mug*. Work together to write a poem using as many of the short *u* words shown above as you can.

Figure 14. Basal phonics worksheet

Underlying skills of review. As students participate in word sorts, making words, word reading, reading words in context and practice book worksheets they engage in several word recognition skills including phonemic awareness, letter knowledge, decoding, analogizing, spelling, sight word recognition and reading words in context. The word sort activity involves students separating words into categories based on a particular feature of the words. For example students may be given several words and then instructed to sort the words into categories. Bear, Invernizzi, Templeton and Johnston (2012) indicated that word sorts help students analyze and make assumptions about words and apply them to words that they have not yet encountered. Depending on the word sort, students practice letter knowledge, decoding, analogizing and sight word recognition skills.

Making words provides students with six to eight different letters. The instructor calls out a word and the students make the word with the letters that have been provided. Making words is an approach to phonics instruction in which children learn how to look for patterns in words and how one letter can change the entire word (Cunningham, 1992). In addition to letter knowledge students employ phonemic awareness and spelling skill as they engage in making words.

The word reading activity includes the phonics songs and rhyme chart. The instructor guides the students in singing the rhyme to the tune of a familiar song. The rhyme includes words that contain the letter or letter pattern that students have been instructed. During this activity students practice their decoding, letter knowledge, analogizing, sight word and reading words in context skills. There have been many studies that have suggested that analogizing is an effective instructional approach.

Goswami (1986) indicated that students have the ability to use rhyme cues in known words to read words they have not yet encountered.

Reading words in context involves students reading decodable text. The instructor writes several sentences on the board and asks individual students to read a sentence. Next, the instructor randomly points to words and asks students to read them. Decodable text only includes letter sounds and sight words that have been taught (Cunningham, 2002). Students demonstrate their knowledge of letter sounds, letter patterns and sight words that have been introduced and employ other word recognition skills including, letter knowledge, decoding, sight word recognition.

Lastly, review activities include practice book worksheets. Practice book worksheets involve students filling in the missing letter or letter pattern, choosing words from a word bank that corresponds to the correct definition, rhyme or complete the sentence. During this activity students practice letter knowledge, decoding, analogizing and reading words in context skills.

Learning theories associated with review. There are several learning theories associated with the basal phonics review activities, including Vygotsky's sociocultural theoretical perspective. According to Moll (1990), Vygotsky indicated that intellectual skills that children acquire are associated with how they interact with their peers and instructor or more knowledgeable other in problem solving environments. Within the word reading activity, students interact with their peers and instructor as they decode the rhyme. In addition, students interact with their instructor during word sorts, making words and reading words in context.

In addition to Vygotsky's sociocultural perspective, Wiggins (2007) suggested that combining music and literacy learning may support both language and literacy development as they both include auditory and visual discrimination, vocabulary development and fluency. During the word reading activity the class sings the rhyme to a familiar tune as the instructor points to each word.

Comparison of Underlying Skills Involved in the Phonics Dance and Basal Phonics

There are several differences between the Phonics Dance program and the Scott Foresman basal program. The Phonics Dance program reviews letter names and letter sounds every day. Also, the Phonics Dance program introduces letter patterns beginning in the third week of the program and reviews the letter patterns that have been previously introduced. However, the basal phonics program initially introduces one short vowel or long vowel sound per week and the concept from the previous week is reviewed. Letter patterns are not introduced until much later.

Additionally, several of the Phonics Dance program components incorporate elements including teacher modeling, movement, chants, writing, environmental print and graphic representations. These elements provide support that may assist children in learning letter-sound correspondences. The basal phonics program provides teacher modeling and some graphic representations. See Table 5.

Table 5.

Word recognition skills and elements of the Phonics Dance and basal phonics program

	Phonics Dance	**Basal Phonics**
Phonemic Awareness	Alphabet Sound Review, Word Association Hunk and Chunks	Review
Letter Knowledge	Alphabet Sound Review, Word Association Hunk and Chunks	Connect, Sound Spelling Cards Group Practice, Review
Decoding	Word Association, Hunk and Chunks Mean Old Uncle Mario	Sound Spelling Cards Group Practice, Review
Analogizing	Word Association, Hunk and Chunks	Review
Spelling	Word Association, Hunk and Chunks	Review
Sight Word Recognition	Monster Words, Mean Old Uncle Mario	Review
Reading Connected Text	Mean Old Uncle Mario	Review
Teacher Modeling	Magic Sound Sprinkles, Alphabet Sound Review Word Association, Hunk and Chunks Monster Words, Mean Old Uncle Mario	Connect, Sound Spelling Cards Model, Group Practice, Review
Movement	Magic Sound Sprinkles, Alphabet Sound Review Hunk and Chunks, Monster Words	
Chants	Magic Sound Sprinkles, Alphabet Sound Review Hunk and Chunks, Chants	Review
Writing	Word Association, Hunk and Chunks Monster Words	Review
Environmental Print	Alphabet Sound Review, Word Association Hunk and Chunks, Monster Words Mean Old Uncle Mario	Word Reading Activity (song and rhyme charts)
Graphic Representations	Alphabet Sound Review, Hunk and Chunks Monster Words, Mean Old Uncle Mario	Sound Spelling Cards

In the next few sections I will explain the literacy related tasks that were implemented in the Phonics Dance and basal phonics classrooms.

Literacy Related Tasks in the Phonics Dance Classroom

Students in the Phonics Dance classroom engaged in other literacy related tasks including comprehension and creative writing lessons. Comprehension lessons included guided reading and activities that focused on reading for understanding. For example, students participated in guided reading and then engaged in additional activities that included concepts such as main idea and details, sequences or cause and effect. Resources that were utilized for guided reading and comprehension lessons included trade books and leveled books. In addition, the Houghton Mufflin basal was used as a supplement. During guided reading lessons students continually looked for hunk and chunks in unfamiliar words. Comprehension focused work was a considerable part of the day lasting 50 to 60 minutes.

Additionally students in the Phonics Dance classroom engaged in creative writing five days a week for 35 minutes. Creative writing was implemented throughout the day in other content areas. Students employed the letter knowledge and letter patterns they had learned from the alphabet sound review and hunk and chunks to assist them as they wrote.

The reading specialist pulled out students individually that were identified as lower level readers and worked with them for 20 minutes. Intervention including reading recovery was not available for students in the Phonics Dance classrooms.

Literacy Related Tasks in the Basal Phonics Classroom

The literacy curriculum in the basal phonics classrooms followed a balanced literacy framework and included lessons that engaged students in fluency, working with words and comprehension. The Scott Foresman basal reading program included several components concerning word work that were not implemented in the basal phonics classroom. These components were phonemic awareness and spelling.

Students in the basal phonics classrooms participated in word work that included spelling, word families and word wall words. Weekly spelling lessons consisted of ten words, five word family words and five word wall words. The basal spelling lessons were not utilized. In addition spelling words for the week were not chosen to correspond with the phonics letter or letter pattern for that week. These lessons were approximately 15 minutes four days a week. A spelling test was implemented on day five.

Additionally, students in the basal phonics classrooms engaged in comprehension lessons that included guided reading and employed resources including the Scott Foresman basal program, *A to Z Reading,* decodable text and trade books. The comprehension lessons were developed around the Ohio first grade reading indicators. Comprehension lessons were implemented four days a week for 30-40 minutes.

Writing was also a component of the basal phonics students' literacy curriculum. These lessons followed the format of writer's workshop. Most lessons began with a teacher led mini-lesson concerning concepts including grammar, punctuation and format. Students then worked individually on their writing projects. Writer's workshop was implemented four days a week for 30 minutes.

Lastly, intervention was provided for all students. During intervention students engaged in lessons based on individual need. For example, students that were not at grade level or below grade level concerning fluency engaged in Read Naturally lessons. Students that needed support with comprehension worked on Reading A to Z (RAZ) computer based lessons. Additional lessons that facilitated comprehension included resources such as Mentoring Ohio for Reading Excellence (MORE) and Peer-Assisted-Literacy-Strategies (PALS). Students participated in intervention lessons four days a week for about 45 minutes. See table 6.

Table 6.

Estimate of percent of time on other literacy related tasks

	Phonics Dance			**Basal Phonics**		
	Minutes Per Week	Minutes Over 16 Weeks	Estimated % of time on Literacy Related Activities	Minutes Per Week	Minutes Over 16 Weeks	Estimated % of time on Literacy Related Activities
Fluency	50	800	8%	180	2,880	36%
Word Work	75	1,200	13%	60	960	12%
Comprehension	300	4,800	50%	140	2,240	28%
Writing	175	2,800	29%	120	1,920	24%
Total time on Literacy Tasks	600	9,600		500	8,000	

Conclusion

In this chapter I have introduced the theoretical perspectives that have guided my thinking in all aspects of the study and support the need for research regarding the Phonics Dance. Contemporary ideas about the importance of a "balanced" approach to early literacy instruction, of which phonics is a key component, have been presented. An historical overview of research about and types of phonics instruction has been represented to provide information regarding the importance of systematic phonics instruction. Also, information about key building blocks of early print literacy such as phonemic awareness and letter-sound knowledge have been clarified, supporting the need for programs that focus on the building blocks of early print literacy.

Additionally, in this chapter I have introduced background information regarding the Phonics Dance, a program designed to assist children in decoding words. Phonics within a balanced approach to literacy instruction that includes guided reading, writing and language arts lessons has also been explored. In addition, this chapter has examined the components of the Phonics Dance and the Scott Foresman first grade reading program including elements that correspond to the key theoretical underpinnings of each component.

In the next chapter, I will discuss the methods utilized to conduct the study.

Chapter Three

Methods

Introduction

This chapter examines the research questions and study methods used to investigate the Phonics Dance, a program developed to assist students in learning how to identify letter names and letter sound correspondences and rhyme patterns through the use of multiple modalities such as chants, movements and visual cues. The initial sections of this chapter describe a pilot study conducted about the Phonics Dance. Next, this chapter explores the study that is the focus of this dissertation, that investigates the effectiveness of the Phonics Dance approach compared to more traditional phonics instruction. The subsequent sections provide descriptions of the research questions, study participants, intervention, research design, data analysis and internal validity.

Pilot Study

The pilot study was conducted over a period of eight weeks beginning the first week of the 2010-2011 school year. The first data collection point was the first week of school. I assessed one first grade class of students that was taught phonics with traditional methods (a basal reading program) and a first grade class of students that was taught phonics with the Phonics Dance approach. The data I collected were AIMSweb (Achievement Increase Monitoring System) letter naming, letter sound, phoneme segmentation and nonsense word identification assessments. Working with individual students just outside the classroom, I assessed each student following the script provided with the assessments. I conducted these assessments again after each group of students

received eight weeks of phonics instruction. The following research question guided the pilot study.

1. How does the use of the Phonics Dance curriculum impact first graders' letter name and letter sound identification, phoneme segmentation and nonsense-word reading skills compared to students taught with a basal reading program?

The results of the pilot study indicated that all students showed growth no matter what group they were in. However, the Phonics Dance group significantly increased in their letter sound and nonsense word identification skills compared to the basal phonics group over an eight week time period.

In the pilot study, I compared results on the AIMSweb letter naming, letter sound, phoneme segmentation and non-sense word assessments for groups of first graders who were taught phonics using their school district's basal reading program materials and first graders who were engaged in using the Phonics Dance curriculum. I used paired t-tests to examine changes in average scores in letter naming, letter sound, phoneme segmentation and nonsense word subsets of the AIMs. The results revealed that after eight weeks, students in both groups significantly improved in three of the four subsets letter naming, letter sound and nonsense words. The Phonics Dance group's scores increased significantly in letter naming, letter sound, phoneme segmentation and nonsense words. The basal reading program group's scores increased in letter naming, letter sound and non-sense words. To examine if there were significant differences between groups over the eight week period of time a repeated measure Analysis of Variance (ANOVA) was

performed for both groups. The ANOVA results suggest that all students improved regardless of which group they were in. The variable of interest is the interaction term which indicates a significant improvement for the Phonics Dance group for letter sound and nonsense words over the eight week period of time when compared to the basal program group.

The Current Study

In this dissertation, I hope to add to what I learned in the pilot study. In the fall of 2011, I had the opportunity to collect additional data, but this time to collect data that explored the Phonics Dance curriculum and the effectiveness of the Phonics Dance method of teaching phonics compared to basal phonics programs over a longer period of time. The initial study indicated that the Phonics Dance group showed significant growth in the areas of letter naming and nonsense word identification as compared to the traditional phonics group. I was interested to learn if the Phonics Dance group would sustain significant growth in the areas of letter naming and nonsense word identification skills compared to the traditional group after an additional period of time. In addition, I was curious about the characteristics of the Phonics Dance program and wanted to do a more in-depth analysis of its components. In this dissertation I propose to analyze these data to address the following question:

1. How does the use of the Phonics Dance curriculum impact first graders' letter name and letter sound identification, phoneme segmentation and nonsense-word reading skills compared to students taught with the Scott Foresman basal reading program?

Study Participants

The students. The participants in this study were 74 first grade students from two rural public elementary schools located in northwestern Ohio. All students in the first grade from both schools were invited to participate in the study. There were no additional eligibility criteria for participating in the study.

In the school where the Phonics Dance was used the student population was 227 and has been designated as a high poverty status elementary. Five percent of those students were black, 8% were multi-racial, 82% were white, 9% had disabilities and none of them were reported as limited English speakers. Seventy-eight percent of the students were reported as economically disadvantaged. Forty-eight percent of the participants in the experimental group from this school were boys and 52% were girls.

The student population in the school that included the comparison group, that used a basal reading program published by Scott Foresman, was 524. None of the students were black, 2% were multi-racial, 94% were white, 11% had disabilities and 5% were reported as limited English speakers. Thirty-four percent of the school's students were reported as economically disadvantaged. The elementary has been reported as a medium-low poverty status elementary. In regard to the basal reading program group, 57% of the participants were boys and 43% were girls. See table 7.

Table 7.

Phonics Dance and basal phonics student population

	Phonics Dance Elementary Population 227	**Basal Phonics Elementary Population 524**
Economically Disadvantaged	78 %	34%
Male	48%	57%
Female	52%	43%
Black	5%	0%
Multi-racial	8%	2%
White	82%	94%
Disabled	9%	11%
Limited English Speaking	0%	5%

The teachers. There were two teachers that each taught the Phonics Dance (PD) group. One had 12 years of experience and the other had 25 years of experience. There were three teachers that each taught a Basal Reading Program group (BP). Their years of experience varied from three to over 35. See table 8.

Table 8.

Participating teachers' years of experience and class sizes during the 2011-2012 school year

Teachers	Number of Participating Students (Those with complete data)	Years of Experience
1PD	14 (12)	25
2PD	11(10)	12
1BP	24(19)	3
2BP	23(16)	18
3BP	23(17)	35

Intervention

The intervention in this study was a daily 20-minute phonics lesson titled, the Phonics Dance that was taught during the first four months of the school year. The purpose of this intervention was to help children learn to decode. Details about the Phonics Dance curriculum are explained in chapter two.

Scott Foresman Basal Phonics Program

The Scott Foresman basal phonics program was the comparison for this study. The basal phonics program lessons were implemented four days a week and were about 20 minutes in length. In addition, the basal phonics lessons are implemented throughout the school year. The purpose of the basal phonics program was to help children learn to decode. Details about the Scott Foresman basal phonics program are explained in chapter two.

Variables & Data Sources

Outcome variables. There are four outcome variables in this study: letter naming, letter sound, phoneme segmentation and nonsense words. I used the AIMSweb Test of Early Literacy assessment to collect these data.

AIMSweb test of early literacy assessments. The letter naming assessment is comprised of a sheet containing 100 capital and lower case letters. The student is asked to name as many letters as possible in one minute. The letter sound assessment is similar. The only difference is that the student is asked to indicate the sound that each letter makes. For the phoneme segmentation assessment, the student is instructed to indicate each phoneme in a word after the assessment administrator says the word (there are a total of 98 phonemes). For example, the administration manual suggests that the test administrator tell the student the following: I am going to say a word. After I say it, I want you to tell me all the sounds in the word. So if I say, Sam you would say /s/ /a/ /m/. Let's try one. Tell me the sounds in the word mop. The student would then say /m/ /o/ /p/. The last assessment is nonsense word identification. Students are given a list of nonsense words, such as "sev" or "fep," and the facilitator explains that the words are made up, that is, that they are pretend words. Students are asked to decode as many as they can of the 220 individual phonemes or to indicate the whole nonsense word. Again this assessment is one minute in length. The team leader for IDEA (Institute for the Development of Educational Achievement) Edward J. Kame'enui (2002) indicated that these measures have been reviewed and there is sufficient evidence to support their use for progress monitoring or to assess reading components for grades k-3.

The AIMSweb instrument is a reliable tool designed for frequent assessment providing information about students' current skills and their progress. The AIMs early literacy assessments measure key fundamental skills and draws upon thirty years of scientific research that indicates its versatility and precise prediction of reading achievement and sensitivity to growth. Additionally, AIMs measures have received high ratings from the National Center for Intensive Interventions (Pearson, 2013).

Reliability indicates the extent to which the same results would be produced from a different but similar population (Hermon, 2001). The assessments were administered with eight week intervals and because of the age of the students the practice effect shouldn't be a factor. Standardized administration procedures were utilized in that the same person administered and scored all the assessments at each testing point.

The AIMSweb instrument can be argued to be valid because it accurately reflects the concept. Instrument validity refers to the extent that it measures what it is supposed to measure (Herman, 2001). It will provide information regarding which method of phonics instruction is more effective basal phonics or the Phonics Dance. In addition this instrument has content validity since it assessed several aspects of phonics acquisition letter identification, letter naming, phoneme segmentation and nonsense word identification.

Categorical treatment variable. The categorical treatment variable in this study is the teaching method, two types of teaching methods included in this study are traditional basal program and the Phonics Dance. I collected field notes, artifacts and documents to analyze these data.

Field notes. Once a week on varying days I observed the Phonics Dance classrooms and wrote verbatim descriptive field notes. These observations were about 20 minutes. The field notes I wrote were grand tour observations for the first several weeks of the study. Spradley (1980) indicated that grand tour field notes are an overview of the situation describing the major events. In the beginning of the study I wanted to conceptualize the Phonics Dance program with an overview of the major components. I began focusing on classroom environmental print, the teacher and students and their interactions. Also, I observed tools that were used, major events and the sequence of learning activities. In addition I wrote about how much time was devoted to each learning activity and the goals the class established. Finally, I tried to capture the emotions of the students and the classroom climate. After about eight weeks of grand tour observations I began to experience data saturation; the field notes had begun to become repetitive.

Weekly visits on varying days continued but instead of grand tour style notes, I began mini-tour observations to inform my field notes. Mini-tour questions are similar to the questions that guide the grand tour observations but they are much more specific (Spradley, 1980). For a few weeks I focused on the activities of two low achieving students instead of the entire class. I wanted more in depth information about how struggling students experience the Phonics Dance. Next, each week I focused on describing in detail one or two components of the Phonics Dance curriculum and how it was implemented. I was curious about the theoretical underpinnings that guided each component of the Phonics Dance and if they were consistent with best-practices for phonics instruction.

In addition I collected artifacts and documents. The artifacts were samples of students work such as completed word association and hunk and chunks work sheets. The documents I collected were letters from Mean Old Uncle Mario and the Phonics Dance teaching manual.

Study Procedures

As previously mentioned the use of truly random assignment was not employed in this study. According to Borman (2002), there are many obstacles involved in implementing random assignment such as denying students potentially beneficial treatments and allowing the researcher to make decisions about curriculum and student placement. By using convenient sampling the study avoided potential obstacles that may be viewed as detrimental to students or professionally unethical.

I contacted five first grade teachers from two public school districts in rural northwestern Ohio because of their willingness to participate in the study. Three of the identified teachers were from one school district and taught phonics using more traditional methods such as worksheets from a basal reading program. The other two identified teachers were from another school district and taught phonics using the Phonics Dance approach. From these two schools most first grade students participated in the study. The groups were formed before the study took place.

There were not an equal number of students in the groups because of the population of the two schools. There were 10 to 12 students in the classrooms that utilized the Phonics Dance approach. In the classrooms in which the teachers used the basal reading program materials for teaching phonics, there were 16-19 children in each

class. However, for phonics instruction students were regrouped by ability. Other professionals such as the reading specialist and gifted education teachers each facilitated a group that ranged in size from about 10 to about 19. There were not equal numbers of students in each group; some were large and others were considerably smaller.

I assessed all students using the AIMSweb letter naming, letter sound, phoneme segmentation and nonsense word identification assessments the first week of school and again after eight weeks of instruction. I also assessed the students again after eight more weeks of instruction using the same AIMSweb assessments. The additional round of assessments was implemented to measure if the treatment group showed significant gains.

Internal Validity

Given the procedures presented earlier, the most obvious threats to internal validity in this study include testing and mortality. Threats to internal validity that were controlled for in this study include testing and mortality. Testing involves participants' scoring higher on post intervention test after having taken a pre-intervention test (Onwuegbuzie, 2000). This effect was minimized by having a long time span between the pre and post-tests. Additionally, the participants in this study were first grade students. It is unlikely that they had the ability to remember specific information on the test between assessments.

Mortality, also known as attrition or the loss of a study participant (Onwuegbuzie, 2000), was a threat because a substantial number of participants have demographic backgrounds that are often correlated with a higher tendency to be transient. This threat

to internal validity was eliminated by not including the assessment scores of students that did not participated in the entire study. There were three participants from the Phonics Dance groups and two participants from the comparison basal reading program phonics groups who moved out of the district. This did not threaten internal validity because the assessments were not analyzed until the end of the study. The assessments from students who moved out of the school district and did not complete the study were not included at any point of analysis.

Current Study Analyses

The analyses I performed with the current study is the repeated ANOVA. The repeated ANOVA would be most appropriate tool because there are two groups: the Phonics Dance group and the comparison basal reading program phonics group. Also, each group will be assessed at three different points the first week of school, after eight weeks of instruction and again after eight addition weeks of instruction. The repeated ANOVA will take into account the students' starting level. In addition, the differences between the groups at each assessment point will be analyzed.

To better understand the quantitative data results, I will analyze my field notes in terms of themes and aspects of the instruction that were emphasized. Field notes in the form of grand tour observations were taken in the basal phonics classroom three times on different days of the week. Artifacts including worksheets and the Scott Foresman reading program teacher's manual were collected and examined. These artifacts along with the field notes provided insight concerning quantitative data results.

Conclusion

In this chapter I descried how the initial pilot study that I'd conducted in 2010 led me to collect additional data to be analyzed in this dissertation. This chapter described the research methodology for this study. Aspects of the study such as research questions, study procedures and study participants were delineated.

In the next chapter, I will present the results of the study.

Chapter Four

Results

Introduction

The purpose of this analysis is to examine the effectiveness of the Phonics Dance, a program developed to assist students in learning how to identify letter names, letter sound correspondences and rhyme patterns. In particular, this study was conducted to investigate the following research question: How does the use of the Phonics Dance curriculum impact first graders' letter name and letter sound identification, phoneme segmentation and nonsense-word reading skills compared to students taught with a basal reading program? This chapter reports the results of the statistical analysis, repeated measure analysis of variance (ANOVA), performed to investigate this research question.

Repeated Measures ANOVA

The study performed was to determine if there were significant differences for the Phonics Dance and basal phonics groups, over the period of August to October to December, for the same two groups of students at three time points. Therefore, a repeated measure analysis of variance was performed for the two groups Phonics Dance (PD) and basal phonics (BP) over the time periods (Aug., Oct,. and Dec.).

The repeated measures ANOVA was chosen because I wanted to analyze the changes of two groups mean scores over three time periods (Aug., Oct., and Dec.). In addition this method of statistical analysis measures the same population more than once on the same dependent variable. For this study, the Phonics Dance and basal phonics

groups mean scores will be measured at three time points Aug., Oct., and Dec., concerning their letter name, letter sound, phoneme segmentation and nonsense word skills.

The Mauchly's test of Sphericity was conducted to determine if the repeated measures ANOVA was the most appropriate tool to measure the data for this study. The Mauchly's test of Sphericity examined the variances and differences in scores for all the pairwise comparisons of the two groups and three time points. The assumption of constant variance was reasonable based on sphericity.

Letter Naming

The repeated measures ANOVA was conducted to compare the impact of the Phonics Dance and basal phonics program on letter naming skills. More specifically, I examined whether there were differences in the Phonics Dance and basal phonics group letter naming mean scores over time, August to December. The results of the repeated measures ANOVA were that there was not a significant interaction between the Phonics Dance and basal phonics programs [$F(2, 72) = 2.063$, $p = .155$]. Row two in the table below shows the time group, which details the changes between time periods in group means over two time periods August to December. In addition, the table below shows that the level of significance was at $p = .155$, not meeting the $p > .05$ significance threshold and therefore not significant.

Table 9.

Tests of Within-Subjects Contrast Letter Naming

Tests of Within-Subjects Contrasts

Measure:MEASURE_LN

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
time	Linear	11798.157	1	11798.157	244.898	.000
time * Group	Linear	99.401	1	99.401	2.063	.155
Error(time)	Linear	3468.660	72	48.176		

The repeated measures ANOVA shows changes in group means. The graph below illustrates the estimated marginal means. The interaction plot shows how the changes in group means occurred over the time periods Aug., Oct., and Dec. Both the Phonics Dance and basal phonics groups had similar means at the first assessment point. However, in examining the changes, the Phonics Dance groups has a slightly higher increase in group mean compared to the basal phonics group at the second data point. Lastly, the third date point shows that both groups continued to grow but the Phonics Dance group had a slightly higher increase than the basal phonics group. See figure 15.

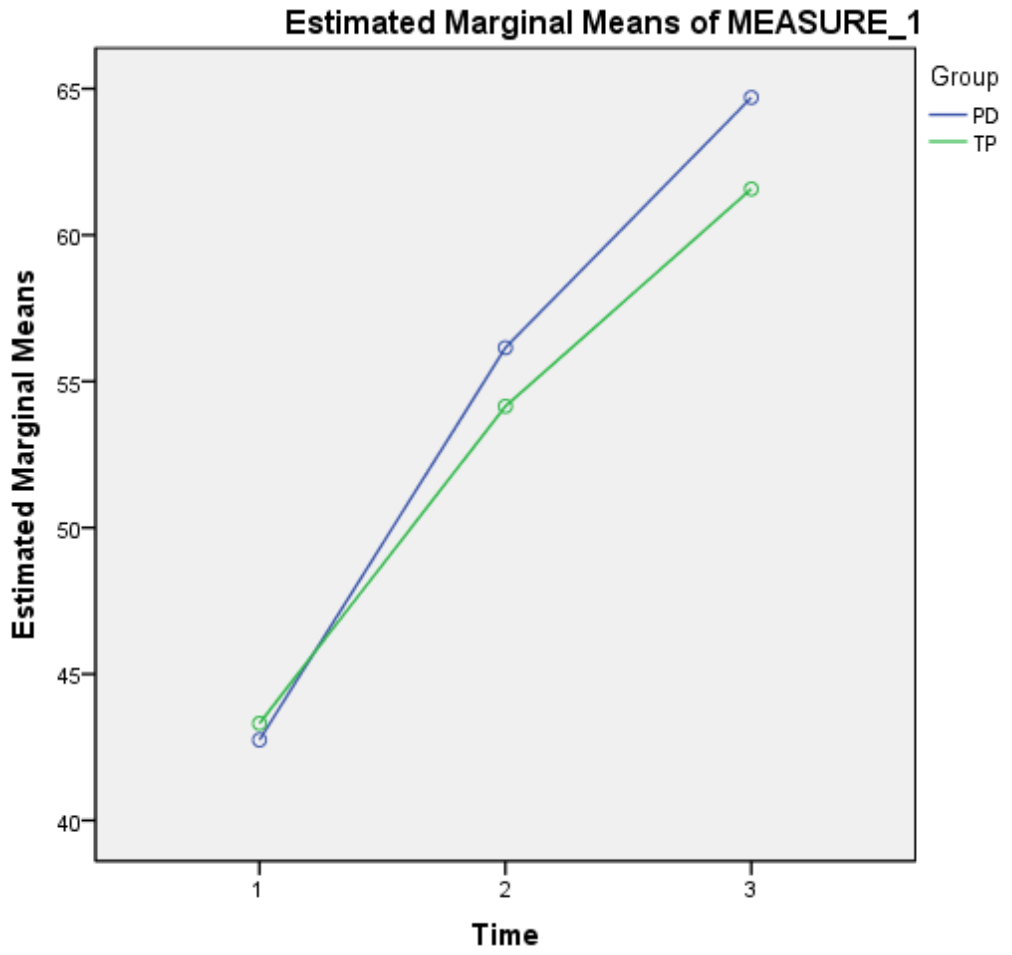


Figure 15. Interaction Plot LN

Letter Sound

A repeated measures ANOVA was conducted to measure the impact of the Phonics Dance and basal phonics group programs concerning letter sound skills. There was significant interaction between the Phonics Dance and basal phonics programs [F, (2, 72) = 15.148, p = .000]. Row two in the table below shows the time group, which details the changes between time periods in group means over two time periods, August to December. In addition, the table below shows that the level of significance was at p = .000, meeting the p < .05 significance threshold and therefore significant. See table 10.

Table 10.

Tests of Within-Subjects Contrasts Letter Sound

Tests of Within-Subjects Contrasts

Measure:MEASURE_LS

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	15625.629	1	15625.629	389.464	.000
Time * Group	Linear	607.737	1	607.737	15.148	.000
Error(Time)	Linear	2888.702	72	40.121		

The interaction plot illustrates the mean for both the Phonics Dance and basal phonics groups at three time points, August, October and December. Both the Phonics Dance and basal phonics group means were similar at the first assessment point. The second data point indicates that after eight weeks of instruction both group means increased. Both the Phonics Dance and basal phonics groups showed growth concerning letter sounds at data points two and three. However, the slope for the Phonics Dance group shows a higher increase than the basal phonics group from data point two to three. See figure 16.

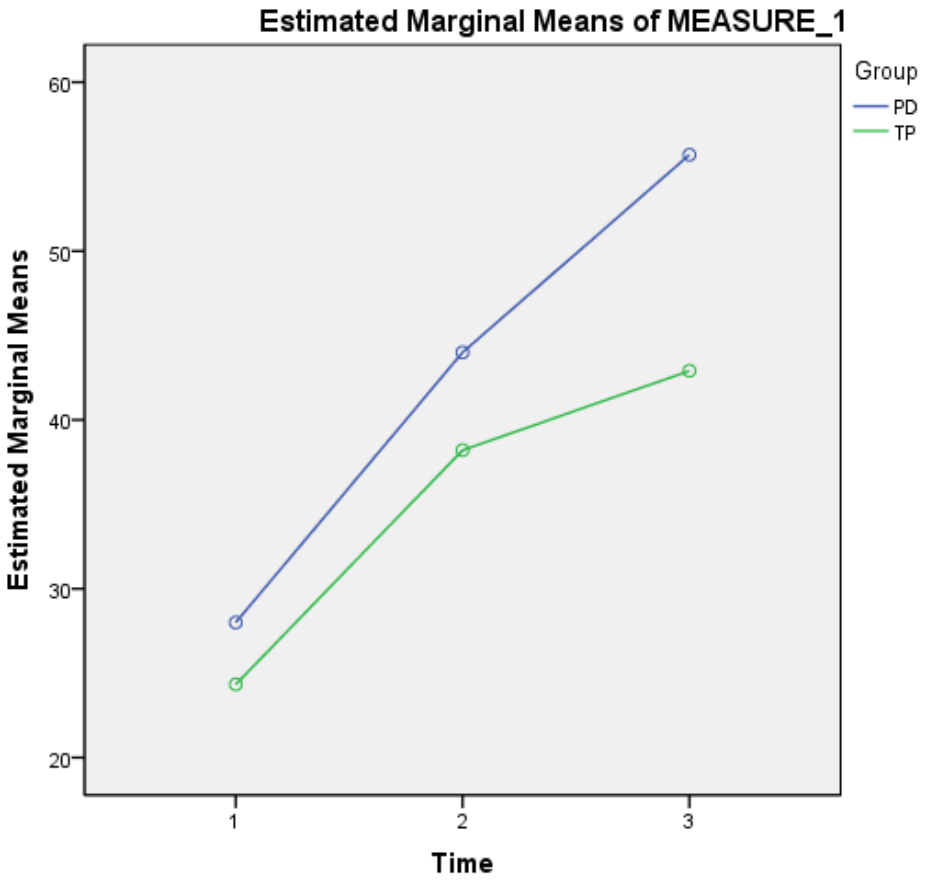


Figure 16. Interaction Plot Letter Sound

Phoneme Segmentation

A repeated measures ANOVA was conducted to measure the impact of the Phonics Dance and basal phonics programs in phoneme segmentation skills. There was a significant interaction between the Phonics Dance and basal phonics mean scores [$F(2, 72) = 4.940$, $p = .029$]. Both groups made significant gains. Row two in the table below shows the time group, which details the changes between time periods in group means over two time periods, August to December. In addition, the table below shows that the

level of significance was at p = .029, meeting the p < .05 significance threshold and therefore significant. See table 11.

Table 11.

Tests of Within-Subjects Contrasts Phoneme Segmentation

Tests of Within-Subjects Contrasts

Measure:MEASURE_PS

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	5858.108	1	5858.108	123.509	.000
Time * Group	Linear	234.324	1	234.324	4.940	.029
Error(Time)	Linear	3415.000	72	47.431		

The interaction plot illustrates that at the first time point both the Phonics Dance and basal program groups had similar means. However, the Phonics Dance slope had a higher increase than the basal phonics slope between time point one and time point two. In addition, both the Phonics Dance and basal phonics slopes continue to increase between time point two and three. However, the Phonics Dance slope has a slightly higher increase. See figure 17.

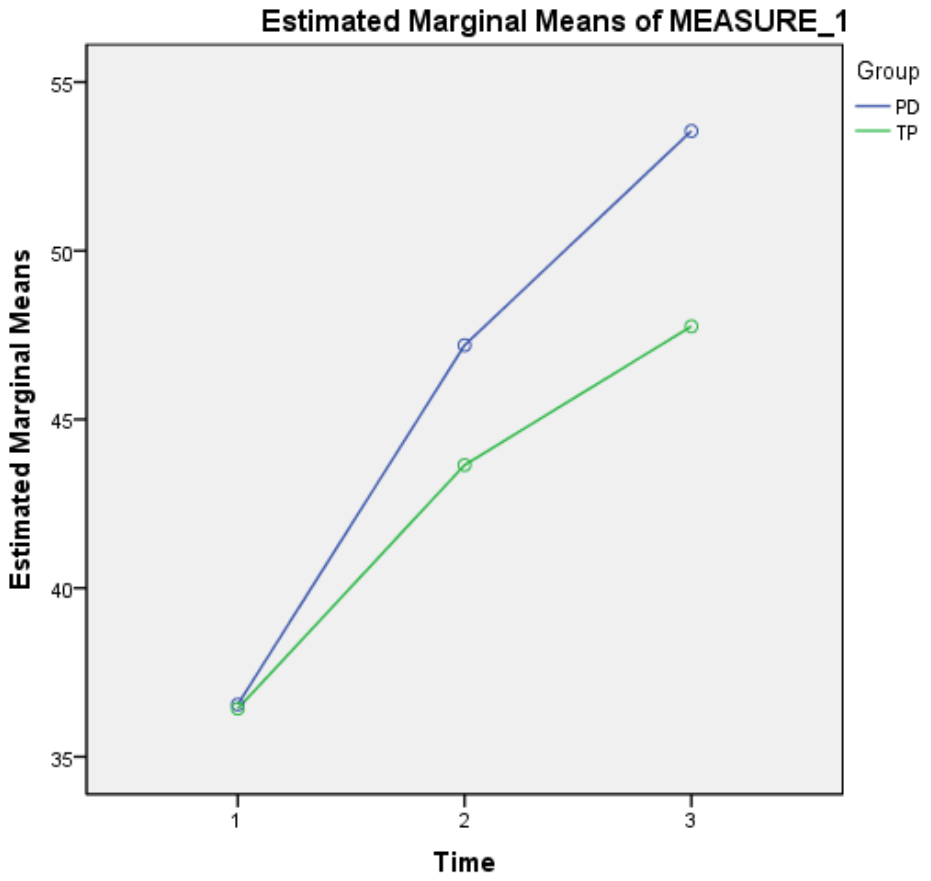


Figure 17. Interaction Plot Phoneme Segmentation

Non-sense Words

A repeated measures ANOVA was conducted to compare the impact of the Phonics Dance and basal phonics mean scores on nonsense word reading skills. There was a significant interaction between the Phonics Dance and basal phonics program [F (2, 72) = 5.761, p = .019]. Row two in the table below shows the time group, which details the changes between time periods in group means over two time periods, August to

December. In addition, the table below shows that the level of significance was at p = .019, meeting the p < .05 significance threshold and therefore significant. See table 12.

Table 12.

Tests of Within-Subjects Contrasts Nonsense Words

Tests of Within-Subjects Contrasts

Measure:MEASURE_1

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	22389.087	1	22389.087	180.004	.000
Time * Group	Linear	716.547	1	716.547	5.761	.019
Error(Time)	Linear	8955.460	72	124.381		

The interaction plot indicates that at the first data point the Phonics Dance group mean was lower than the basal phonics group mean. In addition, the figure illustrates that the Phonics Dance mean increased more than the basal phonics group mean between time point one and time point two (August to October). In the figure below one can see that the Phonics Dance slope was steeper than the basal phonics slope. Both the Phonics Dance and basal phonics groups continued to show mean growth between time point two and time point three (October to December). The Phonics Dance group mean was lower than the basal phonics group mean at time point one. However, the Phonics Dance mean increased more than the basal phonics group mean between time points one and two. The figure below shows that both the Phonics Dance and basal phonics group show increased mean scores at time point three. See figure 18.

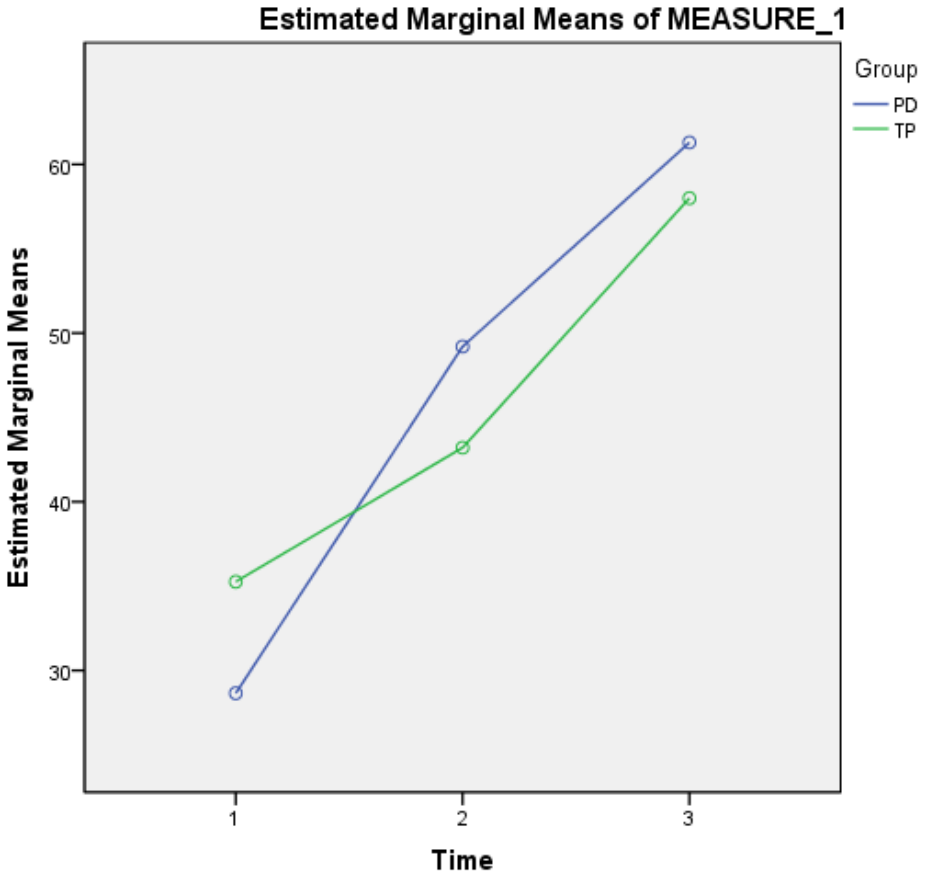


Figure 18. Interaction Plot Nonsense Words

Conclusion

In this chapter I have explored the results of the repeated measures ANOVA analysis that was conducted to answer the research question: How are first grade students letter naming, letter sound, phonemic segmentation and non-sense word identification assessment score impacted through the use of a basal phonics program compared to the Phonics Dance program? Both the basal phonics program and Phonics Dance program groups demonstrated statistically significant increase in mean scores concerning letter

sound, phonemic segmentation and non-sense word identification. However, the Phonics Dance group out-performed the basal phonics group at time point two after the initial eight weeks of instruction concerning phoneme segmentation and non-sense word skills. In addition, the Phonics Dance group showed more growth than the basal phonics group at time point three regarding letter sounds and phonemic segmentation. Considering these results we can conclude that the Phonics Dance approach has a greater impact as it assists students in learning letter sound correspondences at a quicker pace than the basal phonics approach.

In the next chapter I will discuss the results of this study, implications and suggestions for future research.

Chapter Five

Discussion

Summary of the Study

This study was conducted to examine the following research question: How does the use of the Phonics Dance curriculum impact first graders' letter name and letter sound identification, phoneme segmentation and non-sense word reading skills compared to students taught with a basal reading program? The Phonics Dance is a program that claims to assist children in learning letter names, letter sound correspondences and some rhymes making decoding easier. Many educators across the country have attended professional development seminars and have implemented the Phonics Dance in their classrooms. This study provides an analysis of the Phonics Dance curriculum and how it aligns with current research-based ideas about best-practices for phonics instruction.

The participants for this study were 74 first grade students from two semi-rural public elementary schools located in Northwestern Ohio. Seventy-eight percent of the students that were in the Phonics Dance group were reported as economically disadvantaged, whereas thirty-four percent of the students in the comparison group were reported as economically disadvantaged. Forty-eight percent of the participants in the Phonics Dance group were boys and 52% were girls. In regard to the comparison group, 57% were boys and 43% were girls. The Phonics Dance group did not have a population of limited English speakers. However, the comparison group reported 5% limited English speakers.

The participants were tested with the AIMSweb letter naming, letter sound, phonemic segmentation and non-sense word identification assessments the first week of school and again after eight weeks of instruction (in October). Additionally, I assessed the students after eight more weeks of instruction (in December).

The results from this study indicate both the Phonics Dance and basal reading groups benefited from systematic phonics instruction as both groups showed statistically significant increases in scores for letter sound, phonemic segmentation and non-sense word identification. A repeated measure ANOVA was performed to determine if there were significant differences for the groups over the period of August to October to December. As reported in chapter 4, ANOVA results revealed that both the PD and BP improved significantly in their letter sound, phoneme segmentation and nonsense word skills as measured by the AIMS Web assessment. However, the Phonics Dance group showed more growth than the basal phonics group concerning phoneme segmentation and non-sense word reading after eight weeks of instruction at time point two. Also, the Phonics Dance group continued to show more growth than the basal phonics group concerning phoneme segmentation after an additional eight weeks of instruction at time point three. Lastly, the Phonics Dance group showed more growth than the basal phonics group regarding letter sounds at time point three.

Discussion of the Findings

Letter naming. The results of this study indicate that students who were taught systematic phonics, regardless of whether they were instructed with the Phonics Dance approach or the basal phonics program, showed improvement in their letter naming skills

over the period of August to October to December. Learning letter names assists students in understanding the alphabetic principle and supports learning letter sound correspondences. Children must understand that letters or graphemes have specific names. After children recognize that graphemes have names, they can begin to associate a sound with the letter name. Dykstra (1967) indicated that as a result of *the First Grade Studies* that the single best predictor of reading achievement is the ability to recognize letters of the alphabet prior to reading instruction. Therefore, the knowledge of letter names is critical in beginning the process of learning to decode words. Both systematic phonics programs, the Phonics Dance and basal reading programs, assisted children in learning letter names.

Letter sounds. Similar to the letter naming results, this study suggests that students who received systematic phonics instruction regardless of the approach, basal reading program or Phonics Dance Program showed statistically significant growth in letter sound knowledge. The familiarity with a number of letter sound correspondences is a prerequisite in order for children to progress from the pre-alphabetic phase into the partial alphabetic phase. It is during the partial alphabetic phase that children begin to utilize a moderate and predictable system of letter sound relationships (Morris, Lomax and Perney 2003). Instead of relying on visual cue reading, children that are proficient with letter sound correspondences begin to apply their knowledge of letter sounds and employ phonetic cue reading which a more reliable method to decode words. Thus, knowledge of letter sounds is crucial concerning the development of word recognition.

Phoneme segmentation. Additionally, the results of this study indicate that students in both the Phonics Dance group and the basal reading group made statistically

significant growth in their phonemic segmentation skills over the period of August to October to November. The AIMSweb phoneme segmentation assessment required the students to hear, isolate and say each phoneme in several words. Students must have phonemic awareness skills to be successful in phoneme segmentation. Thus, the phoneme segmentation assessment is an indicator of the students' phonemic awareness skills.

Children must employ some phonemic awareness skills in order to progress from the pre-alphabetic phase into the partial alphabetic phase. In the full alphabetic phase, children utilize increased phonemic awareness as they decode words they have not yet encountered, through blending them into pronunciation (Ehri, 1998). Significant growth concerning phonemic segmentation scores indicates that students are developing phonemic awareness, and may have the ability to apply their phonemic awareness skills and progress into the partial alphabetic phase.

Non-sense words. Finally, the results of this study indicate that students in both the Phonics Dance group and the basal reading group made statistically significant growth in their nonsense word identification skills over the period of August to October to November. The nonsense word identification assessment indicates student's ability to identify and pronounce the sounds of letters and letter patterns within words. Through using nonsense words students cannot recall the word by sight, because they are made-up words. These are words that the students have not yet encountered.

Students that have the ability to decode non-sense words with relative ease are in the final, or consolidated phase of word recognition. In the final phase of word recognition, students begin to identify multi-letter patterns within words (Ehri, 1998).

Combining letters in recognizable chunks makes word identification much more efficient. Students that have a repertoire of letter patterns stored into memory are likely to be more successful at decoding non-sense words than their peers who decode a letter at a time and then blend.

Implications

Integrating word recognition skills as part of phonics lesson. The Phonics Dance program provides students with opportunities to practice word recognition skills including phonemic awareness, letter knowledge, spelling, sight words and reading in context. Initially, the lesson begins with a review of all letters and their corresponding sounds and as the lesson progresses students participate in activities that require them to utilize other word recognition skills. Integrating several word recognition skills within the phonics lesson may assist children in making the connections between the skills and how they all interrelated and contribute to word recognition. In addition, embedding several word recognition skills within the phonics lessons may impact other print literacy skills including comprehension, fluency and writing. As previously mentioned in this dissertation, the notion of intersubjectivity was apparent in the Phonics Dance classrooms as students employed their knowledge of letter patterns to efficiently decode unfamiliar words during social studies lessons.

However, the Scott Foresman basal language arts program presents word recognition skills including phonemic awareness, spelling and phonics separately. Therefore an educator may choose to teach only the phonics component and choose not to teach the phonemic awareness or spelling sections. Or, an instructor may, teach

phonemic awareness and abandon the phonics component. However, teaching word recognition skills separately does not support students in making connections concerning the relationships among word recognition skills.

Word recognition skills and socio-economic status. Implementing systematic phonics instruction through the use of the Phonics Dance or basal phonics approach may assist children that have difficulty decoding words. Children that are taught phonics sequentially and with a sound methodology are more likely to become successful with word identification. Additionally, students that rapidly develop efficient decoding skills enjoy reading (Stanovich, 1994). Because they develop more automaticity in their decoding, they are more able to concentrate on the meaning of the texts as they read. Since reading is enjoyable they read more in school and choose to read more in other environments. Their ability to read more, and more increasingly challenging texts, facilitates syntactic knowledge, vocabulary and augments their general knowledge base. This leads to reading texts that are more difficult and interesting. Knowing that the amount of print exposure is a predictor of vocabulary growth, knowledge acquisition and many other verbal skills, students who participate in less practice with print are at a great disadvantage (Stanovich, 1994). Therefore students that are initially successful at decoding and continue to develop word recognition skills are likely to find enjoyment from reading and will experience the benefits of being print literate.

Students from low socio-economic environments begin formal learning at a great disadvantage concerning print literacy compared to students from middle or higher socio-economic backgrounds. Maria Clay (1979) introduced the term emergent literacy as a gradual process that takes place from birth until a child can read and write. Many children

from low socio-economic backgrounds often come to school with fewer concepts about print and smaller vocabularies (Whitehurst and Lonigan, 1998). However, students with more of these skills and knowledge are in a position to augment reading instruction and become readers more quickly and more readily (Whitehurst and Lonigan, 1998).

Seventy-eight percent of students that were in the Phonics Dance group were considered socio-economically disadvantaged compared to 34% of students in the basal phonics group. The results of the current study indicated that the students in the Phonics Dance group made greater gains than the basal phonics group after eight weeks of instruction in the areas of letter sound, letter naming, phoneme segmentation and non-sense word reading. Lastly, students in the Phonics Dance group started much lower than the basal phonics group in the area of non-sense word reading, yet children in the PD group managed to, on average, exceed the mean score of the BP group by the end of the 16 weeks of instruction.

The pace of the Phonics Dance. This study contributes to the large body of research that supports the benefits of systematic phonics. For decades how best to teach beginning readers has been argued. In the mid-1960s, "the First Grade Studies" indicated the benefits from systematic phonics instruction. More recently the National Reading Report (2000) reported evidence supporting that student's benefit from systematic phonics instruction. Students that were taught phonics systematically with Scott Foresman basal and Phonics Dance programs all showed significant gains in the areas of letter sound, phonemic segmentation and non-sense word reading. However, students that were taught phonics systematically with the Phonics Dance program showed more

growth than the basal phonics students after eight weeks of instruction in the areas of phoneme segmentation and non-sense word reading.

Perhaps the pace of the Phonics Dance supports quicker acquisition of word recognition skills. Students in the Phonics Dance classroom practice each letter sound with a chant, movement and visual representation beginning the first day of school. The vowels are all introduced the first two weeks of the Phonics Dance Program. In addition, letter patterns are introduced in the third week of the Phonics Dance program. Students are introduced to two letter patterns each week along with a chant, movement and visual representation. As letter patterns are introduced they are reviewed during each phonics lesson. After twenty-two weeks of instruction, children in the Phonics Dance classroom have had the opportunity to master letters, letter sounds, letter patterns and other word recognition skills.

In comparison the Scott Foresman basal phonics program introduces a different combination of two-letter, letter patterns or a phonics strategy each week over 30 weeks. The basal phonics program does not provide a review of all the letters of the alphabet each day. In addition, only the letters, letter patterns or phonics strategies that have been introduced during the week are reviewed.

Students in the Phonics Dance classroom apply their phonics knowledge they have developed in other literacy related activities. For example, a student may be writing and want to spell the word *nice.* Since the student has learned the letter pattern, *ice* and has knowledge concerning the letter N, the task of writing the word *nice* can be completed without frustration. Additionally, decoding words would become much less

laborious as students could identify letter patterns. Students in the Phonics Dance classroom would have mastered the letter pattern *ice,* during week six. The basal phonics program introduces the letter pattern *ice,* during week nine.

Systematic Engaging Phonics is Absent From Many Classrooms

Research indicates that systematic phonics instruction is still absent in many elementary classrooms (Bowey, 2006). A few factors that may contribute to the absence of systematic phonics instruction may include (a) lack of materials, (b) a lack of teacher knowledge and (c) the history of phonics instruction over the last thirty years, more specifically the whole language verses phonics debate. The Phonics Dance program provides educators with a systematic engaging approach to phonics instruction.

In the following sections I discuss the engaging aspects of the Phonics Dance program components.

Magic Sound Sprinkles

The magic sound sprinkle component of the Phonics Dance program utilizes a chant and cake sprinkles to engage children. Students repeat, "I am smart, I am smart" after the instructor says, "magic sound sprinkles make these students smart help them help them tell all their letters and sounds apart." Through engaging in the magic sound sprinkles component of the Phonics Dance program, students build self-efficacy. Additionally, magic sound sprinkles communicate to the students that their instructor perceives them as smart.

Alphabet Sound Review

The Phonics Dance lesson begins each day with the alphabet sound review. This component of the Phonics Dance program engages students through chants, rhymes, movement and visual representations. Students rehearse the chant, rhyme, and movement for each letter as the instructor points to the corresponding picture.

Word Association

The word association component of the Phonics Dance program is implemented for two weeks beginning the first day of school. During word association students review movements and sounds that correspond with the letters they are working with. In addition, students participate in pronouncing and identifying rhyme patterns.

Hunk and Chunks

Forty hunk and chunks are included in the Phonics Dance program. Each hunk and chunk has a unique chant, movement and visual representation. Students participate in the chant and movements that corresponds with each hunk and chunks as they are introduced. In addition, students engage in reviewing the chants and movements that correspond with the hunk and chunks that have been introduced.

Mean Old Uncle Mario

Mean Old Uncle Mario is the class villain. He engages students through writing letters that taunt them, suggesting that they will not have the ability to master difficult hunk and chunks. Students become more determined to learn the hunk and chunks after their instructor reads a letter from Mean Old Uncle Mario. They are reminded of Mean Old Uncle Mario as his picture and letters he has written are posted in the classroom.

Monster Words

The monster word component of the Phonics Dance program incorporates chants and visual representations. As students are introduced to a new sight word they engage in the corresponding chant. The sight word is written on a monster word card and placed on the class Word Wall.

The Scott Foresman basal phonics program is a systematic approach but contains minimal engaging aspects. Lessons are approximately 20 minutes in length and are comprised of five components including, connect (an introduction to the target concept), sound spelling cards, time for the instructor modeling the skill, group practice and review. The sound spelling cards engage students providing them with a visual representation of the phoneme that is instructed. In addition, the review component includes the phonics song and rhyme chart for several of the lessons.

The Phonics Dance program components include many more engaging aspects including chants, rhymes, movement and visual representations, compared to the Scott Foresman basal phonics program. Additionally, all six of the Phonics Dance components were implemented every day with the exception of magic sound sprinkles (done periodically) and word association that is implemented the first two weeks of the school year and then replaced with the hunk and chunks component. This is compared to the Scott Foresman basal phonics program that includes five components with several of them implemented only three times a week.

Limitations and Future Research Considerations

Though this study contributes to a large body of existing research concerning systematic phonics instruction, there are a few limitations that may have a potential impact regarding the ability to make broader generalizations. First, non-randomized sampling was utilized. Second, the amount of time observing in the basal phonics classroom was less than the amount of time observing the Phonics Dance classroom. Third, this study included a limited number of measures. Fourth, there was a limited scope of skills that were examined. Lastly, the amount of time that was provided for growth between measures was limited.

For this study the groups were non-randomized. I asked local first grade teachers with whom I had a rapport with to participate in the study. Since the teachers were familiar with me, gaining access into their classrooms was relatively easy. However, since non-randomized groups were employed the participants were all from rural Northwestern Ohio.

The amount of time I spent observing in the basal phonics classrooms was less than in the Phonics Dance classrooms. Once a week on alternating days of the week, I took field-notes in the Phonics Dance classrooms. In contrast, I only took field-notes in the basal phonics classrooms at a few points during the study.

The measures for this study were AIMSweb letter naming, letter sound, phonemic awareness and nonsense word recognition skills. There were no measures concerning motivation or self-efficacy. There are several components of the Phonics Dance program including the alphabet sound review, magic sound sprinkles and Mean Old Uncle Mario in which motivation and self-efficacy measures could have provided additional insight.

This study examined word recognition skills. However, other print skills including fluency, vocabulary and comprehension growth were not included. Considering the additional literacy activities that the basal phonics group engaged in, they may have out-performed the Phonics Dance group concerning one or more of these skills. Information concerning growth in these areas would be useful in determining the overall impact of systematic phonics programs including the Phonics Dance and the Scott Foresman basal phonics.

Finally, the measures implemented in this study were implemented at three points, the first week of school, after eight weeks of instruction and again after an additional eight weeks of instruction. In the future it would be beneficial to implement additional measures later in the school year. The Phonics Dance group showed greater growth the first eight weeks of the study than the basal phonics group. After eight more weeks of instruction both groups showed similar growth. Including an additional measure later in the school year, perhaps close to the end of the year would provide additional information concerning the impact of the Phonics Dance and basal phonics programs.

Future Studies

Future studies may examine time on task for children. Time sampling techniques could be implemented to examine how many children are on task every three minutes. Through employing time sampling techniques we could identify how engaged children are in phonics related activities and how much real time they are spending on phonics related activities during different instructional approaches.

In addition to student engagement and time on task, future studies may examine motivation and self-efficacy. Accessing students' ideas and voice may provide a unique perspective to the analysis of the Phonics Dance and basal phonics programs. Questions such as when do students feel like they are readers or how they feel about doing phonics lessons could augment a future study.

As previously mentioned additional research concerning students' progress across the whole year would provide more evidence concerning the impact of the Phonics Dance and the basal phonics program. Would both the Phonics Dance and basal phonics groups continue to sustain growth? Additionally, implementing more measures of other literacy-related aspects including fluency, vocabulary and comprehension would provide more insight. The Phonics Dance is a 22-week program compared the basal phonics program which is 36 weeks. Students in the Phonics Dance classroom are introduced to and progress through letter patterns at a quicker pace. Information concerning how this impacts other literacy areas including fluency, vocabulary and comprehension would be beneficial.

Future research should examine the fidelity of implementation of the Phonics Dance across different schools. There are hundreds of teachers across the country implementing the Phonics Dance program. However, whether teachers are implementing all six components is unknown. Teachers that are implementing the Phonics Dance program and abandoning specific components may not experience similar results of this study.

Lastly, teachers' voice concerning their attitudes and thinking about phonics instruction should be included in future research. Qualitative data in the form of surveys or interviews would provide rich information about a teachers experience concerning implementing the Phonics Dance or some other phonics approach. In addition, teachers' voices could provide insight regarding students as they participate and progress through the Phonics Dance or another phonics program.

Closing Comments

Implementing the Phonics Dance. The Phonics Dance curriculum includes the following components; magic sound sprinkles, word association, alphabet sound review, monster words and Mean Old Uncle Mario. Each component, with the exception of magic sound sprinkles and Mean Old Uncle Mario, provides students with an opportunity to practice specific word recognition skills. For example, the word association component involves students engaged in practicing phonemic awareness, letter knowledge, decoding, analogizing and spelling skills. The hunk and chunk component includes phonemic awareness, letter knowledge, decoding, analogizing and spelling. However, the Phonics Dance program manual does not clearly delineate or provide information concerning specific skills within each component (see Appendix A). Thus it could be the case that an instructor may choose to implement some components leaving out components that are more beneficial. Consequently, if particular components are not included the results of implementing the Phonics Dance program may not be similar to the results of this study.

The teachers in this study have chosen to implement the Phonics Dance program. They are enthusiastic about the Phonics Dance approach and are motivated concerning

teaching their students phonics. Perhaps the gains that the students in the Phonics Dance classroom made, could be partially attributed to these teachers' enthusiasm and motivation.

Students benefit from Phonics Dance in other literacy related activities.

Considering the impact that the Phonics Dance curriculum has concerning first graders' letter name, letter sound, phoneme segmentation and non-sense word reading skills, I would recommend that early elementary teachers consider adopting the Phonics Dance program. If we could help children reach the degree of mastery that the Phonics Dance children achieved after 16 weeks of instruction, we will have provided children with the basic tools for opportunities for success in other literacy related activities. For example, students that have mastered the ability to recognize letter patterns in unfamiliar words, could then apply their knowledge of letters and letter sounds concerning the remaining letters in the word, to decode with relative ease. Children could apply these skills in other literacy related activities such as reading in context, writing, comprehension and working with words.

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Appendix A

An Analysis of the Phonics Dance Manual

A manual is available for purchase to help guide educators in implementing the Phonics Dance program. The manual is packed full of 133 pages of information, however there are many aspects of it that are confusing and without the benefit of being able to watch a teacher experienced with the Phonics Dance, it would be very hard to follow. For example, the manual begins with the author's description of "Six Steps to Literacy" that include; sound attack, word wall, treacherous word training, creative writing, student/teacher conferences and reading. Within the brief description of "treacherous word training" the hunk and chunks component of the Phonics Dance is described. Other components of the Phonics Dance program and how they may support specific steps to literacy are not included.

The Phonics Dance program manual begins with chants for the alphabet sound review including the Halloween alphabet sound review that are clearly written. The next section of the Phonics Dance program manual is a description of how to instruct the word association component. However, the manual titles this next section, "The First Ten Days of First Grade, What Letter is it?" This aspect of the manual is confusing. Within the description of how to instruct the word association component are several lists of rhymes and tips concerning what children need to know. The instructor must assume that the advice concerning what children need to know is about word recognition. The worksheets for the word association component follow the description of how to instruct the word association component.

Next, the Phonics Dance manual provides an explanation of how to instruct the hunk and chunk component. Within the summary of how to instruct the hunk and chunk component of the Phonics Dance program is a list of Word Wall games including information concerning how to implement several of the Word Wall games. Also, the chants that correspond to the hunk and chunks are included. Lastly, the worksheets that correspond with the hunk and chunks are provided but the lower half contains math mania.

After the hunk and chunk section of the manual, a brief explanation of monster words is provided. Each monster word is listed along with the corresponding chant. The monster word card templates are provided at the end of the manual.

Additionally, the Phonics Dance program manual includes a section concerning spelling. Within this section is a plan for utilizing monster words that are also on the Word Wall for spelling tests. The author provides a rationale for a plan concerning implementing spelling tests along with worksheets for the students to write their spelling words on during a test.

There are several pages of the Phonics Dance program manual that are titled Treacherous Word Training. This section includes suggestions for coaching students to look for letter patterns. For example, the instructor would suggest that the students find hunk and chunks within a word and circle them. Also, included is a list of manuals to assist educators in instructing creative writing, student/teacher conferences and comprehension lessons.

The Phonics Dance program manual includes the first grade word list used in the authors' school. In addition, word lists are provided for the Phonics Dance word work section of the hunk and chunks component. Words are listed according to the hunk and chunks within the word. For example, for the hunk and chunk *ai*, the words *ace, face, lace* and *tracer* are provided.

The last section of the Phonics Dance manual includes linking charts (picture cards) for the alphabet sound review, hunk and chunks (Phonics Dance), monster words and mean old Uncle Mario. They are provided in black and white or they can be purchased in color.

The Phonics Dance program manual provides educators with an enormous amount of information. However, I found that a large amount of the information was not part of the Phonics Dance program. For example, the manual begins with a brief explanation of the author's six steps to literacy. Perhaps a brief description or a chart of the Phonics Dance components would provide individuals with an understanding of the program. Additionally, the Phonics Dance program manual included math mania on the lower portion of the hunk and chunks worksheet but does not include information on how to instruct math mania. Overall, an individual must shift through much information, to focus on the instructions and description of the Phonics Dance program components.