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Students who were involved in the highly-enriched Music, Movement & Magination curriculum displayed a higher increase in reading fluency scores, showing that those students involved in the music and movement curriculum program were able to read more accurately and with greater speed than those in the standard teacher directed read-aloud curriculum program.



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Running head: MUSIC AND MOVEMENT

The Effect of Music and Movement versus Read Aloud

On the Reading Fluency Development of First Graders

Andrea Casal - Villegas

California State University San Marcos

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*Chapter One**Introduction**Background*

One of the most difficult tasks a teacher can undertake is to teach a child to read. There are numerous theories and methods that work in different ways with different types of learners. In a first grade classroom, literacy development, especially reading fluency and comprehension are the primary objective within the span of a single year. Because kindergarten is still an optional year of attendance, the first grade is often the first stop where students are actually challenged to learn formal and academic reading and literacy skills. Once a child reaches the second grade they are already expected to be a fluent reader as required by the educational standards of the state of California. This study will look at literacy development within a first grade classroom, and specifically focus on the kinds of strategies that support the fluency development in young readers.

Although individual first grade classroom designs may differ, all first grade teachers share a common objective for their reading instruction, reading comprehension and fluency development of their young students. This study is designed to help identify successful reading instruction strategies as well as a variety of techniques that veteran and new educators can implement to help young readers become successful.

Recent trends in reading instruction have young students spending much more time in their seats doing pencil and paper activities. However, the research in education for young children provides evidence that seatwork may be less effective than strategies which incorporate movement. There has been significant research in the field of kinesiology that demonstrates how students benefit from a movement-rich environment. “Imagination and fantasizing have enormous significance for an early school child ... and in this way it can be used to support a child’s development” (Krason, 2003, p. 1). The research shows that academic activities that are linked to music correlate to student’s ability to improve in math and reading ability. Towell (2000) found that “music is universal, and listening to music can ... excite emotions and ... help children develop intelligence” (Towell, 2000, p. 284). Music and movement in the classroom has significant potential to assist students in the development of literacy skills — as well as math — and is a beneficial integration into the classroom.

Statement of the Problem

Unfortunately, in many classrooms today, music and movement is believed to be a classroom management technique that has little to do with academics. Because of the current “teach to the test” culture in education, most first grade teachers feel a great deal of pressure to keep their students at their desks or at work tables where they are focused on pencil and paper tasks.

Few teachers are aware that the music and movement activities could significantly enhance their students' academic achievements.

Purpose of the Study

This study will evaluate the effects of music and movement in a classroom experimental group and monitor how this type of environment influences the reader's fluency development. The study will evaluate the use of singing, songs, chants, hand motions, and kinesthetic movement to teach and reinforce reading and fluency development. Finally, the study will compare the results of these activities with a more traditional environment with a control group that uses teacher and student-directed read aloud as primary reinforcement.

Significance of Study

The results of this study will be beneficial to future research on using music to teach reading fluency. It will benefit other teachers who are looking for additional strategies to assist their students in learning to read fluently. It is important to keep in mind as teachers that not all children learn the same way. As Gardner expressed throughout his studies of multiple intelligences that there are many effective ways to reach a child's learning.

Conclusion

This chapter discussed the significance and background of this study to build better readers. It is time that teachers realize the importance of music and movement integration into the classroom and move away from the strict paper and pencil techniques that have become all too familiar. Fluency development in the first grade

classroom is the key to reading development. Chapter two will further delve into past research on this subject, and discuss possibilities that this study will build a better understanding of music and movement in the classroom. It will explore the current research available for reading fluency, teacher based read aloud programs and the development of music and movement to improve reading skills in students.

Definition of Terms

Fluency. The ability to read text with speed and accuracy.

Kinesthetic learning. The use of physical movement in an education learning environment where students are learning through movement connected to the learning goal.

Literacy. The ability to read and write.

Music and Movement. The use of songs, chants, poems, riddles, rhymes, dances, hand motions and body language in a classroom learning environment.

Teacher Directed Read Aloud. A teacher chosen piece of literature for the purpose of reading to a group of students while they are asked to listen and/ or follow along to the text with or out without pictures for the purpose of building a specific literacy skill.

Comprehension. The understanding or grasping of meaning and gaining knowledge from text.

*Chapter Two**Review of Literature**Introduction*

Fluency development is a critical aspect of becoming a successful reader and a significant component to literacy development in a primary classroom. This study will evaluate the significance of music and movement in a first grade classroom and its correlation to fluency development in comparison to a teacher-directed read aloud program. This chapter will explore the current research available in relation to music and movement, teacher directed read aloud, and fluency development as related to comprehension.

Music and Movement

Teachers have incorporated arts, music and movement into their lessons in a variety of ways through the history of education in the United States. Many programs in the late twentieth century valued a “holistic” approach to education. A main assumption of these approaches was that the more children are able to involve their whole person in their learning the better they would learn. For example, The Learning to Read Through the Arts (LTRTA) by Ganley (1983) program is another way to integrate not only movement into the classroom but music and creative arts as well. Originally developed in New York City as a Title 1 program, LTRTA is designed for at-risk students who have not learned to read through traditional means (Collett, 1991). The LTRTA program not only promotes the integration of various arts but also teaches them separately for their own sake as well, such as music and

dance. Teachers and students are encouraged to reinforce their learning through multiple media and expression.

For example, during a literature unit on folk tales, students are encouraged to construct instruments and re-enact pieces of the literature, create dances and musical compositions and choreograph stories to music and dance. These music and movement activities are a natural match for reading and language arts activities.

During an animal study students listen to and create sounds and movement to express different animals and environments (Collett, 1991). The goal in the LTRTA program which has been recognized by the United States Department of Education as an exceptional program is to create an awareness and connection for students to a holistic learning environment.

The benefits of tapping the whole child are of particular importance given the great diversity of students that we teach. The arts can be a powerful tool for working with diverse students including students with disabilities. Block and Campbell (2001) described the importance of movement to reinforce literacy development with children with hearing disabilities. Their article uses Block's organizational levels of literacy to systematically target special populations in education and help teachers adapt to the needs of their students who are hearing impaired. These levels include; pre-literate level, symbolic level, lexical level, syntactic level, and the language of movement.

Each level includes a tactile or pictorial representation of the focus skill in literacy and any special accommodation needed for student of special populations.

For example, the pre-literate level focuses on phonemic awareness and auditory comprehension. While students with disabilities at this stage might have difficulty with the auditory comprehension, Block and Campbell (2001) suggest that teachers use visual material, nonverbal cues such as hand motions and sign language in order to prevent segregation between students. The symbolic level focuses on visual processing and movement translation; the lexical level focuses on movement words and grammar and therefore suggests the adaptation of sign language and sound vibrations for students with hearing disabilities. Syntactic level includes sentence structure and elements of poetry and suggests that students work in groups and use movements during recitation with opportunities for signing. The language of movement is the last level which includes movement, literacy and choreography where there are auditory and visual learning cues for all students (Block, Campbell, 2001).

Block and Campbell (2001) suggest that the integration of movement and actions to describe an emotional state, a literacy piece and creative writing help close the gap between students with hearing disabilities and those without. “Using movement to reinforce literacy among children with hearing impairments is one way that physical educators can contribute to the growth of their students as readers and movers” (Block, Campbell, 2001). Once again this shows the importance of integrating music and movement into the classroom to reinforce literacy development among students.

In 2002, Reading Improvements printed an article that examined the improvement of reading skills and music instruction. Diamantes, Young and McBee (2002) argue that there is a direct correlation between music instruction in the classroom and reading improvements. They suggest that music integration touches multiple levels of instruction and intelligences as notes by Gardner in 1989 who listed music as one of the multiple intelligences (Diamantes, et.al, 2002).

Diamantes, Young and McBee (2002) suggest that music improves cognitive development as a positive relationship to brain development. Reading improvement as “singing is a celebration of language and rhythm and melody” (Diamantes, et.al, 2002, p. 116). Mathematics and social studies within cultural connections to musical influence. Cooperative learning as musical performances are dependent upon a whole group’s collaborations and participation, evaluation and as a self-esteem builder. Music and movement are key elements in a classroom environment and touch learning beyond the paper and pencil techniques most commonly used.

In *Listening to Literacy* Fisher (2001) dissects the multiple aspects of literacy and makes musical connections in order to help students improve their reading skills. Fisher (2001) suggests music become integrated into the literacy programs in schools. In the earliest stages of literacy there are concepts about print and in a primary classroom, which is the first building block for reading success. Fisher (2001) suggests that in this stage, teachers use rhythm and movement in order to help students engage and identify print and meaning within print. He uses an example of a big book where a teacher starts the story by physically pointing to the words on the

page to create one to one correspondence and then incorporates creative movements with rhythm to help student read along and realize the meaning to the words on the page. By the end of this lesson students were able to identify the concepts about print while using the hand movements and rhythm to help them reinforce the learning on their own.

The second stage in Fisher's (2001) strategy is story sequencing in narrative text. Fisher suggests teachers use a variety of written literature that provides their own songs and chants within the writing to help demonstrate this concept. He states that this can be easily seen in the children's book *There Was an Old lady Who Swallowed a Fly* by Taback (1997) and *The Wheels on the Bus* by Zillinsky (1991). Both use a lyrical sequencing story structure that help students follow the events while providing rhythm and song while students follow along. He also cites an activity a teacher used where the students were given a picture to correspond with the story. The picture consisted of an old woman with an empty belly, and around her were smaller pictures to represent all the things she swallowed. As students sang the song they marked the items swallowed with bingo markers in order to follow the sequencing of the book therefore using song to reinforce a literary element such as story structure.

The third level is phonemic awareness and phonics, where Fisher (2001) argues that songs and chants can be used to help students identify such elements as rhyming words and patterns through songs such as *Oopples and Boonoo-noos* by Yopp (1997), which was used in a first grade classroom to identify the rhyming

words at the end of each line. Music is a perfect example of phonemic awareness and phonics because of the poetic license taken in writing it “Words are shortened, lengthened, repeated, sung high, low, loud and soft” (Fisher, 2001, p. 109).

Background knowledge and vocabulary represents the fourth level of Fisher’s (2001) literacy development scale which includes using story songs (as listed before) but in this level are used to outline the story elements and further identify new vocabulary within “meaningful, active and expressive context” (Fisher 2002 p. 110). Where music and movement is used to reinforce elements within literacy development.

The last two levels addressed in Fisher’s (2001) article are spelling patterns and writing components which are based on the principles from previous levels, using songs and chant stories to help identify spelling patterns and writing styles and sentence patterns. Fisher (2002) stresses the use of songs, chants and creative movements incorporated into the classroom to further identify and reinforce the literary elements that are taught in the early literate learning stages.

Fisher’s (2002) article is a great qualitative look at different levels of reading development and includes many detailed activities and suggestions to promote reading through the arts but lacks the direct evidence from classroom experience for true validity.

The use of musical components is not the only way in which music can be incorporated into the classroom. Fluckinger and Kuhlman’s (2000) article discusses the use of literature to enforce and connect students to the influence that music has

had throughout history and how it can positively influence their reading experiences. They suggest that positive experiences in language and literature can effectively influence student's literacy development. "Both music and literature inspire aesthetic response" (Fluckinger, Kuhlman, 2000, p. 56). Therefore when students read literature about musicians and their development students can find a connection to the literature outside of the written word and become positive influences.

Fluckinger and Kuhlman's (2000) article is a case study of how literature affects the reader based on what is written and how it was written to include musical aspects and biographies of musicians. The study includes suggestions for young adults and primary age children, from chapter books to picture books. But it lacks the evidence needed to provide valid conclusions about the connections between music in literature and a positive influence. It reads more like a book review of various pieces of literature that would be used in this study, rather than a study itself.

As stated in numerous articles previously mentioned, music is not only a tool or a fun activity, but an important aspect of learning and is listed as one of the seven parts of intelligence according to Gardner (1985) who argued that arts based learning was the most effective learning environment (Hill-Clarke, 2004). Hill-Clarke and Robison (2004) suggest that, music, rhythm and rhyme promote children's literacy development. They cite Gardner's (1985) multiple intelligences as the source behind the music and rhyme and argue that music is the way to reach all those children in the classroom that need development. The multiple intelligences include linguistic,

logical/ mathematical, spatial, naturalist, interpersonal, intrapersonal, bodily/ kinesthetic and musical (Hill-Clarke, 2004).

The target age group for Hill-Clarke's (2004) article is primary school children from preschool up through the fifth grade and the goal is to incorporate music, chants, rhythm and rhyme into the classroom as everyday routine. This article cites many sources of research that support music in the classroom and provides numerous examples of ways it can be incorporated from interactive story telling, to nursery rhyme charades including writing games to improve creativity and vocabulary (Hill-Clarke, 2004).

Hill-Clarke's (2004) article takes a qualitative look at the benefits music, rhythm and rhyme has on early literacy development but lacks the evidence needed for a valid study. It makes no primary connection to why or how this benefits students other than common sense in the author's point of view. This article has excellent suggestions and ideas with valid research in the field but needs further study to provide a more valid argument of the facts.

Kersten conducted a study in 1996 using musical sound to enhance stories in a second grade classroom in Phillipsburg, Pennsylvania where students were asked to interpret the story of Snow White using musical instruments (Kersten, 1996). Students were given names tags of a character from the book and asked to think critically about that given character before choosing the appropriate musical instrument to represent that character. Then while listening to the story being read, a student was instructed to play their instrument when the name of their character was

said or addressed in the story. In this study, students made direct connections to the characters and the instrument they played, and were able to re-tell and re-enact the story for weeks beyond the first re-telling.

Kersten's (1996) qualitative study shows that students are strongly influenced by musical interaction and the connection to literature. Some limitations from this study include the lack of a longitudinal study and the interest students might have in the story Snow White prior to the musical component. For example, would students have shown such a positive reaction to a story they might not be as familiar with?

Read Aloud

Dickey (1991) conducted a study on verbal instruction and nonverbal teacher-student modeling where he looked at the connection between the students ability to perform based on a verbal teacher model and a nonverbal teacher model in musical instrumental ensembles. This study used a two-group method with a control group and a treatment group, including a pretest-posttest for each group. The population included 128 middle school students from three different school sites in a suburban district of Southeast Michigan.

Students were divided by classes into groups which were conducted by Dickey, the author and by a replicator, meaning there were four classes involved. The author taught two classes, one control group (verbal teaching method) and one treatment group (teacher modeling method), and the replicator taught two classes, one control and one treatment. For continuity purposes the teacher of the replication group was trained by the author previous to the teaching period.

Each class session included three parts, a warm-up, work book, and practice period. Teachers in both groups used either verbal cues or modeling cues to help students during rehearsals. The difference identified between verbal and modeling groups was that the teacher would either describe a rhythmic pattern, or difference in tone, versus modeling that specific pattern or difference in tone.

At the conclusion, the two judges determined the outcome of the two performances between the control group and the replicator group. The results found that the treatment group of teacher modeling had a much stronger performance and showed a better understanding of the concepts used in the instrumental ensemble (Dickey, 1991). Finding from this study suggest that teacher modeling is a more effective way of teaching that can correlate to multiple subjects beyond the scope of musical instruction, including reading, and that teacher directed read aloud can be effective if used in a modeled-type setting. Haston (2007) also found this to be a valid point in their research of teacher modeling. “Learning by imitating a model results in learning about the structure of a fairly complex stimulus environment without intending to do so and resulting in knowledge” (Haston, 2007, p. 2).

Haston (2007) argues that modeling can be done in something as simple as a teacher demonstration or as complex as a whole group interaction. Yet with each demonstration or interaction, students are learning on a subconscious level.

Fluency

Hansen and Bernstorf (2002) define a fluent reader as “those who are capable of reading text with speed and accuracy” (Hansen, Bernstorf, 2002, p. 5). In their

article titled *Linking Music Learning to Reading Instruction*, they identify the similarities between learning to read music and learning to read literature to show that students who learn music for its own sake can improve their reading skills through the similarities of the two tasks at hand.

For example, fluent readers of literature, as stated above, read with speed and accuracy, as is the same for fluent readers of musical compositions. A flawless musical performance speaks for itself! Hansen and Bernstorf (2002) argue that students who struggle with reading can find an outlet in music and improve their reading skills at the same time as they learn to read music. The musical skills cross over into their reading skills, therefore improving both in music and reading development.

Hansen and Bernstorf's (2002) article includes numerous suggestions and connections between the similarities between reading literature and reading music; but it lacks the evidence to support the validity of the argument that fluent readers of musical compositions are therefore fluent reader of literature.

Conclusion

This chapter provided a review of the current research and literature available on the topic of music and movement in the classroom and its correlation to reading fluency development in contrast to teacher directed read aloud. The next chapter will provide the method and procedure that will be used to continue this study on fluency development.

Chapter Three

Methodology

Introduction

This study explores the effects of music and movement in a first grade classroom on students' literacy development versus that of a teacher directed read aloud environment. This chapter will describe the methodology utilized in this study.

Design

This was a qualitative study of the effects of music and movement on the literacy development in two first grade classrooms where the collection of data was done primarily through observation and the collection of pre-test and post-test results. The students chosen were based on a convenience sample (American Psychological Association, 2001) group from two participating first grade classrooms, ranging in age from six to seven years old.

This was a two group study with a pre-test and post-test design where student's fluency prior to the treatment was tested and then compared to the results of the post-test after the treatment. There was a control group and a treatment group both consisting of twenty students of mixed abilities (high, medium and low reading ability).

The control group participated in a standard curriculum; Houghton Mifflin, Theme Three "Let's Look Around," (2004) reading program used by teachers throughout the United States as the basis for reading instruction.

The treatment group participated in a highly active, musical and movement reading program; Music, Movement and Magination Inc. (2007), designed to help build reading fluency; including rate, recognition and voice.

Setting

District. This study took place in a small suburban town in a small district made of elementary and middle schools in Southern California in a predominantly Caucasian and Hispanic population, in which 39.7 percent are Caucasian, 38.6 percent are Hispanic, and 5.8 percent are African American. In this district 25.9 percent of the student population is designated as an English Language Learner from kindergarten through eighth grade.

School. The school used in this study is of high academic achievement with high performing API score of 785 (XXXX Union School District, 2007). The school has kindergarten to fifth grade classes with a year-round calendar and a serious risk of overcrowding as every classroom meets the maximum student to teacher ratio. Twenty one percent of this schools population is designated as an English Language Learner with an 18.5 percent Hispanic population.

Classroom. The two classrooms used in this study are a high performing group of twenty first graders in each class of predominantly Caucasian students with 25% English Language Learners in each classroom.

In the control classroom there were 20 students, 11 boys and 9 girls 2 boys and 3 girls are designated English Language Learners with their primary language being Spanish. In the treatment classroom there were 20 students with 10 boys and

10 girls, 4 boys and 3 girls are designated English Language Learners with their primary language being Spanish. The teacher of the control class is bilingual and speaks fluent Spanish while the teacher of the treatment class is not.

Participants

The participants in this study were chosen from a convenience sample within two first grade classrooms in a suburban area of Southern California. Ten girls and 10 boys were in the sample divided evenly between the two classrooms, 12 English language learners were also included and divided evenly between the two classrooms.

Materials

District Reading Assessments. District designed benchmark exams were used as pre- and post-tests to specifically assess the reading fluency ability of the students involved (Bedolla, 2007). Both the pretest and post test were given to students as a cold read where they had not been exposed to the specific text prior to the assessment. They were asked to read the passage as fast as they could but as best as they could, trying to avoid mistakes. The student was timed while reading using a standard, minute, digital timer and the score was measured by words read correctly in one minute's time.

District Reading Passages. District-standard based reading passages to test for fluency as pre- and post-test (Bedolla, 2007).

Music and Movement Curriculum. Curriculum with incorporated music and movements that correlate to the direct guided reading instruction and language development lessons were used for the treatment group. These lessons included

songs about letters, letter patterns and letter sounds that the students learned with the incorporated hand gestures and picture cards. Activity sheets that used pictures and chants directly related to the songs and picture card used throughout the program were also used for reinforcement (Music, Movement & Magination, 2007).

Basic Reading Curriculum. Basic reading curriculum designated by the district for the control group. Houghton Mifflin reading curriculum for first grade was used, including curriculum given reading passages for the teacher to read aloud and workbook pages that correlate directly with the given read alouds. The control group used Theme Three “Let’s Look Around and Theme Four “Family and Friends” over the six week period (Houghton Mifflin, 2004).

Procedure and Timeline

Week one. A pre-test was given to determine the base ability of the student’s fluency reading ability. Students were assessed on their fluency ability at that given point in time and tested on their rate and accuracy.

Weeks two through week five. The treatment group was taught using a highly enriched language arts program using music and movement to reinforce language arts (to include, reading, decoding, letter recognition and fluency). Two hours of each morning is dedicated to language arts instruction, the treatment group used this time to learn the songs, *Letter Blender*, *ABC Rap*, *Who Knows the Alphabet*, *I Like Letters* and *Yahoo Alphabet*, learn the corresponding body movements and gestures, recite and sing the songs and chants within whole group, partners and individual practice as well as reinforce this learning with the corresponding workbooks and activity pages

provided by the program (Music, Movement & Magination, 2007). The control group was taught using a more teacher direct language arts program that included reading, decoding, letter recognition and fluency. This group used the language arts time to listen to the teacher read such stories as *Counting on the Woods* by Ann W. Olsen, *Pearl's First Prize Plant* by A. Delaney, *Hilda Hen's Scary Night* by Mary Wormell, *An Egg is an Egg* by Nick Weiss, *The Secret Code* by Dana Meachen Rau and *Caribbean Dream* by Rachel Isadora. This group also participated in workbooks and activity pages that corresponded with the teacher read aloud.

Week six. The post-test was given to both groups and the study was completed. The post-test included the standard based assessment designed by the district and assessed the students on their reading fluency to include rate and accuracy at the conclusion of the study.

Analysis of Data

The pre-test and post-test of the control class and treatment class were analyzed by the two teachers involved in the study and also three other first grade teachers not involved directly and the analysis from all compared to validate accuracy of results. Descriptive statistics were used to compare the data in a bar graph to show the change of each student from the pre-test to the post-test. Another bar graph was created to show the difference between the treatment group as a whole and the control group as a whole.

Limitations

The limitations of this study are the lack of evidence across cultural and diverse groups to create a more general study and therefore allow for a more generalized conclusion. This study is a directed case study using a small population of participants and therefore has very specific results. This study took place over a period of six weeks and therefore would show improvement in all students due to maturity and continued practice with any curriculum or program.

Conclusion

This chapter describes the study of first grade students and their fluency development with the influence of music and movement in the classroom in comparison to a teacher directed read aloud environment.

Chapter Four

Results

Introduction

In this study, my research compared the effects of a musical and movement based program on the development of first grader’s reading fluency to a teacher directed read aloud program. This chapter will display the results found in this study.

Results

Fluency scores. Figures one and two display the difference between the control group, that received the standard “teacher read aloud” curriculum, and the treatment group, that received the “musical and movement based reading curriculum” over a period of six weeks. Each graph is a display of one classroom’s results.

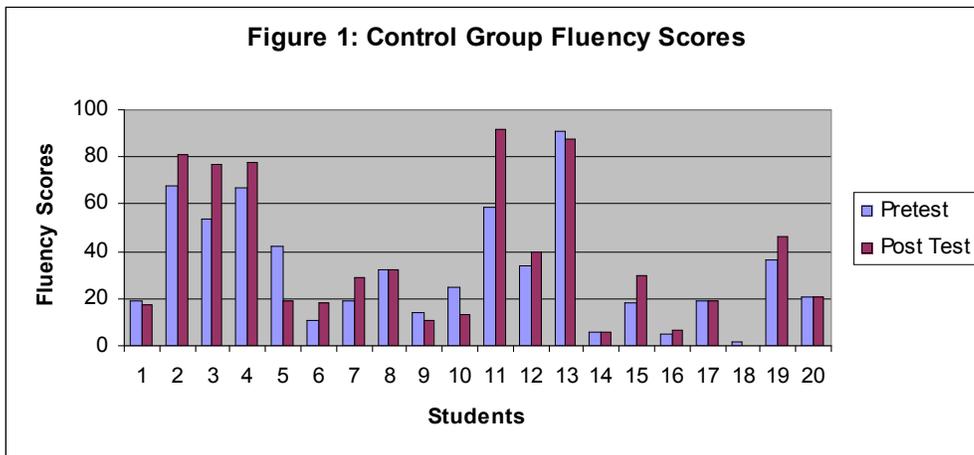


Figure one shows the growth students made from the first pretest given to the end of the program. Fifty percent of the students in this group made growth, while the other 50 percent either stayed within the same score or showed a regression in reading fluency.

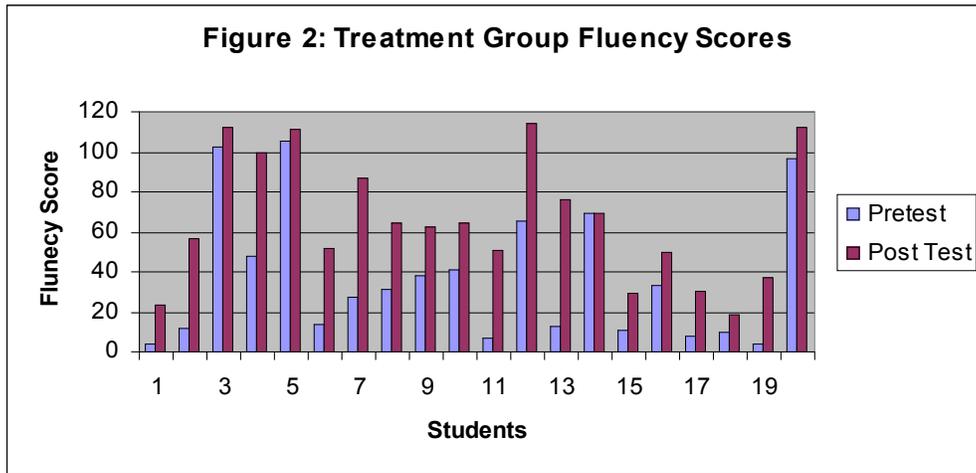
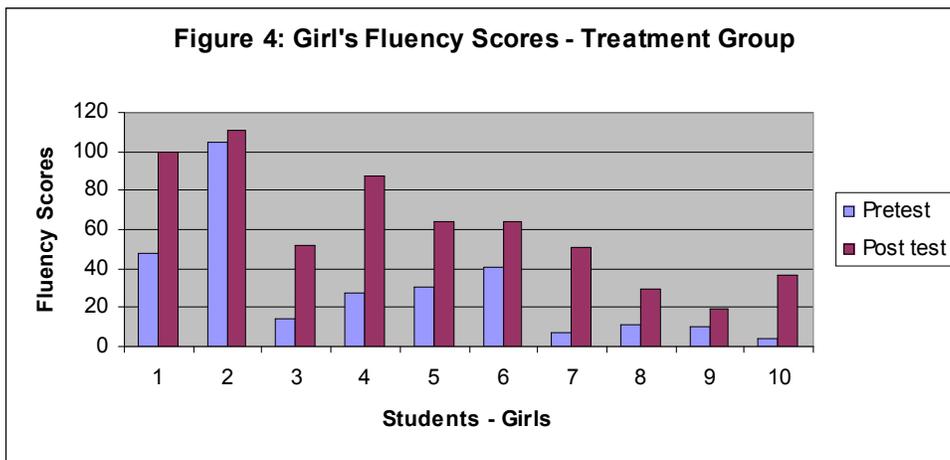
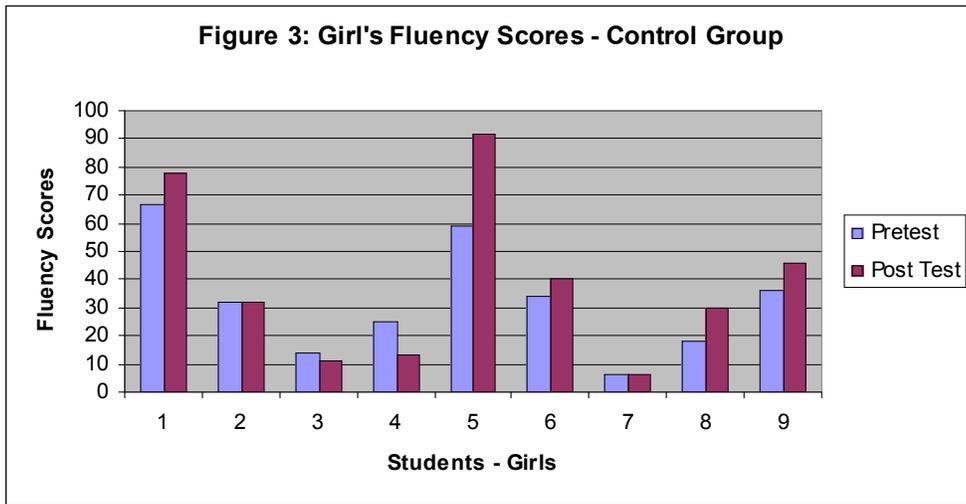


Figure 2 shows the growth the treatment group made while using the musical and movement-based curriculum. What can be observed between the pretest and the post test is that one hundred percent made progress with no regression in reading fluency.

Differences in gender

Figure 3 and Figure 4 show the difference between the control group and the treatment group, specifically related to girl’s growth within the six week programs.



The control group graph shows that 55 percent of the girls made progress in their reading fluency while 45 percent showed no growth or a regression in their reading fluency scores. The girls in the treatment group showed 100 percent growth in their reading fluency scores.

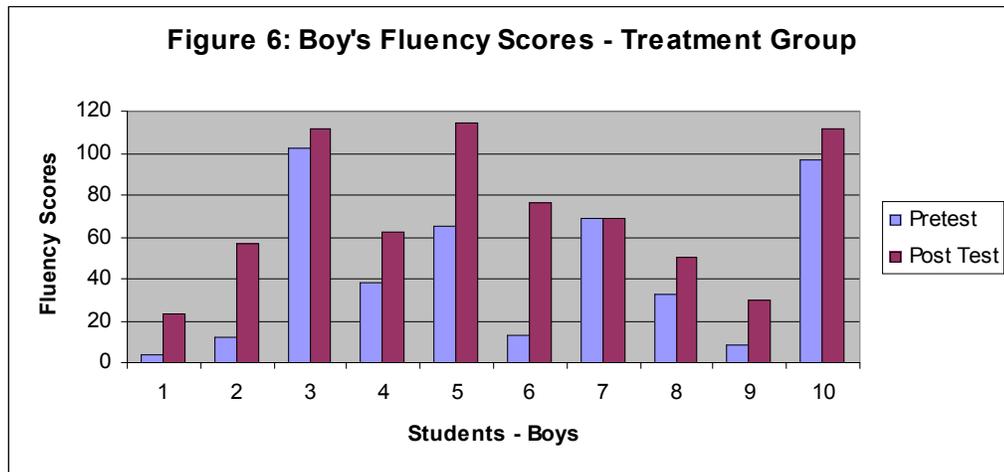
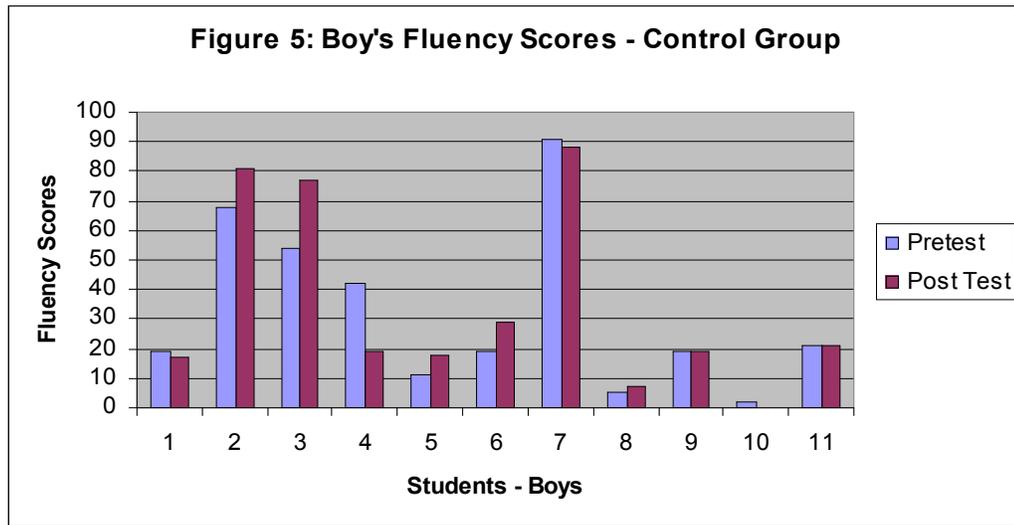
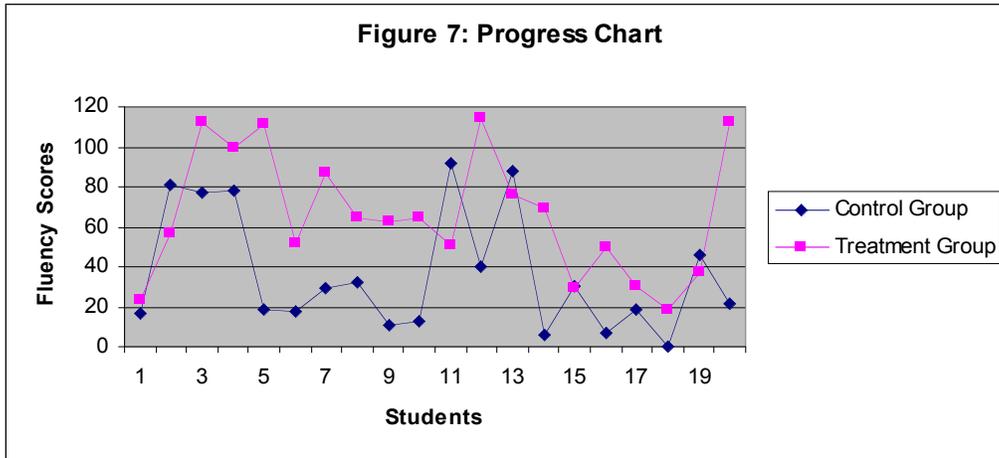


Figure 5 and Figure 6 display the difference in growth between boys in both the control group and the treatment group. Figure 5 is a representation of the progress that the boys made in the control group while using the teacher-based read aloud program. In the control group, 45 percent of the boys showed growth from the pretest to the post test, while 55 percent of the boys showed none or even a regression in their reading fluency. Figure 6 shows progress of boys involved in the treatment

group program, where 100 percent of the boys made progress in their reading fluency between the pretest and post test.



This process chart shows the difference in post test score between the control group and the treatment group. As can be seen from this chart the treatment group shows a higher growth after the study was completed from using the highly enriched musical and movement based curriculum in contrast to the more standard based teacher read aloud curriculum.

Conclusion

This chapter discussed the findings of the study of the effects of music and movement on the fluency development of first graders in comparison to a teacher directed read aloud program. The research concluded that the group involved in the music and movement based curriculum displayed a higher growth and improvement in their reading fluency scores compared to those students involved in the teacher-directed read-aloud program. One hundred percent of the students in the music and movement treatment group showed marked improvement, while only 55 percent of

the students in the teacher read aloud curriculum program showed progress; the remaining 45 percent showed virtually none or even a regression in skills.

Chapter Five

Analysis of Results

Introduction

Fluency is the ability to read text accurately and quickly, which is essential in reading development, especially among first grade students learning to develop their reading skills for the first time. This study observed the differences among various reading programs, and identified the development of first grade level reading fluency by comparing a musical and movement based curriculum to a more teacher directed read aloud program. This chapter will identify and define results found over a six-week study, and analyze the data that shows which program was more effective in fluency development among two first grade classes.

Analysis of Fluency Scores

As discussed in chapter four, multiple graphs show the difference between the two groups: the control group (teacher-directed read-aloud) and the treatment group (music and movement). The teacher directed read aloud group showed an average of 50 percent growth in reading fluency between the pretest and the post tests given; while the music and movement group showed a 100 percent growth in reading fluency between both tests. As predicted, the students who were involved in the highly-enriched music and movement curriculum displayed a higher increase in reading fluency scores, showing that those students involved in the music and movement curriculum program were able to read more accurately and with greater speed than those in the standard teacher directed read aloud curriculum program.

Analysis by Gender

In both groups, the control and the treatment group, the girls displayed a higher growth in reading fluency development over the boys. This could be explained by the maturation factor that girls tend to mature fast than boys. The treatment group still displayed a higher percentage in growth between the two groups of boys and this could be explained through the interactive means of the treatment group curriculum, where the boys were able to express their learning through action and sound.

Connections

As discussed in chapter two these findings directly correlate to that of Gardner (1985) and Hill-Clarke (2004) who stated music is not only a tool or a fun activity, but an important aspect of learning and is listed as one of the seven parts of intelligence according to Gardner (1985) who argued that arts based learning was the most effective learning environment (Hill-Clarke, 2004). Also noted in chapter two Diamantes, Young and McBee (2002) argue that there is a direct correlation between music instruction in the classroom and reading improvements. They suggest that music integration touches multiple levels of instruction and intelligences as notes by Gardner in 1989 who listed music as one of the multiple intelligences (Diamantes, et.al, 2002). This study agrees with their findings and further shows that music and movement in the classroom helps build fluent, more accurate readers and touches on the multiple intelligences found in a classroom environment.

Implications

This study of fluency development among first grade students further identifies the need for research and development of standard reading curriculum to include more abstract-based learning, such as the incorporation of multiple tactile methods such as the integration of music and movement into the curriculum and classroom environment. In a time when such extracurricular addendums to the classroom are so limited and standard based learning is the focus, standard curriculum needs to be further developed to provide integration within reading programs to allow for teachers to justify its use. This study demonstrates the importance of a multi-learning based curriculum in reading development and the need for its integration into the classroom.

Limitations

Natural maturation could be attributed to the growth of students reading fluency development over the period of six weeks during the completion of this study, displaying a natural growth that is expected among students at any grade with in a period of time.

Both groups of students came from separate classroom environments with different teachers and multiple backgrounds, which allow for a difference in teaching style and home support. Although the classrooms chosen were the most similar among those researched, there are still variables within the difference among human beings that could contribute to the end results, such as teaching style and student support outside of the classroom. Both classrooms had the same number of students

while the control group had one more boy than girls; while the treatment group had an equal number of boys and girls. The treatment group also had two students whose parents decided to enroll in tutoring outside of the classroom which could also influence the overall results of this study.

Conclusion

In conclusion, this study demonstrated that the fluency development of first grade students can be positively influenced and further developed by including a more musical and movement based curriculum into the classroom. Further research would be beneficial to further correlate the use of music and movement into the classroom to improve all learning among all subject matter within multiple grade levels.

In today's serious approach to standard based learning and an environment where teaching itself has grown into a push for better test scores, a little music and movement in the classroom can provide physical and mental exercise. This small change, a stimulating and easily incorporated tool, should not be overlooked as a method of differentiation and empowerment — especially for those students who struggle and eventually get left behind.

Think back to the days of our own learning experience to perhaps empathize with children of all learning abilities. It is our job as educators and gift to our students to look beyond the standardized “face of education” and utilize creative and motivating ways to influence and motivate our students to become better readers,

writers, mathematicians, scientists and musicians, and to hopefully stimulate their desire for learning for generations to come.

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