

The Effect of the Kodaly Music Methodology on  
Reading Fluency in Second Grade Students

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Submitted in Partial Fulfillment of the Requirements for the  
Degree of Master of Education

July 2014

Graduate Programs in Education  
Goucher College

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## **Abstract**

The purpose of this study was to examine the effects of the Kodály Music Methodology on the reading fluency of second grade students. The participants in this study were enrolled in a Baltimore County Public School for the 2013-2014 school year. All of the students received the Baltimore County Public Schools Music Curriculum while the treatment group was instructed primarily in the Kodály Methodology. The treatment group also participated in a take home study that focused on music literacy, sight reading, and pitch exploration all outlined by the Kodály Method. The study lasted over the course of 6 weeks with the participants receiving 50 minutes of instruction once a week, and then at home practice that was monitored by parents. While both groups increased their score on the post-test, the null hypothesis was retained.

# **CHAPTER I**

## **INTRODUCTION**

### **Overview**

“Making music, makes you smarter” is a phrase that has long been researched by many different education institutions. It has been proven that music enhances children’s education and helps to promote many different skills. In this study the researcher plans to examine the influence of a music literacy curriculums called the Kodály Methodology, and its effects on students reading fluency skills. Fluency is a very important skill imbedded in the reading process itself. Often this skill is largely addressed in the primary grades, and once mastered it is automatic for intermediate aged students to read with fluency. In primary grades fluency naturally lends itself to early reading. Students learn to decode words using phonemes and learn to blend sounds together. Often reading curricula encourage teaching the whole language approach but, there are always learners to can benefit from additional work in phonics and fluency.

In 2010, the researcher began an active study of Kodály Methodology, and began to widely incorporate it into her curriculum at all grade levels. While using authentic music and age appropriate skills the Kodály Methodology is known for increasing students music skills, and further research has indicated that Kodály music learners also perform well in core subjects such as reading and math. Most research on Kodály versus academic subjects has been done using older students. This study focuses on second grade students who have a firm foundation in reading skills and are emergent learners in music literacy. They are reading authentic music that features notes in the pentatonic scale using basic rhythm skills.

The study is shaped around a class of second grade students who is divided into two small groups. One group received a treatment of intense rigorous practice of sight-reading, solfege, rhythmic reading, and inner hearing for a six week time period. The treatment group also had an at home study packet that they were to complete each night. The second small group served as the control and received regular vocal music curriculum. The Dynamic Indicators of Basic Early Literacy (DIBELS) Assessment was used as a measure. This assessment was administered at the beginning and conclusion of the treatment time period.

### **Statement of the Problem**

The goal of this research is to investigate the rigorous instruction in music literacy skills (Kodály Methodology) and its effects on reading fluency in Second Grade students.

### **Hypothesis**

Research in the field suggests that music can have an effect on a child's ability to read. Reading fluency is a skill that is a large focus in young students. The Kodály Methodology is a music teaching philosophy that focuses heavily on the reading of music, and acquiring skills at a developmentally appropriate age. This leads to the following hypothesis: It is hypothesized that after receiving intensive Kodály music instruction, in class and at home, second grade students will not have improved scores on their DIBELS assessment than they would having only received in class music curriculum not routed in the Kodály philosophy. This hypothesis is null.

## **Operational Definitions**

*Kodály Methodology* - The Kodály Method, also referred to as the Kodály Concept, is an approach to [music education](#) developed in [Hungary](#) during the mid-twentieth century by [Zoltán Kodály](#). This philosophy focuses on a child-developmental approach that introduces the child to concepts appropriate to their skills level. Music sources are rooted in authentic folk music. And students who have studied this methodology are said to, have improved music literacy and many other music skills and improved performance in academic areas such as Reading and Mathematics. (DeVries 2001, 24-25).

*The Dynamic Indicators of Basic Early Literacy Skills (DIBELS)* - a set of directions and assessments for evaluating early literacy skills from kindergarten through sixth grade. They are designed to be short (one minute) fluency measures used to regularly monitor the development of early literacy and early reading skills (Good & Kaminski, 2002).



## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### **Reading Fluency**

##### *Importance of Teaching Reading Fluency*

The importance of teaching reading fluency has taken an evolving journey over the past several years. It has gone through many different reforms being held as very important, to taking a backseat. Reading fluency encompasses many different skills such as word recognition, comprehension, phrasing, prosody, phonological skills, and oral reading rate. Because all of these skills are important for a successful reader the definition of reading fluency has also been reformed. For this particular study we will use the following comprehensive definition of fluency: “Fluency is a component of the reading process that allows readers to decode words in a text with sufficient accuracy and efficiency to allow for understanding the text, and that reflect the prosodic features embedded in the text” (Blachowicz, Lems & Rasinski, 2011 p. 25).

##### *Effective Reading Curricula*

Researchers and literary experts have been studying and tweaking combinations of skills that will result in the most effective reading curriculum for years. There are many different schools of thought as to what strategies work best for certain learners and what should be emphasized and why. The four most essential components that should be aligned in all reading curricula are word knowledge, fluency, reading comprehension, and writing (Blachowicz, Lems & Rasinski, 2011). It is also worth noting that in order for students to have a successful reading education they should have prior skills in phonemic

and phonological awareness and should be exposed to some type of phonics decoding skilled program (Standley, 2008).

As students progress, it is important to place emphasis on different components at different times in the reader's development. Fluency is best emphasized in the primary grades, while the writing component is important to develop in intermediate grades.

In effective reading curricula, the skills must be developed in different forms. Deep, guided and repeated reading helps readers practice fluency at different levels. Choosing appropriate leveled text is also important for students to practice their readability level. It is also important to develop comprehension as well as the oral reading rate. The most effective comprehensive Reading curricula strike a perfect balance between including all elements.

### *Understanding Reading Difficulties in Children*

The varied philosophies of teaching reading have shed light on how different children learn and how some children have difficulties learning how to read. The different emphasis on phonics vs. whole language has been of great interest to researchers studying reading difficulties. Understanding the relationship between auditory identification and visual decoding helps researchers understand where there are gaps learning (Standley, 2008).

Researchers have identified four major difficulties that occur in children learning to read: (1) failure to visually quickly decode sight words, (2) decoding sensitivity to sound structure, (3) phonetic sound structure and sound blending, and (4) attention memory and comprehension skills based on the above mentioned areas (Standley, 2008). Every child's reading difficulty is unique to them. There does not seem to be an isolated

solution to each issue. Music educators have developed and tested theories on how using music as part of a multi-sensory approach will help prepare students and aid in the reading instruction of primary-aged students.

### **Music Education and Early Literacy**

#### *The Influence of Music Instruction*

Music educators have realized their unique ability to support reading instruction in primary students. The main focus is on the following crossover skills – aural/pitch discrimination, phonemic and phonological awareness, phrasing, prosody, and sight identification. (Telesco, 2010; Hansen & Milligan 2012). These skills which are natural imbedded in music instruction also crossover to students who may or may not be having difficulty with reading (Hansen & Bernstorf, 2002).

Aural and pitch discrimination is a precursor to be able to predict phonological skills in spoken language. Being able to distinguish slight differences high and low pitch aids in student's ability to notice the differences between phonemes. Pitch discrimination also aids in a tone qualities of vowel sounds (Telesco, 2010). Pitch discrimination is crucial to language development of language learners whose languages are tonal such as Mandarin Chinese, Japanese, Cantonese Chinese, Tagalong, and Korean (Paquette & Rieg 2008).

Phonemic and phonological awareness is the most widely addressed research in the link between music and reading fluency. Learning phonemes (small units of sound) in their native language, and being able to discriminate differences in sound qualities is a building block to developing fluency (Telesco, 2010). Phonological awareness is the awareness of sound and segments of sound. These skills are crucial for new readers who

are decoding sounds in order to identify the word they are reading (Hansen & Milligan, 2012). Reciting rhymes and chants that have a rhythmic sound pattern helps students identify rhyming words and the division of syllables (Hansen & Bernstorf, 2002).

Prosody is also crucial to reading fluency and is naturally imbedded in music instruction. Prosody includes natural phrasing, vocal inflection, punctuation, reading vocal expression, accent on syllables, and the speed of reading. All of these elements are imperative to reflect the author's tone or mood (Hansen & Milligan, 2012). These skills are directly parallel to one another and can naturally be transferred to help students practice fluency using another learning style. Intonation and duration is also included in prosody and is said to deliver as much of the meaning to the words as the definitions themselves (Blachowicz, et al., 2012).

Primary sight-identification for students assists with fluency in music text reading, music symbol reading and reading literacy. Students at the emergent level can identify high frequency letters or note symbols through reading, writing, performing, and improvising. Students at the decoding level automatically use strategies like word-identification and can layer skills like rhythm, pitch, and text on top of each other (Hansen & Bernstorf, 2002).

#### *Phonological and Phonemic Awareness*

The development of phonological and phonemic awareness in beginning readers is the variable best supported by music instruction, and it has been researched at length. Phonemic awareness is the awareness that that you simply need to decode the sound segments of the spoken word (Eastlund, 2005). Research proposed that when children learn to distinguish differences between pitch and rhythm patterns, and associate it with

visual symbols they would benefit in any skills that use sound processing. This near transfer hypothesis was tested and showed significant gains in treatment groups.

Phonological and phonemic awareness can be tested with music using three different measures: reading text, music-symbol reading, and music-text reading (Eastlund, 2005). In text reading it would be identified as recognizing rhyming words, separating beginning, middle, and end sounds, and identifying small units (phonemes) of sound. In music-symbol reading students would be able to recognize and be sensitive to sound patterns, sequences, and emphasize musical symbols within a phrase, and articulation. Music-text reading allows students to learn how to form sounds in a musical setting rhymed text in phrases, repeated passages, consonants, vowels, and diphthongs (Hansen & Bernstorff, 2002).

### **Music Methods that Enhance Reading Skills**

#### *Literacy--Based Music Instruction*

Music and reading share a multisensory instruction approach. Development and practice of the many different facets of both subjects help students become more fluent. With music skills should be developed and practiced by preparing each skill: physically, aurally, and visually. After the skill is presented it should be practiced by reading, writing, improvising, composing, performing, and listening, once lower level skills are practiced and mastered then more advanced skills are scaffolded. Using this method to transfer to reading skills is beneficial to students who need help developing their reading fluency (Standley, 2008).

Specific music teaching techniques such as those of Orff, Dalcroze, and Kodály use this multisensory approach for teaching (as cited in Standley, 2008). Each approach is a little different. Orff provides emphasis on playing instruments, Kodály provides an

emphasis on the use of folk song literature singing and reading, and Dalcroze provides an emphasis on music and movement (Hanson, 2003). Combined Dalcroze, Orff and Kodály (2008) methods provide music students with the most comprehensive education. Drawing elements from these methodologies have helped reading researchers. Chanting letter sounds, using steady beat, improvising, using sound effects, manipulating tempo and dynamics, and using symbols or notation have been some methods that have aided in using these methods to teach reading (Standley, 2008).

Incorporating specific reading skills embedded in music activities is also a popular approach in using music to increase reading fluency. Identifying musical form and using text organization, or incorporating music that is significant to the social or cultural subject matter of the literature being studied. Using songs to teach spelling, phonics and songs are popular in transferring skills of phonological awareness (Standley, 2008). Lesson plans that incorporated literacy skills like rhyming, letter sounds, vocabulary that were set to music were easier for students to recall. Children's books that were sung or were provided with an instrumental accompaniment allowed students to access how they felt about a certain story based on their feelings. The lessons that used musical elements proved to be more meaningful for students. (Darrow, et al., 2009)

### *Music-Integrated Instruction*

Using multiple intelligences to teach students, it's noted that one of the first intelligences to show in children is musical (Eastlund, 2005). When we are able to access a child's musical intelligence we can create a personal connection between their prior knowledge and the new material being presented. Singing and listening to songs can help to develop the vocabulary and comprehension of the students learning. It also allows for

deep understanding of comprehension because students have to infer meaning from the words to comprehend the plot. Although the decoding system for reading and music differ, the process for understanding is the same (Hill-Clarke & Robinson, 2004).

Combining music and reading as opposed to having formal reading instruction and formal music instruction is also a popular topic among researchers. Research showed some significance that reading and music instruction together was the most beneficial (Eastlund, 2005). Using the skills in conjunction with each other allowed for students to be aware of what the skills and access their prior knowledge. Remediation through music was often very effective in younger aged students (Darrow, et. al., 2009).

Integrating music as a supplemental source allows teachers to vary their instruction for students who have varied learning styles. It can also serve to teach specific skills such as word recognition, phonemic awareness, structure, context, tone and mood. Music like reading is an active process and must allow children to be engaged in variety of different outlets that keep students engaged (Hill-Clarke & Robinson, 2004).

## **CHAPTER III**

### **METHODS**

#### **Design**

This quasi experimental study examines the relationship between increased music literacy study and its effect on students reading scores. 20 second grade students took part in a quasi-experimental design. Students were tested using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) subtest at the beginning and end of the treatment time period. The scores were correlated to indicate whether or not the treatment had an effect on their early literacy skills.

All students were given the DIBELS measure as a pre-test. Ten students received the treatment of small group, focused music sight-reading. They were also provided take home-- practice activities. Of the ten students in the treatment group, they were representative of various reading levels: three students reading above grade level, four students reading on grade level, and three students reading below grade level as grouped by their reading teacher using reading comprehension data, MAP testing data, and teacher judgment. The other ten students in the class served as the control.

#### **Participants**

A convenient sample of 20 second grade students was used in this study. Students attended a suburban school of 468 enrolled students. Of these students 49% were African American, 32% were Asian, 12% were Hispanic/Latino, and 7% were Caucasian/Bi-racial. In 2012-2013 students in grades three through five 99% scored advanced or proficient on the reading portion of the Maryland State Assessment (MSA), and 99.5% of students scored advanced or proficient on the math portion. All students were assigned to



the same homeroom teacher. Students were of vary reading ability levels. 11 students were boys, and nine students in this class were girls. The students used in this study were a convenience sample. 14 students in this class were eight years old and six students were seven years old. Ten students in this class were African American, eight students were Asian/Middle Eastern, and two students were Hispanic. Two students in this class have an Individualized Education Plan (IEP).

### **Instrument**

There was one instrument used in this study: Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Assessment. In the first administration (pre-test) of DIBELS, the instructor administered the Nonsense Word Fluency and Oral Reading Fluency subtests. In the second administration (post-test) of DIBELS the instructor administered the same subtests. In a review done by Shanahan from the University of Illinois at Chicago for the *Mental Measurement Yearbook* (2005) he states that:

I find **DIBELS** to be useful for classroom and school decision making, but would consider it to be more trustworthy if it had information concerning the discriminate validity of the tests with regard to the instructional categories used. Given the lack of data, it is important to be cautious in the use of these educational groupings (at risk, some risk, low risk) and I would not hesitate to alter some placements depending upon other classroom observations. These categories are derived from the performance of 32,000 children. That sounds impressive, but this is not a traditional or necessarily representative norming sample. Participating schools enter their own data into this database and it seems likely that this would be rife with error. Because this process is ongoing, the

participating volunteers continue to enter data and the benchmarks for these tests can change. Again, this should highlight their approximate nature. **DIBELS** represents an exciting development in classroom assessment. These measures, for the most part, evidence adequate or better psychometric properties and do a fine job of evaluating letter name knowledge, phonemic awareness, and oral reading fluency. The large numbers of alternative forms are valuable as they allow for frequent monitoring of the educational progress of younger children. Teachers need to treat the instructional recommendations derived from **DIBELS** as estimates-useful approximations-as there are no data supporting the validity of the instructional categories used. The tests generally are valid indicators of reading ability, but the ability of the test to correctly and accurately identify who would need additional help may or may not be sound, though they look sensible.

### **Procedure**

Data for this study was collected in spring of the 2013-2014 school year. **DIBELS** was administered to each child in a one-on-one setting with the administering teacher. Students were given two subtests of the **DIBELS** Assessment: Nonsense Word Fluency and Oral Reading Fluency.

For the Nonsense Word Fluency subtest, students were given selection of make-believe words. Students were instructed that they would have one minute to read the word the best they can, and to make sure they said any sounds that they know until time was called. Data was recorded in the student's test booklet by the teacher. The data indicated how many correct letter sounds were read in the given time.

For the Oral Reading Fluency subtest, students were instructed to read the passage as best they could in one minute. When the time was started, the teacher followed along and indicated any mistakes the student had made. The student was asked to summarize the selection, and the teacher recorded how many ideas/events were retold. Once the test was completed, the teacher recorded data from the booklets to the computer for all twenty students.

In the students' music class students were divided into two small groups. One group was the treatment group, and the other group served as the control. During whole--group instruction, students were taught together the standard second grade vocal music curriculum. The control group was given a small--group assignment related to the curriculum. The treatment group received specialized instruction from the teacher practicing sight-reading, solfege, pitches recognition, pitches awareness, and was instructed using Curwen hand signs. This method is known as the Kodaly Methodology, and it is a literacy based music instruction. Students in the treatment group were also given a packet of exercises to practice at home. They were given an additional 10 to 15 minutes of individual or small group work to practice their at home exercises and as questions if they had any. During the individual/small-group practice for the treatment group, the teacher met with the control group to review their small group work. The control group was not assigned any homework or practice activities to do outside of class.

At the end of the treatment, all students in both the treatment group, and the control group were given the same DIBELS assessment (post-test) as they were given at the beginning of the experiment. All data was recorded by the teacher and input into the computer.

## **CHAPTER IV**

### **RESULTS**

#### **Analysis of the Data**

This study examines the impact of instruction in music literacy skills (Kodály Methodology) and its effects on reading fluency in second grade students. In particular, the following data was gathered on the students participating in the study. Students in both the treatment group, and the control group received two pretests. Both pretests are subtest of the DIBELS testing series. Students were pre-tested using the Nonsense Word Fluency subtest (NWF) and the Oral Reading Fluency subtest (ORF).

Ten students of varied reading ability levels were members of the treatment group, and the remaining ten students of varied reading ability levels were members of the control group. The control group received regular music curriculum while the students in the treatment group received an intensive six-week study embedded in the Kodály Methodology focusing on music fluency and sight reading. Students in the treatment group also had take-home assignments.

Data gathered on benchmarks related to reading and whether students were part of the treatment or control groups indicate that only four students did not meet the satisfactory score for the second benchmark and two were in the treatment group and two were in the control group as depicted in Table 1. The hypothesis of no impact by the instructional methodology is therefore retained.

Table 1  
Benchmark Performance of Treatment and Control Groups  
Oral Reading Fluency Subtest

<b>STUDENT</b>	<b>Beginning ORF</b>	<b>Ending ORF</b>	<b>Benchmark</b>	<b>Treatment/Control</b>
1DL	140	125	Yes	Treatment
2AD	135	121	Yes	Control
3ZN	134	150	Yes	Treatment
4SB	92	109	Yes	Control
5AR	91	95	Yes	Treatment
6 <sup>TH</sup>	81	108	Yes	Control
7TNH	80	139	Yes	Treatment
8AP	78	115	Yes	Control
9AR	70	100	Yes	Treatment
10ZJ	67	101	Yes	Control
11DJ	65	90	Yes	Treatment
12CD	64	99	Yes	Control
13MO	63	93	Yes	Treatment
14AB	60	91	Yes	Control
15JB	58	90	Yes	Treatment
16AM	49	93	Yes	Control
17IC	48	71	No	Treatment
18SA	45	89	No	Control
19AB	42	73	No	Treatment
20DH	34	79	No	Control

Benchmark Goal – 90 at the end of Second Grade

Data gathered on benchmarks related to Nonsense Word Fluency in reading and whether students were part of the treatment or control groups indicate that only one student did not meet the satisfactory score for the second grade benchmark this student was in the control group as depicted in Table 2. The hypothesis of no impact by the instructional methodology is therefore retained.

Table 2  
 Benchmark Performance of Treatment and Control Groups  
 Nonsense Word Fluency – Subtest  
 CLS – Correct Letter Sounds  
 WRC – Words Read Correctly

<b>STUDENT</b>	<b>Beginning CLS/WRC</b>	<b>Ending CLS/WRC</b>	<b>Benchmark</b>	<b>Treatment/Control</b>
1DL	142/50	142/50	Yes	Treatment
2AD	142/50	142/50	Yes	Control
3ZN	137/46	140/48	Yes	Treatment
4SB	137/47	130/42	Yes	Control
5AR	98/32	100/35	Yes	Treatment
6 <sup>TH</sup>	105/36	108/36	Yes	Control
7TNH	100/34	123/36	Yes	Treatment
8AP	74/25	105/27	Yes	Control
9AR	106/35	123/35	Yes	Treatment
10ZJ	68/20	78/27	Yes	Control
11DJ	123/42	130/45	Yes	Treatment
12CD	108/36	130/46	Yes	Control
13MO	131/43	141/45	Yes	Treatment
14AB	71/24	98/26	Yes	Control
15JB	78/27	100/32	Yes	Treatment
16AM	66/23	106/35	Yes	Control
17IC	72/23	98/36	Yes	Treatment
18SA	56/18	78/25	Yes	Control
19AB	67/24	74/25	Yes	Treatment
20DH	40/9	56/12	No	Control

Benchmark Goal CLS – 74  
 Benchmark Goal WRC - 22

## **CHAPTER V**

### **DISCUSSION**

The original hypothesis states that after receiving intensive Kodály music instruction, in class and at home, second grade students will not have improved scores on their DIBELS assessment than they would have if only received in class music curriculum not routed in the Kodály philosophy. This hypothesis was proven to be null. The data shows that most students who were members of the treatment group improved their scores in both the nonsense word fluency, and oral reading fluency subtests. However, most students who were members of the control group, also increased his/her score.

#### **Implications of Results**

Some implications that can be drawn from the results of the data are that students in both the control and treatment group, made improvements. Students were tested in both Nonsense Word Fluency (NWF) and Oral Reading Fluency (ORF) subtests. In the Nonsense Word Fluency subtest which included identifying correct letter sounds and words read correctly there was only one student who did not meet the benchmark. This student was part of the control group. In that same subtest (NWF) there was only one student who didn't improve his/her score. This student was also a member of the control group. All members of the treatment group improved their score and met the benchmark.

In the Oral Reading Fluency subtest there were four students who did not meet the benchmark, two of these students were in the treatment group, and the other two students were in the control group. The results of this same subtest (ORF) there were two students who did not improve their score. One student was a member of the treatment group, and the other student was a member of the control group.

## **Theoretical Consequences**

Although DIBELS is an excellent measure for early literacy skills it cannot directly measure the growth they did musically and its direct effect. Other theoretical consequences stem from the many different interventions that are done in the classroom by their teachers, and reading specialists. Students in both the treatment group and the control group benefit from many different interventions that are conducted in the classroom. All of these other interventions could have a major effect on the results as well.

Some students receive a specialized phonics program that focuses greatly on decoding words by breaking them into phonemes and minimizing their time decoding to increase the rate of fluency. Other students are English Language Learners (ELL) and they receive supports through their ELL teachers to learn sight words, and reading comprehension. Some students who are performing high above the benchmark are benefiting from a gifted/talented program that challenges these students by allowing them to work above grade level.

All of these interventions working together are so beneficial to the students that need them. It is difficult to say that one is better than the other. The data proves overall that many different learners learn in many different ways and it is important to have many programs in place to benefit all students. While the intensive sight-reading music program routed in the Kodaly Methodology was beneficial to the students in the treatment group. It does not directly show that because of the one treatment, their scores improved.



### **Threats to the Validity**

There were some threats to validity. An external threat to the validity was that the researcher was only able to see this group of students, both the control group, and the treatment group once a week. There was a week where the researcher was unable to see them at all because of a snow storm so the treatment was extended an extra week to make up for the week lost. However, there was a two week lapse where the students and were unable to work with the researcher.

An internal threat to the validity of this experiment is that students receive so many interventions in their reading classes that the researcher is unable to clearly measure whether or not the treatment is what is causing the change in test scores. A true measure of this test would be that students in the treatment group would receive no other supports except the supports of the music literacy program.

### **Connections to Previous Studies & Existing Literature**

Previous studies in this area show that the decoding of reading music is similar to the decoding of phonemes in developing early literacy. When students are able to develop these skills in a different way, they are strengthened. Although the decoding system for reading and music differ, the process for understanding is the same (Hill-Clarke & Robinson, 2004). This particular research parallels the same findings.

The researcher found that the students in the treatment group were extremely motivated by the study. It was explained it to them, they were given take home work, and many of them asked me for more work. When the study was over parents indicated how motivated students were at home as well. In a similar study, researchers found that the lessons that used musical elements proved to be more meaningful for students (Darrow,

et al., 2009). The control group in this study was motivated to do something differently than the other group, they weren't as motivated since they didn't have extra take home assignments.

In a study done by Telesco (2010), he found that being able to distinguish slight differences high and low pitch aids in student's ability to notice the differences between phonemes. Pitch discrimination also aids in the tone qualities of vowel sounds. In this study many student read with more vocal inflection during their post-test. The DIBELS test didn't measure this, it was just noted that students who were in the treatment group showed a parallel to Telesco's study, and used pitch to distinguish their voices as they were reading certain phonemes.

### **Implications for Future Research**

In future research the researcher would be interested in using the music piece during their actual reading class, as an intervention for students who are not as motivated. Music would be a good tool perhaps motivate student who are struggling to read fluently by helping them vocally produce phonemes. It would be interesting to see it used in a different classroom setting instead of in music class.

The researcher would also like to see how it worked with different homogenously grouped students. The student samples used in both the treatment and control group were all students of varied levels and abilities. Students who are struggling with phonics would have a different focus than students who were reading above grade level and needed to be challenged. The music intervention could be tailored to meet the needs of a diverse group of learners. A more challenging program for some students focusing on fluency and decoding, and a more intensive program for students who need a focus on

phonological production could be offered.

In future research it would be helpful to test them musically. Since there is not a test that measures these skills specifically, the researcher would have to create some sort of measure. In comparison to the other second grade students in this school, the students who participated in this study read music effortlessly, they have better tonal and pitch awareness.

### **Conclusions & Summary**

In conclusion it should be noted that this sample of students was incredibly motivated by this study. Most often students work in a large group setting, and the small groups was really motivated by the fact that they were learning something different. The students in the treatment group were also very motivated by the take-home piece. Since they usually have no take-home assignments for music, they were very motivated to practice at home each week and come back and get a new practice assignment. Take-home work was also provided to the control group that was unrelated to the focus of this research but still relevant because many of the students really wanted take-home assignments.

The girls in this study, in particular the girls in the treatment group, were very motivated throughout all six weeks of the study. The boys were excited initially, and then seemed to trail off by the end of the study or if the material started to become too difficult for them. Behavior throughout the entire study was very good. Students were focused and came into the classroom ready to learn and worked efficiently until the very end of class. Parents of students who were in the treatment group also expressed interest and would work with their students and their take-home work at home.

This study was very beneficial the current teaching style for the researcher. The difference between the two groups musically and how motivated the groups were who were participating was very noticeable. There is more research to be done on this subject. The findings will be interesting if there are some changes made in some future research on this subject.

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