Singing Your Way to Phonological Awareness

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This Master’s Research Project has been approved

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Abstract

The purpose of this study was to determine if a kindergarten music classroom could be used to reinforce phonological awareness, in the context of teaching grade level-appropriate music content. It also sought to explore how students who are at-risk for reading difficulties would respond to the imbedded phonological awareness activities as compared to grade-level matched typically developing readers. The intervention lasted for a period of eight weeks and took place in a kindergarten music classroom. A total of sixty-seven kindergarten students were randomly assigned to an experimental group that received music instruction that incorporated phonological awareness, or a control group that received regular music instruction. A pre- and post-test design was utilized to assess the phonological awareness capabilities and music aptitude of each student. Results indicate that students in the experimental group increased their phonological awareness performance through imbedded lessons in a music classroom. Furthermore, phonological awareness activities did not have a negative impact on the acquisition of music content for the experimental group. Lastly, the results indicate that students identified as at-risk for reading difficulties benefitted from the intervention in music class, but not as much as the students who were not at-risk.
Learning to read is essential for students to succeed both in and out of school. Research shows that failure to learn to read has a negative impact on student achievement in all academic areas, extracurricular activities, and peer relations (Lipka & Siegel, 2010; Stanovich, 1986) as well as self-concept (Boetsch, Green, & Pennington, 1996; Chapman, 1988). Unfortunately, there are many students in this country’s school system that fail to develop this essential life skill. Gunning (2010) estimates that up to 25% of the population has some difficulty with reading, ranging from mild to more severe levels of difficulty. Specifically, he reports that approximately 10% of the school population has a mild reading problem, 12% have a moderate problem, up to 3 to 6% have a more serious problem, and only about 1% has a severe reading disability. As a result, when many of these students enter middle and high school, they cannot read and comprehend their academic textbooks. The National Research Council (Snow, Burns, & Griffin, 1998) concluded, “The educational careers of 25 to 40 percent of American children are imperiled because they do not read well enough, quickly enough, or easily enough to ensure comprehension in their content courses in middle and secondary school” (p. 98). Literacy development is clearly an area in crisis within our school system. Fortunately, a majority of these students have only mild to moderate reading difficulties. With proper instruction and early intervention, many of these reading difficulties can be prevented.

One way to prevent reading difficulties from developing is to provide students with instruction in phonological awareness (Ehri, Nunes, Willows, Valeska-Schuster, Yaghoub-Zadeh, & Shanahan, 2001). Phonological awareness is the ability to detect and manipulate sounds (Yopp & Yopp, 2009). It has been found to be a reliable predictor of reading success (Adams, 1990; Blachman, 1989, 1991; Griffith & Olson, 1992; Stanovich, 1986; Yopp, 1995), meaning that students who have a solid understanding of phonological awareness are likely to
become successful readers, while students who lack phonological awareness are likely to become poor readers. Providing students with instruction in phonological awareness may prevent reading difficulties from occurring, and may even reduce the severity of a reading disability (Ericson & Juliebō, 2000).

Phonological awareness does not develop naturally, but requires explicit teaching and multiple opportunities for practice (Phillips, Clancy-Menchetti, & Lonigan, 2008). The more practice and opportunity students have to develop their phonological awareness, the more likely they are to become successful readers. Research suggests that phonological awareness instruction may have the greatest impact in preschool and kindergarten, and may decrease beyond the first grade (Ehri et al., 2001). Therefore, teachers have a limited amount of time to develop a student’s phonological awareness.

The question addressed by this research project is whether instruction in phonological awareness could be incorporated into another discipline as a way to provide students with more practice. The purpose of this study is to determine if a music classroom can be used to reinforce phonological awareness, in the context of teaching grade level-appropriate music content. This study seeks to answer four specific questions: Can music activities geared toward teaching phonological awareness increase a student’s overall phonological awareness performance? Does instruction in phonological awareness imbedded in a music class have a negative impact on students learning grade level-appropriate music content? Will students who are at-risk for reading difficulties benefit from phonological awareness activities imbedded into music class? If so, to what extent when compared to grade-level matched typically developing readers?

The results of this study could benefit society by both improving students’ reading development, and affirming the need for school music programs. If students’ phonological
awareness can increase after receiving additional instruction in the music room, educators may seek to imbed phonological awareness instruction in other disciplines. This strategy would provide students with many more opportunities for instruction and practice, thereby ensuring the development of phonological awareness, and, in turn, successful reading ability.

Furthermore, if a music classroom can aid in teaching early literacy skills, more music teachers may incorporate phonological awareness activities in their classroom, and music programs may be less likely to be cut. Many schools throughout the country are cutting music programs because of a lack of funding and an increased focus on academics. Depriving students of a music program prevents them from receiving the many benefits that accompany music education. Having a music program in the school ensures that students will receive a well-rounded education (Glenn, 1992). Music programs help students become more knowledgeable about different cultures, and help foster creativity—both of which are important skills for the workforce of the future (Glenn, 1992). Additionally, music education can lead to increased self-confidence, stronger relationships in school, and increased success in other areas and classes (Olanoff & Kirshner, 1969). Evidence indicates that it can even lead to increased academic achievement (Ciepluch, 1988; Wood, 1990), and can keep students in school (Glenn, 1992). If students are to compete globally in the work force, then music should be included in their education.

**Literature Review**

A thorough literature review of scholarly journals, books, and studies was conducted to gain a deeper understanding of phonological awareness and how it has been integrated in the music classroom. After understanding the importance of the development of phonological awareness and proper instruction, the researcher reviewed specific literature pertaining to
phonological awareness in the music room. Following that review, an analysis of phonological awareness and students with reading difficulties, or at-risk for reading difficulties, was conducted. Last, the researcher reviewed literature on the use of music to strengthen the reading skills of students with reading difficulties. The results of this thorough review of the literature are presented in the following sections.

**Importance of Phonological Awareness**

Numerous studies have shown that children’s phonological awareness plays a critical role in their reading acquisition (Stanovich, 1994; Liberman & Liberman, 1990; Liberman & Shankweiler, 1991). Research has also found that children who lack phonological awareness are likely to be among the poorest readers (Catts, 1991; Maclean et al., 1987). The importance of phonological awareness lies in our language system. In English, the majority of the written language is a record of the sounds we speak. In order to make sense of our system of written language, a person must have a secure awareness of the sounds that make up our speech, and the correspondence between those sounds and graphemes (Yopp & Yopp, 2009). This skill is called phonological awareness. Children show examples of phonological awareness by dividing a word into syllables, creating rhymes, determining if a word is longer or shorter than another word, and detecting individual letter sounds. Phonemic awareness is one aspect of phonological awareness. It is the ability to detect and manipulate phonemes, which are the smallest units of speech (Yopp & Yopp, 2009). A child who is phonemically aware understands that the spoken word *pig* is made up of three different phonemes (/p/-/i/-/g/).

The activities conducted in this study focused mainly on phonemic awareness. For example, students were often asked to detect or create rhymes, or insert a phoneme at the beginning of a word, which all involve manipulating only one sound. However, occasionally an
activity required the students to detect syllables rather than phonemes. This required phonological rather than phonemic awareness. Therefore, the focus of this study is on phonological awareness, but research pertaining to phonemic awareness is still valid.

**Instruction in Phonological Awareness**

Although phonological awareness is an important prerequisite reading skill, it can be difficult to grasp. Griffith and Olson (1992) explain that this is because phonemes are not discrete units. When people speak, they do not distinctly pronounce each isolated phoneme. Instead, the phonemes blend together and are co-articulated. Furthermore, phonemes are abstract units of language (Griffith & Olson, 1992). They have no meaning and people are naturally inclined to focus on the meaning of a word, rather than the specific sounds of a word. Explicit instruction in phonological awareness can greatly help students detect phonemic units (Ehri et al., 2001).

In 2001, the National Reading Panel conducted a quantitative meta-analysis on the effects of phonemic awareness instruction on learning to read and spell. They concluded with “much confidence that phonemic awareness instruction is more effective than alternative forms of instruction, or no instruction, in helping children acquire phonemic awareness and in facilitating transfer of phonemic awareness skills to reading and spelling” (Ehri et al., 2001, p. 260).

Therefore, instruction in phonemic awareness is effective in helping children learn to read. The meta-analysis further concluded that the impact of phonemic awareness instruction may be greatest in preschool and kindergarten age children, and may actually decrease beyond first grade (Ehri et al.). The authors go on to explain that students enter preschool with little phonological awareness, and hence, have much to gain from phonological awareness instruction. In contrast, beginning readers, such as kindergartens, have acquired some phonological awareness, even
without phonological awareness instruction, because the process of learning to read requires grapheme-phoneme knowledge (Ehri et al., p. 255). As students advance beyond the first grade, the focus of instruction may become more centered on learning common spelling patterns rather than on phonemes, thus diminishing the impact of phonological awareness instruction (Ehri et al.). The authors concluded that phonological awareness instruction beyond the first grade may still contribute to a child’s growth in literacy, but the impact may be less than in the earlier grades. These findings indicate that educators should provide students with instruction in phonological awareness, and this instruction would be most beneficial for students in preschool and kindergarten.

In order to provide instruction in phonological awareness, teachers should create a linguistically rich environment where children are encouraged to actively explore and manipulate sounds (Adams, 1990; Griffith & Olson, 1992; Yopp, 1992). This exploration and manipulation of sounds can occur through explicit instruction, such as providing students with formal instruction on sound segmentation. However, research has also shown that phonological awareness instruction can be less formal, (e.g., spontaneous activities, games, or songs), and still result in positive gains in reading and spelling achievement (Ericson & Juliebö, 2000). Lundberg, Frost, and Peterson (1988) conducted a study involving 235 kindergarteners from 12 classrooms that had not received any previous instruction in letter-sound correspondence. Students in the experimental group were taught daily in a whole class setting for 15-20 minutes. The control group received no phonological instruction. The activities used in the experimental group were informal exercises and games geared toward phonological awareness. The study concluded that children who had received informal instruction in phonological awareness performed significantly higher on measures of spelling ability in the first grade, and word recognition and
spelling ability in the second grade. This study illustrates that advances in phonological awareness capabilities can occur through short, informal instruction.

When considering the type of phonological awareness instruction to provide, it is important to make explicit connections between letter-sound segments and letter names. In their investigation, Ball and Blachman (1991) found that the connection between letter sounds and names was included in all the most successful phonological awareness teaching programs. This was again found to be true in the Ehri et al. (2001) meta-analysis. The meta-analysis also concluded that children who received instruction that focused on only one or two phonemic awareness skills exhibited stronger phonemic awareness and a stronger transfer to reading than children who were taught three or more phonemic awareness skills (Ehri et al.). When preparing for instruction in phonemic awareness, educators should consider teaching only one or two phonemic awareness skills at a time, rather than addressing many different skills at once.

**Phonological Awareness and Music**

As discussed above, research has shown that phonological awareness can develop through informal instruction. Findings also support the idea that “effective phonological awareness can be integrated into a curriculum that simultaneously supports the development of children’s language, social, and motor skills, and general knowledge and interests” (Phillips, Clancy-Menchetti, & Lonigan, 2008, p. 6). Music supports all of these areas of child development, and is a subject into which phonological awareness can easily be integrated.

Preschool and kindergarten classrooms have long been integrating music and phonological awareness by singing songs that play with sounds, such as “Old MacDonald Had a Farm” or “Apples and Bananas.” Yopp and Yopp (2002) describe numerous songs, as well as musical rhymes and chants, that include different forms of phonemic awareness, such as manipulating
and detecting rhymes, alliteration, phoneme substitution, phoneme addition, and nonsense manipulation. There are numerous books and articles that promote music as a way to enhance early literacy skills (Eppink, 2009; Hansen & Bernstorf, 2002; Yopp & Yopp, 2003; 2009). An area of interest in the music field at the moment is whether a correlation exists between music aptitude and phonological awareness. A study by Lamb and Gregory (1993) determined that students’ scores on auditory discrimination of pitch were related to their scores on phonemic awareness. Several other studies have concluded that children between the ages of four and eight who score high on various musical aptitude tests also obtain high results on assessments of phonological awareness and word recognition (Anvari, Trainor, Woodside, & Levy, 2002; Bolduc & Montesinos-Gelet, 2005). These studies indicate there seems to be a link between music aptitude and phonological awareness. However, it appears that relatively few studies have been conducted to determine if music instruction that incorporates phonological awareness can increase students’ phonological awareness performance.

One study that does address this issue was conducted by Bolduc (2009). The purpose of the study was to determine if an interdisciplinary language-music program could increase preschool aged children’s phonological awareness; particularly the identification of phonemes, syllables, and rhymes. The participants included 104 Francophone kindergarten students in Canada with no learning disabilities. The experiment used a pre- and post-test design, in which students were assessed on musical aptitude and phonological awareness. The experimental group followed a music curriculum designed to increase preschoolers’ interest in reading and writing through musical activities. Activities to promote emergent literacy included analyzing song lyrics, composing rhythmic counting rhymes, reading children’s books associated with musical concepts, and writing words. The control group followed a similar music curriculum; only it did
not include the emergent literacy activities. Music instruction lasted for three months. Both groups scored similarly on the musical aptitude post-tests, illustrating that the music curriculum used in the experimental group was just as effective as the one used in the control group in developing tonal and rhythm perceptive skills. Students in the experimental group scored higher on the post-test in phonological awareness (although the score was not significantly higher). The study concluded that the interdisciplinary language-music program was more effective in developing phonological awareness skills than the regular music program.

In another study pertaining to music and phonological awareness, Gromko (2005) examined whether music instruction that taught children to analyze a simple song into patterns would enhance their ability to segment words into phonemes. The study was based on a near-transfer hypothesis that “when children learn to discriminate fine differences between tonal and rhythmic patterns and to associate their perceptions with visual symbols, they will benefit in skills related to the processing of sound shown to be necessary for reading” (p. 201). Children at the experimental school received weekly music instruction for 30 minutes. A major part of the instruction involved touching icons on a chart that represented a steady beat, word rhyme, and melodic contour. Phoneme-segmentation fluency was measured by the corresponding Dynamic Indicators of Basic Early Literacy Skills (DIBELS) subtest. The mean gain between the pre- and post-test results on phoneme-segmentation fluency was significantly greater in the experimental school. The study concluded that kindergarten children who received four months of music instruction showed significantly greater gains in phoneme-segmentation fluency when compared to children who did not receive music instruction.
Both studies demonstrate that music can be used to increase phonological awareness. However, neither study examined the impact the instruction had on students who are at-risk for reading difficulties.

Phonological Awareness and Reading Difficulties

Several decades of research have consistently found that most children who have difficulty learning to read have a core deficit in phonological awareness and related processing skills (Adams, 1990; Share & Stanovich, 1995, Wagner et al., 1997). This means that regardless of any other difficulties a child may possess, “a problem in performing and applying phonological awareness capabilities is at the heart of most children’s reading problems” (Phillips, Clancy-Menchetti, & Lonigan, 2008, p. 3). Adams (1990) went as far as to say that phonemic awareness is the most important core and causal factor separating children with reading disabilities and typically developing readers.

Using measures of phonological awareness is one way to identify students who are at-risk for reading problems (Ehri et al., 2001), and early identification of children with weak phonological awareness skills may help prevent some reading disabilities from developing (Ericson & Juliebö, 2000). Early identification in preschool and kindergarten is ideal, because research shows that poor readers who enter first grade lacking phonemic awareness are very likely to remain poor readers at the end of fourth grade (Griffith & Olson, 1992). However, research has shown that once a student has been identified with a reading difficulty, even past the first grade, the student can still increase his/her phonological awareness capabilities with adequate instruction. Results from the 2001 National Reading Panel meta-analysis concluded that children identified as at-risk were no less responsive to the phonemic awareness instruction than typically developing readers (Ehri et al., 2001). The results further indicate that phonemic
awareness instruction gave at-risk students a larger boost in reading over typically developing readers (Ehri et al.).

Having difficulty with reading can, in some cases, lead to the identification of a learning disability. The majority of the children who are classified as having learning disabilities in public schools have reading problems (Gaffney, 1998). It is estimated that 75-85 percent of the population of students with learning disabilities have reading problems (Moats, 1995). Several studies have shown that students with learning disabilities can increase their phonological awareness capabilities when provided with instruction. Research by O’Connor, Jenkins, Leicester, and Slocum (1993) indicated that young children (4-6 years of age) with learning disabilities can make significant progress in phonological awareness capabilities when provided with instruction. However, these students had trouble making generalizations within and between categories of phonological awareness. Bhat, Griffin, and Sindelar (2003) conducted a study to determine if middle school students with learning disabilities, who were also identified as having phonological awareness deficits, could improve their phonological awareness skills after instruction. Results showed that students scored significantly higher on the post-test, indicating that they improved their phonological awareness capabilities over time.

These findings indicate that students identified as at-risk, or even as having a learning disability, can benefit from instruction in phonological awareness.

**Music and Students with Reading Difficulties**

A limited amount of research exists on music education aiding students with reading difficulties. However, there is some research that is applicable in the music therapy realm. Music therapy and music education are distinct disciplines. Patterson (2003) defines music therapy as “a process that uses music and sound to improve mental and physical health” (p. 36).
It is sometimes provided as a related service, such as physical or occupational therapy, to help a student meet an educational need. Music therapy can take place in a group setting or with individual students. The purpose of music therapy is to use music to help a student meet his or her IEP goals and objectives, while the purpose of music education is to educate a student about music. However, there are many similarities in the activities that take place in a music education and music therapy environment (singing songs, playing instruments, playing music games).

Standley and Hughes (1997) conducted a study that evaluated the effects of music therapy sessions designed to increase the pre-reading and writing skills of twenty-four children, between four and five, who were enrolled in Early Intervention and Exceptional Student Education (ESE) programs. Music activities included alphabet recognition, song composition, drawing in response to the lesson, teacher modeling of reading song lyrics while singing a song, and the use of pictures in books and on posters with labels to accompany song activities. Results indicated that music significantly enhanced print concepts and prewriting skills of four-year-old children.

Colwell and Murlless (2002) conducted a study to determine the effect of music (singing vs. chanting) on the reading accuracy of five elementary students diagnosed with learning disabilities. Each week the students had to learn a new set of 8 or 9 words. Reading accuracy was calculated by the number of words read correctly at the end of each week. Music activities involved used chants or songs to accompany the student’s weekly set of words they were to learn. The reading accuracy of the participants improved, but there was no significant difference between the music (singing or chanting) and the non-music group. However, the sample size for this study was small, which makes it difficult to show a significant difference between groups. Also the treatment only lasted four weeks, which could have impacted the results as well.
These studies indicate that music activities geared toward teaching reading skills can lead to improvements in reading for students with learning disabilities, or students at-risk, in the music therapy environment. However, there is no research indicating that similar results could occur in the music education environment.

In summary, existing research supports the importance of the development of phonological awareness in the early grades, and the critical role it plays in helping students become successful readers. Research has shown that all students benefit from instruction in phonological awareness, including students who are at-risk for reading difficulties, or who have been identified with a learning disability. Identifying students with weak phonological awareness skills, and providing them with instruction may prevent some reading difficulties from occurring, and may even reduce the severity of a reading disability. Studies have shown that the music classroom can be used to reinforce phonological awareness. However, there have been no studies that have examined whether music education can aid in the development of phonological awareness in students who are at-risk for reading difficulties. The current research project seeks to fill this gap in existing research. The purpose of this study is to determine if activities in a music classroom can be used to increase a student’s phonological awareness performance, particularly students found to be at-risk for reading difficulties, in the context of teaching grade level-appropriate music content.

**Method**

After an extensive review of literature, the researcher conducted a study based on several existing studies. A pre- post-test design with a control and experimental group was utilized in this study. Participants included kindergarteners made up of typically developing readers, as well as students found to be at-risk for reading difficulties. The participants completed assessments on
both music aptitude and phonological awareness. Informal instruction in phonological awareness was imbedded in the music curriculum of the experimental group, which focused mainly on three different types of phonological awareness: detecting and manipulating rhymes, phoneme addition, and phoneme substitution. Connections between letter sounds and names, as well as the printed letters, were incorporated as often as possible.

**Setting**

This study was conducted in an elementary school located in a rural region of southeastern Ohio. The elementary school is made up of grades PreK-5 and serves 782 students. The elementary building resides in one wing of the single PreK-12 complex, while the middle school and high school each have their own wing. The school district serves 1,652 students. In the elementary school, 22.4% of the student population has identified disabilities, and over half of the students (51.9%) are economically disadvantaged. Ninety-eight percent of the students are of Caucasian descent, and 1.7% identify as multi-racial.

This study took place in a kindergarten music room. There are a total of six kindergarten classes, but only five kindergarten music classes. The students from one kindergarten class are dispersed among the other kindergarten classes to attend music. The kindergarten classes in this school are grouped based on ability level. Two of the kindergarten classes are considered to be functioning much lower than the other four. One of these classes is the class whose students are spread out to attend music with the other classes. There are two different kindergarten music teachers who work with the kindergarten classes once a week. This study was conducted in only one of the music rooms with one of the music teachers.
Participants

The participants in this study were members of four different kindergarten music classes. There are five kindergarten classes in total who have music, but only four were chosen to ensure an even number of participants in the control and experimental groups. To determine which four classes would participate, the researcher matched the classes as closely as possible based on phonological awareness pre-assessments scores. From each pair of classes, one class was randomly assigned to the control group and the other to the experimental group, creating a total of two control and two experimental classes. Classes were paired in this manner to create a direct comparison between the control and experimental groups, and eliminate any outside factors that might have contributed to differences in scores. The experimental group received music instruction from the researcher that incorporated activities to increase phonological awareness. The control group received routine music lessons instructed by the regular music teacher.

The only criterion for participating in this study was that the students had to bring back their parental consent forms. Students who did not return the parental consent forms still participated in the music classes, but their data was not included in the study. Each class was designated a name and number to track the data. Control 1 consisted of sixteen students (nine girls and seven boys). Experimental 1 was made up of seventeen students (seven girls and ten boys). Control 2 had twenty-one students (sixteen boys and five girls), and Experimental 2 consisted of thirteen students (six girls and seven boys). A total of 67 participants took part in the study (37 in the control group, and 30 in the experimental). The participants were all between the ages of five and six and in good health.
Instrumentation

The 6th edition of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) test, a commonly used reading assessment for young children, was used to assess phonological awareness (Good & Kaminski, 2002). DIBELS assesses early literacy skills from kindergarten through sixth grade. These skills cover the five essential areas of literacy as identified by the National Reading Panel: Phonemic Awareness, Alphabetic Principle, Accuracy and Fluency, Vocabulary, and Comprehension. The current study used the Phoneme Segmentation Fluency (PSF) subtest to measure phonemic awareness. The benchmark K.2 served as the pre-assessment and K.3 as the post-assessment (See Appendix A).

The PSF subtest assesses a student's ability to segment three- and four-phoneme words into individual phonemes. The examiner says a word made up of three to four phonemes, and the student orally segments the word into its individual phonemes. The student is awarded a point for each phoneme. After one minute, the examiner stops the assessment and totals up the number of correct phonemes produced in one minute.

To ensure the students still received appropriate music instruction in the experimental group, the students also took a pre- and post-assessment in music. The music assessment is a written exam created by Christy Lovenduski, an elementary music teacher. It was retrieved from a website created for music teachers in the state of Missouri (Missouri Music GLEs, MissouriMusicGLEsLessonPlansAndTests.html). The content of the assessment is representative of the music curriculum students are to learn in kindergarten. The students listened to a music excerpt and circled the icon that represented the appropriate response. This test served as both the pre- and post-assessment for music knowledge. The music excerpts were changed on the
post-test, so an improvement in scores would not be a result of the students taking the same test twice (See appendix B).

**Procedures**

This study lasted nine weeks. Before the study began, pre-assessments in music and phonological awareness were administered to the participants. The phonological awareness pre-assessment was administered individually to each student by his or her regular kindergarten teacher. The researcher administered the music pre-assessment to each class during one of their regularly scheduled music periods.

After the phonological awareness pre-assessments were administered, the reading specialist recorded the data in the program mclasshome.com (a software package used by the school for tracking progress). The program assigned each student a score and a category based on that score. The target for this subtest is for the student to earn a score of 18. Students who scored 0-6 were classified as at-risk for failing to achieve early literacy goals, 7-17 meant the students had some risk, and scoring 18 and over classified the students as having a low risk. For this study, the students who scored at-risk on the pre-assessment were considered to be at-risk for reading difficulties.

Based on the pre-assessment class mean and the number of students considered to be at-risk in the class, the researcher matched the classes in pairs as best as possible. Control 1 and Experimental 1 were paired together, and were a close match. Control 1 had a class mean of 29.5. Twelve of the 16 students (75% of the class) were classified as low risk and four were classified as some risk. Experimental 1 had a class mean of 24.06. Thirteen of the 17 students were classified as low risk (76% of the class), two were classified as having some risk (12%), and two were classified at-risk (12%).
Experimental 2 was one of the lower functioning kindergarten classes. It contained the highest number of students at-risk and there was no class whose scores were comparable to this class. Experimental 2 had a mean of 4.62 on the pre-assessment. Eight of the 14 students were classified as some risk (57% of the class), and six as at-risk (43%). The closest match was Control 2. The class mean was 27.14. Three of the 21 students were classified as some risk (14%), 3 were at-risk (14%), and 15 had a low risk (71%).

Once the classes were placed in pairs, one class from each matched pair was randomly assigned to the control and one to the experimental group. The researcher flipped a coin to determine which group each class was assigned. Experimental 1 and 2 were assigned to the experimental group, and Control 1 and 2 to the control. Each class received music instruction once a week, for 45 minutes, over a total of eight weeks. During the ninth week, post-tests were administered.

**Intervention**

The intervention in this study was a music class imbedded with phonological awareness activities taught by the researcher. Students in the experimental group received the intervention once a week during their regularly scheduled music class. The class was similar to a typical kindergarten music class except that the researcher incorporated phonological awareness as often as possible. The researcher used songs that played with sounds to promote experimentation and manipulation of language. These songs included rhymes, alliteration, phoneme substitution, phoneme addition, and nonsense manipulation. Other activities involved students clapping, patting, or playing an instrument on the syllable division of words. Students also analyzed song lyrics for alliteration and rhymes, and at times even wrote their own lyrics. Children’s books written with song lyrics were included in the instruction as often as possible.
A typical lesson began with some type of warm-up activity (i.e., “The Name Game,” “Shake My Sillies Out,” or stretches). This was followed by the main lesson, which was usually an introduction to a new song, sometimes a rhythm, or musical instrument. Some type of movement activity usually followed the lesson, or occurred during the lesson, to give the students an opportunity to get out of their seats. If there was time left, the students usually played a musical game. The lesson always concluded with a review of what had been accomplished that day. For a detailed sample lesson see Appendix C.

Results

There were three purposes for this study. The first was to determine whether the phonological awareness activities conducted in the experimental group would lead to an increase in students’ overall phonological awareness. Next, to conclude whether or not students who are at-risk for reading difficulties benefitted from the imbedded phonological awareness activities, and to what extent when compared with grade-level matched typically developing readers. Third was to determine if the imbedded phonological awareness activities in music class would detract from the students learning grade level-appropriate music content. Results of the pre- and post-assessments in phonological awareness are discussed first, followed by the difference in pre- and post-test scores. Then specific results of the students at-risk for reading difficulties are reported. Finally, the results of the scores on the music pre- and post-tests are discussed.

Changes in Phonological Awareness

Phonological awareness was measured using the Phoneme Segmentation Fluency (PSF) subtest of the DIBELS test.

Differences in experimental versus control groups. First, the data for the pre- and post-tests was divided in two subgroups for analysis: experimental and control group. The
means between the two subgroups on the pre- and post-test were analyzed and are presented below (with standard deviations in parentheses).

Table 1

**Phoneme Segmentation Fluency: Pre and Post-Test Means and Standard Deviations by Group**

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pre-Test M</th>
<th>Pre-Test SD</th>
<th>Post-Test M</th>
<th>Post-Test SD</th>
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<td>37</td>
<td>28.16</td>
<td>13.85</td>
<td>43.08</td>
<td>13.85</td>
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<td>15.6</td>
<td>13.08</td>
<td>36.53</td>
<td>19.15</td>
</tr>
</tbody>
</table>

An independent-samples *t*-test was run to determine if there was a significant difference between the two subgroups on the Phoneme Segmentation Fluency (PSF) pre- and post-test scores. When comparing the mean scores of the pre-test, the *t*-test indicated a significant difference between the means of the two groups (*t*(65) = 3.775, *p* < .05). The mean of the experimental group was significantly lower than the mean of the control group on the pre-test. When the post-test scores were analyzed, the *t*-test indicated no significant difference in the mean scores between the control and experimental group (*t*(65) = 1.623, *p* > .05). Figure 1 shows the mean scores on both the pre- and post-tests for the control and experimental groups.
Figure 1: The mean scores for the control and experimental group on the pre- and post-phonological awareness (PA) test.

Differences by class. Next, the data was divided into four different subgroups for analysis representing the four different music classes.

Table 2

<table>
<thead>
<tr>
<th>Class</th>
<th>n</th>
<th>Pre-Test</th>
<th></th>
<th>Post-Test</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
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<tr>
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<td>16</td>
<td>29.5</td>
<td>13.52</td>
<td>44.56</td>
<td>11.77</td>
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<td>27.14</td>
<td>14.33</td>
<td>41.95</td>
<td>15.44</td>
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<tr>
<td>Experimental 1</td>
<td>17</td>
<td>24.05</td>
<td>10.96</td>
<td>48.7</td>
<td>11.26</td>
</tr>
<tr>
<td>Experimental 2</td>
<td>13</td>
<td>4.62</td>
<td>4.57</td>
<td>20.62</td>
<td>15.24</td>
</tr>
</tbody>
</table>

Control 1 and Experimental 1 groups were paired and groups Control 2 and Experimental 2 were paired for comparison. On the pre-test, the means for both control groups were higher than their paired experimental groups. Because the difference in pre-test scores was so great
between Control 2 and Experimental 2, it can be assumed that Control 2 scored significantly higher than Experimental 2 on the pre-test. However, the scores between Control 1 and Experimental 1 were so close, an independent-samples *t*-test was conducted to determine if there was a significant difference in pre-test means. The *t*-test indicated no significant difference in the scores (*t*(31) = 1.27, *p* > .05). Therefore, even though Control group 1 scored higher than Experimental group 1, the difference was not enough to be significant.

All four classes increased phonological awareness scores from the pre- to post-test. An independent-samples *t*-test was conducted to determine if there was a significant difference in means on the post-test. The mean of Control Group 2 was again significantly higher than Experimental 2 on the post-test (*t*(32) = 3.94, *p* < .05). The mean of Experimental 1 was actually higher than Control group 1 on the post-test. However, the difference was not enough to be significant (*t*(31) = -1.03, *p* > .05). Figure 2 shows the mean scores on the pre- and post-test by class.

![Scores on PA Test by Class](image)

*Figure 2:* The pre- and post-test mean scores by categorized by class on the PA test.
**Phonological Awareness Change Scores**

Differences in pre- and post-test scores were calculated to determine the amount of growth made by students in each subgroup. First, the mean of the difference in pre- and post-test scores was configured for the two subgroups: control and experimental groups. The mean gain for the control group was $M = 14.92$ ($SD = 9.73$) from the pre- to post-test, and the mean gain for the experimental group was $M = 20.9$ ($SD = 10.61$). An independent-samples $t$-test was conducted to determine if the mean difference in pre- and post-test scores between the two groups was significant. The $t$-test determined that the mean difference in pre- and post-test scores in the experimental group was significantly higher than the control group ($t(65) = -2.40, p < .05$) as is depicted in Figure 3.

![Difference Between PA Pre- and Post-test](image)

*Figure 3*: The mean difference in pre-and post-test PA scores for the control and experimental group.

The mean of the difference in pre- and post-test scores was next analyzed by class:
Table 3

*Phoneme Segmentation Fluency: Mean Difference in Pre and Post-Test Scores*

<table>
<thead>
<tr>
<th>Class</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control 1</td>
<td>16</td>
<td>15.06</td>
<td>9.65</td>
</tr>
<tr>
<td>Control 2</td>
<td>21</td>
<td>14.81</td>
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<tr>
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<td>17</td>
<td>24.65</td>
<td>6.44</td>
</tr>
<tr>
<td>Experimental 2</td>
<td>13</td>
<td>16</td>
<td>13.07</td>
</tr>
</tbody>
</table>

Both experimental groups had a higher mean difference scores than their paired control groups. An independent-samples *t*-test was conducted for each paired group to determine if the mean difference between the pre- to post-test was significant. The *t*-test determined that the difference Experimental 1 class made in their pre- and post-test scores was significantly higher than the difference in the scores of the Control 1 class (*t*(31) = -3.38, *p* < .05). However, the difference in the pre- and post-test scores between the Experimental 2 and Control 2 classes was not significant (*t*(32) = -.300, *p* > .05). Figure 4 illustrates the mean difference of pre- and post-test scores for the four classes.
**Figure 4:** The mean difference in the pre-and post-test phonological awareness scores categorized by class.

**Students At-Risk for Reading Difficulties**

Students were identified as being at-risk for reading difficulties if the score on their phonological awareness pre-test categorized them as being at-risk. Thirteen students were identified as at-risk, and 54 were not. Ten of the students identified as at-risk were in the experimental group. Students were classified into two different subgroups for this analysis: students who were at-risk in the experimental group, and students who were not at-risk in the experimental group. The mean pre-test score for the students at-risk was $M = 1.7$ ($SD = 2.4$). Students who were not at-risk had a mean pre-test score of $M = 22.6$ ($SD = 10.25$). The students who were not at-risk had a much higher overall mean than the students who were at-risk. On the post-test, the students who were at-risk had a mean score of $M = 16.1$ ($SD = 11.80$). This is a major improvement, which shows that these students did benefit from the imbedded phonological activities in the music class. The mean score on the post-test for students who were
not at-risk in the experimental group was $M = 46.75$ ($SD = 12.8$). Figure 5 depicts the mean pre- and post-test scores for students at-risk versus those not at-risk in the experimental group.

**Figure 5:** The mean pre- and post-test scores for students at-risk and not at-risk on the PA test.

The difference in scores from the pre- to post-test was examined next to compare the growth the at-risk students made in relation to their typically developing peers. The mean difference in pre- and post-test scores for the students at-risk was $M = 14.4$ ($SD = 10.78$), while the mean difference for students not at-risk was $M = 24.15$ ($SD = 9.12$). This indicates that the students who were at-risk did not improve as much as the students who were not at-risk. An independent-samples $t$-test was run comparing the mean difference in pre- and post-test scores between students who were at-risk and those who were not. The $t$-test indicates that the mean difference in pre- and post-test scores for students who were at-risk were significantly lower than those who were not at-risk ($t(28) = -2.597, p < .05$). These results are depicted in Figure 6.
Figure 6: The mean difference in pre-and post-test PA scores for students at-risk and not at-risk in the experimental group

Music Content

Students were given a pre- and post-test in music to ensure that the students in the experimental group were receiving appropriate music instruction in addition to the imbedded phonological awareness activities. Data was disaggregated by experimental and control group. The pre-test mean for the control group was $M = 77.25$ ($SD = 21.21$), and the experimental group had a mean of $M = 66.67$ ($SD = 21.33$). An independent-samples $t$-test was conducted to determine if there was a significant difference in the pre-test scores. The $t$-test indicated that the control group scored significantly higher on the pre-test ($t(65) = 2.02, p < .05$) than the experimental group.

The researcher designed the post-test to be slightly more difficult to account for the amount of growth students should have made throughout the eight weeks. The results show that many of the students actually scored lower on the post-test. The control group had a mean of $M =$
64.64 (SD = 15.64) on the post-test and the experimental group had a mean of $M = 67.22$ (SD = 19.44). An independent-samples $t$-test was run to compare the difference in post-test scores between the two subgroups. The test found that there was no significant difference in the post-test scores ($t(65) = -0.61, p > .05$). Figure 7 depicts the results on the music pre- and post-tests.

![Scores on Music Test](image)

**Figure 7:** The mean scores for the control and experimental group on the pre- and post-test in music.

Next, the difference in pre- and post-test scores was analyzed to compare the development each group made with regard to the music content standards. The mean difference for the control group was $M = -12.57$ (SD = 14.6) from the pre- and post-test. The mean difference for the experimental group was a gain of $M = .33$ (SD = 21.82). An independent-samples $t$-test revealed the mean difference in pre- and post-test scores to be significantly higher in the experimental group ($t(65) = -2.89, p < .05$).
Discussion and Recommendations

Previously reviewed literature has shown that the music classroom can be used to increase phonological awareness. The results obtained from the present study indicate similar findings.

Research Question 1

The first research question this study sought to answer was: Can music activities geared toward teaching phonological awareness increase a student’s overall phonological awareness performance? Results from the pre- and post-tests in phonological awareness indicate that they can. The mean score on the pre-test in phonological awareness showed that the students in the experimental group scored significantly lower than the students in the control group. However, on the post-test, there was no significant difference in the mean scores between the control and experimental groups. This indicates that the intervention in music reduced the gap in phonological awareness capabilities of the students in the experimental group to the point where there was no significant difference between the groups. However, these results were not reflected when the data was broken down by class (results indicate that no significant change was made). One explanation for this occurrence could be because the sample size in each class was small (13 to 21 participants), and it is more difficult to find a significant result with smaller sample sizes.

Results also indicate that students in the experimental group had a significantly higher mean difference in pre- and post-test scores than the control group. This means that students in the experimental group generally made more improvement on the post-test than the control group. Again, these results weren’t as clear when analyzed by class. Both experimental groups had a higher mean difference in scores than their paired control groups. However, only one experimental group (Experimental 1) had a significantly higher difference in mean scores than
their paired control group (Control 1). No significant difference in post-test scores was found between Experimental 2 and Control 2. These results could again be attributed to the smaller sample sizes, but it is more likely a result of inherent differences between the classes. Experimental 2 was one of the lower functioning kindergarten classes, and contained the highest number of students at-risk. Therefore, there was no class that was a close match for Experimental 2. More valid results might have occurred with a better pairing of classes of equal abilities.

**Research Question 2**

The second research question sought to determine if instruction in phonological awareness imbedded in a music class would have a negative impact on students’ ability to learn grade level-appropriate music content. The findings from this study indicate that this is not the case—students can still learn grade level-appropriate music content when the music instruction incorporates phonological awareness. The students in the control group scored significantly higher on the music pre-test than the experimental group. However, on the post-test there was no significant difference between scores. This indicates that the music instruction incorporating phonological awareness taught the same music content as the regular music class. The experimental group also had a significantly higher mean difference in pre- and post-test scores than the control group, indicating that they actually improved more from the pre- to post-test with regard to music content knowledge.

**Research Questions 3 and 4**

The final two questions in this study pertain to students who are at-risk for reading difficulties. The first of the two questions asked: Will students who are at-risk for reading difficulties benefit from phonological awareness activities imbedded into music class? The results indicate that students who are at-risk do indeed benefit from imbedded phonological
awareness activities in music classes. In the present study, students identified as being at-risk experienced major improvements from their pre- to post-test scores on the phonological awareness test. The final question in this research project was if students at-risk did benefit, to what extent did they benefit when compared to grade-level matched typically developing readers. Findings show that students identified as at-risk did not benefit from the intervention as much as grade-level matched typically developing peers. The mean difference in pre- and post-test scores for students found to be at-risk were significantly lower than those who were not at-risk. This demonstrates that the students who were at-risk did not improve as much from their pre- to post-test in phonological awareness. This result could have occurred because of the small sample size, and the disproportionate numbers between the two groups. Only ten students were found to be at-risk that received the intervention, while there were twenty students who were not at-risk.

**Limitations**

Although fairly positive results were obtained during this research, there are several limitations that should be considered. The first is time. The study lasted nine weeks, but a longer intervention period might have shown a greater improvement in phonological awareness and a greater difference in scores between the experimental and control group. The time of year that the study occurred is a second limitation. Experimental 2 had music class on Fridays. Because of a snow day and a holiday, Experimental 2 missed music class twice during the study. Having two more days of intervention could have made a significant difference on their scores on phonological awareness and music aptitude. Another limitation is the number of participants in the study. There were several students who could not be included in the study because their parental consent forms were not returned. Many of these students were in Experimental 2, which
had the highest number of at-risk students and the lowest number of participants. Being able to include all of the students in Experimental 2 is likely to have impacted the results in every area, including the comparison of students at-risk with those not at-risk.

Although the results are consistent with other research pertaining to music and phonological awareness, they are open to alternative explanations. First, the difference in scores between the control and experimental group could be a result of the differences in phonological awareness instruction from the students’ classroom teachers. However, the researcher controlled for class differences by randomly assigning each class to an experimental or control group. Also an independent-samples t-test found there was a significant change between the experimental and control group’s scores on the pre- and post-test in phonological awareness. The significant change ensures that no other outside factors could account for the results. A second explanation could be made based on the observation that the students in the experimental group scored low on the pre-test in phonological awareness. One might argue that because the students scored low on the pre-test, they have a higher probability of increasing their score the next time they take the test. However, the students identified as being at-risk for reading difficulties tended to score the lowest on the pre-test. The results show that the mean difference in pre- and post-test scores for students who were at-risk was significantly lower than those who were not at-risk. This indicates that the students who scored the lowest on the pre-test did not show the most improvement on the post-test. These alternative explanations could account for the results found in this study. However, the results are more easily explained by the phonological awareness activities that took place in music class.
Recommendations

To strengthen this study, there are several recommendations for future practice. In this study, the researcher instructed the experimental group while the regular music teacher instructed the control group. To maintain consistency, and to have a better comparison between the control and experimental group, the same person should instruct each group. Also, better results on the music assessments might have been obtained if the assessments were administered individually or in small groups. The participants (kindergarten students) seemed to have a hard time focusing for the amount of time it took everyone to complete the test, and it appeared that many of them lost interest in the test before it was over. The researcher gave make-up tests to the students who weren’t present for the group test. These were given in small groups or one-on-one, and the results from these tests seem to be a better representation of the student’s knowledge in music than the assessments given to the whole-class. Another change that could impact the results on the music assessment has to do with the post-test. The researcher changed the questions on the music post-test to represent the growth students should have made in learning music content. However, many of the students did worse on the post-test. In order to determine if the students improved in music aptitude from the beginning of the study to the end, the questions on the post-test should remain the same, or should be changed but still represent the same level of music knowledge as the pre-test. Also in the future, multiple assessments of phonological awareness should be used. This study used only one test to measure phonological awareness (phoneme segmentation fluency), so results can only be generalized to that particular phonological awareness skill.

While studies have shown that music activities geared toward teaching reading skills in a music therapy environment can lead to improvements in reading for students with learning
disabilities, or students at-risk, this study appears to be the first to investigate the impact of reading-based activities in a music education classroom. This study found that students at-risk did benefit from the intervention in music class, which supports the results of similar studies in the music therapy realm. However, because this study seems to be the first to examine this group of students, further research should be conducted to verify its findings.

**Implications for Practice**

The findings of this study are useful for multiple fields of education: music, early childhood, as well as reading intervention. This study demonstrates the potential benefits of imbedding phonological awareness activities in a music class. These activities were easy to incorporate into the curriculum, and did not detract from teaching the kindergarten music standards. Other music educators could set up a similar intervention in their classroom after receiving some instruction in phonological awareness, perhaps by attending a workshop or professional development seminar. Music educators could also collaborate with early childhood educators or reading specialists within their school, to discuss the type of phonological awareness to incorporate in their classroom. It would be ideal if they could align the phonological awareness activities in their classroom to reinforce what the students are learning in their general education classroom.

The results of this study demonstrated that students identified as at-risk benefitted from the phonological awareness intervention in music, but not as much as the students who were not at-risk. These students may need more intensive instruction in phonological awareness to significantly increase their capabilities. Nevertheless, they did benefit from the instruction, and research has shown that students with learning disabilities benefit from phonological awareness instruction as well. It would be beneficial for all students who are at-risk for reading difficulties,
or who have been identified with a reading disability, to be included in a general music classroom that incorporates phonological awareness activities.

The results of this study stand to benefit not only students, but educators as well. Early childhood educators would benefit from phonological awareness being incorporated in the music room because their students would be receiving additional instruction in phonological awareness that might not have been possible to provide in the general education classroom. Music educators would benefit because it would affirm the need for an elementary school music program. Most importantly, the students would benefit because they would receive more opportunities for instruction and practice in phonological awareness, which would increase their development of phonological awareness, thereby increasing their likelihood of becoming a successful reader.

**Conclusion**

The purpose of this study was to determine if a music classroom could be used to reinforce phonological awareness in the context of teaching grade level-appropriate music content. The results revealed the following: (1) kindergarten students increased their phoneme segmentation fluency after receiving imbedded phonological awareness instruction in a music classroom, (2) phonological awareness activities do not have a negative impact on students learning grade level-appropriate music content, (3) students who are at-risk for reading difficulties do benefit from imbedded phonological awareness instruction, and (4) students at-risk do not benefit from the intervention as much as typically developing readers. Implications of this study demonstrate the benefits of including phonological awareness activities in a music classroom.


DIBELS™ Phoneme Segmentation Fluency

Short Form Directions

Make sure you have reviewed the long form of the directions and have them available. Say these specific directions to the student:

I am going to say a word. After I say it, you tell me all the sounds in the word. So, if I say, “sam,” you would say /s/ /a/ /m/. Let’s try one (one-second pause). Tell me the sounds in “mop.”

CORRECT RESPONSE:
If student says /m/ /o/ /p/, you say

INCORRECT RESPONSE:
If student gives any other response, you say

Very good. The sounds in “mop” are /m/ /o/ /p/. Your turn. Tell me the sounds in “mop.”

OK. Here is your first word.
### Benchmark K.3
**DIBELS™ Phoneme Segmentation Fluency**

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<th>Word</th>
<th>Phonemes</th>
<th>Correct Answer</th>
<th>Score</th>
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</table>

**Error Pattern:**

**Total:**
Appendix B

Pre- and Post-Test in Music

My Kindergarten Music Booklet

Name:___________________

My Kindergarten Music Booklet

Name:___________________
HCIAKa: Identify characteristics of teacher-selected genres or styles lullabies, marches, nursery rhymes/chants.

Circle the Baton Twirler when you hear a March.
Circle the “No” when you do not hear a March.

1. NO
2. NO
Name: ____________________________
Kindergarten Music First Semester

EM1AK: Read icons for long and short sounds and silence in duple meter

Circle the “Long block” when you hear long sounds.
Circle the “Short block” when you hear short sounds.

_________________________  _______________
AP1AKa: Distinguish between same and different
When you hear sounds that are the same, circle the horses that are the same color.
When you hear sounds that are different, circle the horses that are different colors.
AP1BKb: Differentiate between nature, man-made, and animal sounds

Circle the Animal when you hear a sound that comes from nature. Circle the Man when you hear sounds that are man-made.

1. [Image of a donkey] [Image of a man]
2. [Image of a donkey] [Image of a man]
AP1BKc: Differentiate between various vocal productions: singing, whispering, shouting, speaking

Circle the picture of the voice that you hear.

1.
- Whisper
- Speaking
- Calling
- Singing

2.
- Whisper
- Speaking
- Calling
- Singing
AP2AKa: Develop criteria to distinguish between quality and non-quality performance through listening and self-assessment with regard to the following musical elements: appropriate singing voice, loud/soft, steady beat, posture/stage presence.

Circle the Drum if you hear a steady beat.
Circle the word “No” if you do not hear a steady beat.

1.

2.
HC1AKa: Identify characteristics of teacher-selected genres or styles lullabies, marches, nursery rhymes/chants.

Circle the Baby when you hear a lullaby.
Circle the “No” when you do not hear a lullaby.

1. 

2.
Appendix C
Sample Lesson
Willoughby Wallaby Woo

Grade: Kindergarten

Standards

Music
• Sing alone and with others a varied repertoire of songs maintaining a steady beat (Creative Expression and Communication, k.1).
• Improvise movement to songs and recorded music (Creative Expression and Communication, k.4).

Language Arts
• Identify and complete rhyming words and patterns (Phonemic Awareness, Word Recognition, and Fluency, 2)
• Hear and say the different phonemes in words, such as identifying the initial consonant sound in a word (Phonemic Awareness, Word Recognition, and Fluency, 7).

Procedures:

1. Name Game Song
• demonstrate first with my name and explain how the song works. Keep the beat with a tambourine and talk about how the instrument can be played
• sing the song with each student’s name in it
• have students stand in a circle. The person whose name is being used comes into the center of the circle and can dance as we sing
2. Play the song Willoughby Wallaby Woo on a CD for the students #37 on Oo-ples CD
   • listen for the animal in the song and what the animal is doing
   • play again and have them listen for rhyming words (explain what a rhyme is if they are not sure)
   • ask them to identify any rhymes in the song
3. Analyze lyrics
   • look at lyrics on the SMART Board
   • say title of the song
     o what letter does each word start with?
     o what sound does it make?
   • what are the other rhyming words in the song?
   • what happens with each person’s name in the song?
     o demonstrate with name cards and post-it
   • sing through the song a couple times to make sure they know it
4. Sing through with new rhymes
   • students will sit in a circle.
   • introduce them to stuffed elephant name Willoughby Wallaby (have the students pass it around at the beginning so they get a chance to feel it).
   • as we sing the song we will pass around the stuffed elephant. When it gets to the third verse, whoever the elephant lands on substitutes a w for the first letter of their name and we insert their name in the song (give the student the chance to say what their name would be first and then open it up to the class)
• continue doing this and repeat the song a couple of times

5. Musical Scarves

• students will dance to the music using scarves

  #8 Under the Sea

  #1 Let’s Go Fly a Kite

• From CD Move Your Dancing Feet

  #4 Alphabet Chant 4:03

    o explain this type of music is called reggae

    o explain this is an echo song and have them echo the singer

    o when it gets to part where letter is said every 4 beats, have them make that letter with their scarf

6. Review

With about 3 minutes left stop and review what the students did that day

• What 2 new songs did we learn?

• What letter do the words Willoughby Wallaby Woo all begin with?

• What rhyming words did we find today?

• What instrument did we learn about today?
Lyrics to Willoughby Wallaby Woo

Willoughby wallaby wee,
An elephant sat on me!

Willoughby wallaby woo,
An elephant sat on you!

Willoughby wallaby Wustin,
An elephant sat on Justin!

Willoughby wallaby Wody,
An elephant sat on Cody!