

# National Association of Special Education Teachers (NASET)

## THE PRACTICAL TEACHER

*This Month's Topic:*

### Using Music to Teach Reading to Kindergarten Students

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A common struggle for teachers, of typical and ESE students, is teaching the students to learn how to read with fluency. Kindergarten students especially those who are in school for the first time or ESOL students struggle to learn how to read fluently. Songs may offer a change from routine classroom activities and can offer students an alternate approach to learning and uses different learning styles to reach a greater range of learners. Using songs can help students to learn to recognize words easier through repetition. This issue of **NASET's Practical Teacher** was written by Kristen Rodriguez. It focuses on using music to teach read reading to kindergarten students

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### Introduction

A common struggle for teachers, of typical and ESE students, is teaching the students to learn how to read with fluency. Kindergarten students especially those who are in school for the first time or ESOL students struggle to learn how to read fluently. Songs may offer a change from routine classroom activities. According to Sevik, "They are precious resources to develop students' abilities in listening, speaking, reading and writing" (p. 1029). Songs can offer students an alternate approach to learning and uses different learning styles to reach a greater range of learners. Using songs can help students to learn to recognize words easier through repetition. Patel, and Laud (2007) study found the following:

The introduction of songs and lyrics during the class brought about a certain element of excitement, as if the students were allowed to do something that they did at home or during their free time. This increased interest helped to shape their understanding of the true definition of fluency and motivated them to reach their goals more readily (p. 13-14).

Bintz (2010) found, “singing has long been used as an instructional strategy in literacy development” (p. 683). Students need to learn to read and be able to read fluently in order to be able to succeed in school and be successful in life after they graduate from school.

The purpose of this action research plan was to determine if I use songs with my kindergarten students then by how much will it help increase the students’ reading comprehension and fluency skills. Students need to learn how to read and be able to read fluently. If they are not fluent reader they will eventually begin to dislike reading and not want to read.

The teacher used songs to help student learn sight words and help them build their reading fluency. The teacher sung the songs with the students. The teacher did this during the day as part of the reading routine in the classroom with all of the 18 students in the classroom, ages 5 and 6. The teacher sent home a letter to the students’ parents informing them that they will be using this intervention as part of their normal reading day. The principal of the school has been informed that this is an intervention being done in the class as part of a research class for my master’s degree.

## Literature Review

This literature review is going to discuss the use of music and song in aiding the instruction of reading fluency. For long, music has been used to teach students and help them to absorb and maintain the information taught to them. Songs and music can be used to teach students new information and help them to be able to remember the information using catchy rhythms. Teaching using song and music utilizes auditory and musical intelligence as well as repetition to help process and retain information. This paper will be discussing the use of music to teach language arts, math, and other subjects.

### Using Music to Teach Language Arts

Many aspects impact a student’s ability to learn and retain information, including the students’ ability to stay on task and free from distractions. Engaging a young student, especially kindergarten students, is not an easy task. Trinick (2011) investigated the use of music to help teach language learning to students. This article reviewed previous research that explored similar topics and found that those articles supported the idea of using music to help teach language learning to students as a part of the language program. The article by Trinick talks about how song can help students with language learning by incorporating things such as syntax, rhyming words, and parts of speech. According to Trinick, books and songs for young children share features that help with memory and retention such as “rhythm, rhyme, repetition, and refrain” (p. 7).

In a similar article, Hines (2010) investigates the use of song lyrics to help students with learning disabilities (LD) learn decoding skills for reading. They used a 14-year-old student with LD to complete a case study in which the teacher printed lyrics from the student’s favorite song and had her read them pointing at each word as she went. The teacher then gave her the words to take home and practice the first two verses. The teacher highlighted the high frequency words that appeared in the lyrics and found that the student’s reading fluency improved using this technique. It was discussed how, over the years, the teacher and colleagues have used this method with other students and have modified it to meet the students’ interests and needs. This article talks about how students who know lyrics to songs are able to use this in helping them to be able to read the words by matching. Hines found that using song lyrics as instructional material is a promising technique for adolescents with disabilities who need remedial decoding instruction but who may have lost the motivation to engage in more traditional instructional practices due to repeated failures (p.21).

Similarly, Sevik (2011) explores how teachers feel about using music to teach young learners English. A questionnaire was given to teachers to find out thoughts, beliefs, feelings, and how often they used songs to help teach student's English. The survey used a five point Likert scale and found that, overall most of the teachers thought that songs were an important part of teaching students Language Arts. Sevik states that "songs are regarded as the most effective way of teaching listening comprehension to young learners" (p.1029).

Patel and Laud (2007) investigate the use of song to help students strengthen their reading fluency. During this study, the researchers started by administering a fluency test to get a baseline and then started with repeated reading of passage for three days over a period of eight weeks.. The first day, the teacher read the passage to the students and then they read it aloud by themselves after. The second day, the student read the passage aloud by themselves again and they did the same thing again on day three. For the next eight weeks, they used song lyrics to read. On the first day, he students listened to the song and followed along using the printed lyrics and after this the teacher and students read the passage at the same time, and finally the students read the lyrics aloud by themselves. This was repeated on days two and three. The research found that the song lyrics helped the students with their reading fluency by providing "a certain element of excitement, as if the students were allowed to do something that they did at home or during their free time" this is, in turn, "increased interest [and] helped to shape their understanding of the true definition of fluency and motivated them to reach their goals more readily" (Patel & Laud, 2007, pp. 13-14).

Carlson (2010) investigated the use of song in high school English classes to help students to think critically. During this study, a high school English teacher incorporated song-poems into the lessons in class to study social, historical, cultural and literacy reasons. This teacher guided the students through a unit studying song-poems in and found it to be beneficial to their critical thinking skills.

Carlson (2010) writes that

Song-poem, in combination with poetry, novels, nonfiction, and other genres, is one important genre for teachers to use to encourage students to be critical-edge readers, trying on multiple perspectives, asking questions not only about the texts but also about the advantages and disadvantages offered by various genres and points of view. (p. 69)

These articles all highlight the importance of the repetitions of the songs in helping the students with their fluency and increasing engagement in reading, which in turn helps them improve their comprehension and language learning skills. These articles support the research plan proposed and demonstrate that students can be taught reading fluency using songs.

## **Using Music and Song to Teach Math**

An, Ma and Capraro (2011) investigate the thoughts of preservice teachers on the use of song and music to teach math. During this research study, 64 preservice teachers were randomly chosen to participate in a 90 minute long intervention. They were asked to complete two worksheets where they compose music and solve math problems. At the end of this intervention, the researchers found the participants had different attitudes and thoughts on using music to help teach students math. The research talks about the attitude and teacher point of view on the use music to teach math as an intervention. In this article, they find that the use of music to teach math helps motivate students and positively affects their attitude as well as their desire to learn. An et al. found "the change in preservice teachers' beliefs is followed by their improvement of engagement, attitudes, and confidence toward mathematics teaching and learning" (p.244). The research also showed that the intervention made them see a clear connection between math and music and the ability to use this music to create a more exciting environment and attitude around math lessons.

Although this article does not discuss using songs to teach reading fluency, it does show that song can be used to give teachers a more positive perspective on using song to teach. If using songs to teach math can change the attitude of teaching math then it could also help change teachers' attitude about teaching reading fluency.

## Using Music to Teach

The other articles discussed are about using music to teach multiple subjects, life skills, and joint attention. Bintz (2010) investigated using reading, writing and singing in combination to learn across the curriculum. This study found the technique of using music, reading, and writing in combination was helpful for students. Bintz states that while listening students share and reflect on their songs, he was able to hear them comment on how this engagement was seamless for them and that "they didn't separate reading and writing from science but rather integrated them efficiently and effortlessly" (pp.685-686).

White (2007) investigated the use of background music to help motivate students in class. During this research, the teacher played music in the background in class while students completed their class work. This was found to positively affect the students' motivation, productivity, and behavior in class. They found the students stayed on task more and were able to complete the work with less redirection. "The increase in their productivity could result in many beneficial aspects, such as staying on task, increasing retention of material, improving grades/performance, increasing concentration levels, and accelerating learning" (p. 4). When students are more productive, they can remember more of the information taught to them. A good way to help students, both typically developing and those students with disabilities, is through repetition. The repetition of songs can be helpful when it comes to teaching kindergarten students. It is also very important to keep students engaged in the learning process or they will begin to talk, play and become disruptive if they get bored. Songs are thought to increase the ability to memorize due to the repetition of the verses or lyrics. Burton, Horowitz, and Abeles (2000) investigated how learning in and through the arts transfers to other subjects. They researched the link between the exposure to arts and the performance levels in other subjects. According to Burton et. al. (2000) "that high-arts groups consistently outscore low-arts groups in almost every indicator dimension" (p. 239).

The effects of improvisational music therapy to help with teach students with Autism Spectrum Disorder (ASD) joint attention skills was investigated by Kim, Wigram and Gold (2008). Thirteen boys and two girls ages 3 -5 with ASD were given 12 weeks of 30 minute long improvisational music sessions and were compared to 30 minute play sessions. They found that the students showed better joint attention skills with the music therapy. According to Kim et. al. "both the ESCS and session analysis indicated that the majority of participants showed marked improvement in joint visual attention skills during and after music therapy than during and after the play condition throughout the trials and across the cases" (p.1763).

The final article by Obiozor (2010) investigated the use of music to help teach life skills to students with emotional disabilities. Obiozor discusses how the students are motivated and eager to do work in reading, writing and all subject areas because the teacher reached out to them in a unique way. As stated by Obiozor "teachers and therapists should use entertainment materials and resources for varieties of instruction in the classroom...students with emotional disabilities require special supports that would soothe their feelings in the classroom, as well as opportunities for self-expression" (p. 24).

Although these articles do not explicitly deal with teaching fluency, they do show how the song and music help students be more engaged in tasks which is a necessary skill when it comes to teaching students reading. Some of the articles found that using music in different ways to teach and reach out to the students increased their productivity and excitement about doing their class work. If a student cannot engage in what they are learning, they will not be able to understand or apply the knowledge. Part of learning how to reading is learning how to decode words and for this skill, engagement is an integral part.



**Data Collection:**

*Data Source 1: Teacher observation Standardized test that measures fluency and listening comprehension. The answers are entered into the computer system called PMRN.*

*Data: Student Scores of fluency and listening comprehension levels were calculated into a percentage at three different times: baseline, in the middle of intervention, and at the end.*

*Data Source 2: Teacher Observation of percent read correctly-standardized test-Teacher had a photocopy of the reading passage and mark a slash through words unknown or said incorrectly (with word said in its place written above the word they said incorrectly)*

*Data: Student's Fluency-percent correct was calculated by amount of words read minus errors divided by the time given to read the passage*

*Data Source 3: Teacher Observation Teacher made-Teacher showed the students a list of High Frequency Sight Words and have the students read the words going down the list. Teacher marked what words the students were able to recognize correctly.*

*Data: Number of words read correctly was recorded every other week and a total number was added at the end to show how many words they learned in all over the eight weeks.*

**Time Line**

*2/11/2013- Rigby Session one*

*12/18/2013- Inform principal of action plan*

*12/18/2013- Send Pre survey home with students for parents to fill-out- Did not come back*

*1/6/2014- Baseline Sight Word Check*

*1/9/2014- Baseline Sight Word Check*

*1/16/2014- Give Fair test session two*

*1/17/2014- Baseline Sight Word Check*

*1/31/2014- Baseline Sight Word Check*

*2/7/2014- Baseline Sight Word Check*

*2/21/2014- Baseline Sight Word Check*

*2/28/2014- Baseline Sight Word Check*

*3/7/2014- Rigby Session two*

## Data Analysis

The data that was collected during the course of this action research study were interpreted using various different approaches. The FAIR test that was administered before the intervention began and after the intervention began was interpreted using a table. The predicted reading success score or PRS score is given to each student on the website: [pmrn.fcrr.org](http://pmrn.fcrr.org) where the assessment is completed. The teacher recorded the students' PRS for the first session of FAIR and the second session into a table. The teacher then calculated the amount of increase or decrease in the two sessions by subtracting the two scores for each student.

The sight word fluency check data that was done every other week during the course of the action research study. The number of words each student was able to recognize correctly each time they were assessed was placed into a line graph displaying all the students' scores throughout the duration of the study.

The Rigby test that was administered once before the intervention began and then after the intervention was completed. The teacher recorded the number of words the students read correctly in each passage and divided that by the total number of words in the passage to get the percent correct. The teacher also calculated how many of the comprehension questions the students answered correctly and divided that number by the total number of comprehension questions asked for the passage to get a percent correct. The student must read at least 94% of the passage correct and answer at least 90% of the comprehension questions correct in order to be given the next reading level passage to read. If any student received less on just one then they are at that reading level for instruction any student who read less the passage less than 70% correct is at an instruction level of the level before that passage. The students' scores are arranged in a bar graph to show how many students are at each reading level in the first assessment and then in the second.

## Findings

The findings were consistent with the research that was found on this topic prior to the action research study taking place such as Trinick (2011). The research found indicated that the use of music could help students to improve their reading fluency and comprehension abilities. According to Trinick, books and songs for young children share features that help with memory and retention such as "rhythm, rhyme, repetition, and refrain" (p. 7). After analyzing the data taken during this research study the findings shows that the music helped the students increase their reading fluency and comprehension abilities significantly.

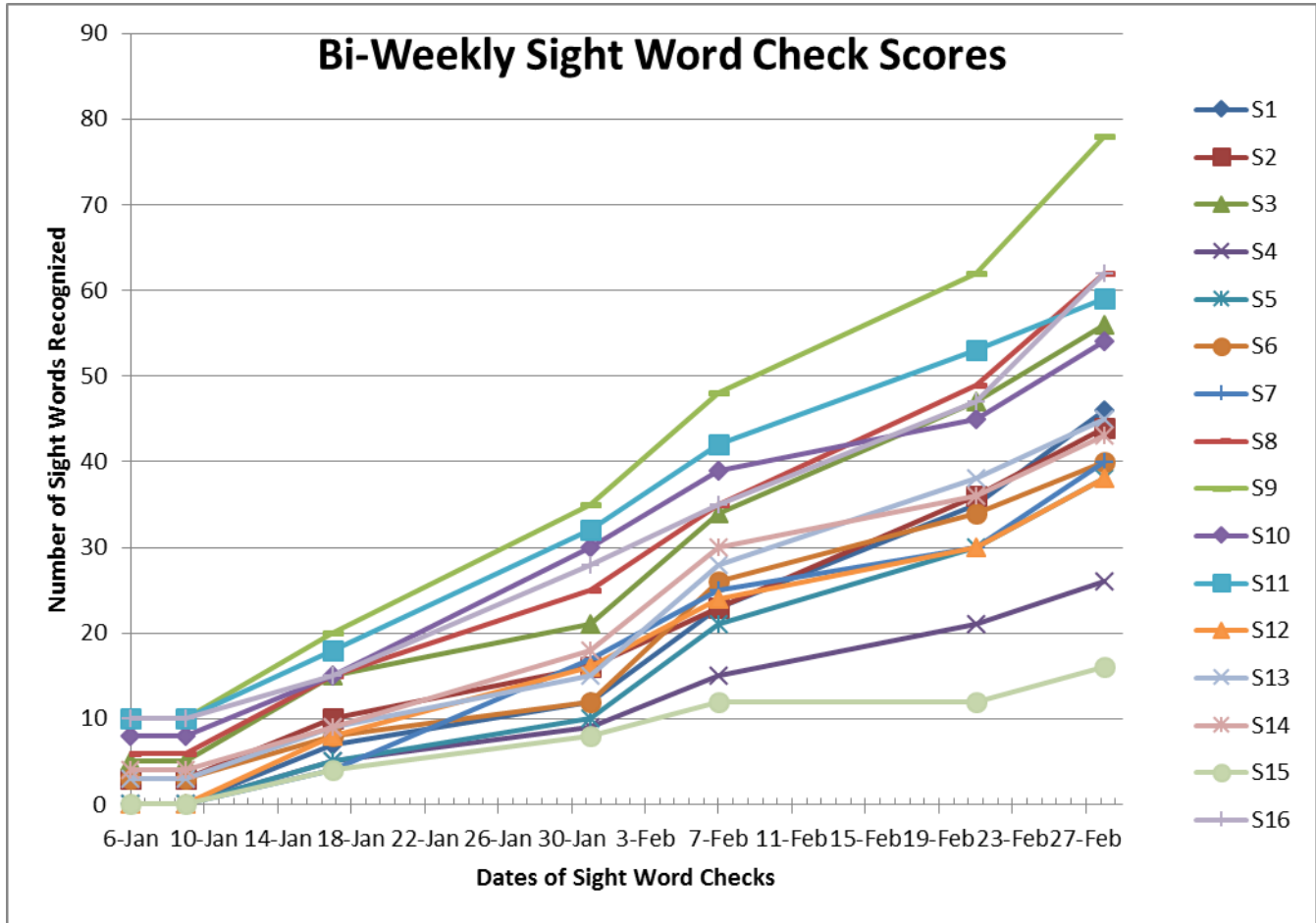
**FAIR Test.** This is a standardized assessment administered to students three times a year. This assessment gives the students predicted reading success (PRS) score based on different assessment questions asked to the student. For Kindergarten students the test asks them to identify the letter names, sounds, has the teacher read them a short passage and the students are asked to answer comprehension questions. Students are also asked to identify words by blending phoneme segments together. This assessment was given to my students in September before the intervention began and once again in January shortly after invention began. The scores for these two assessments varied. Most of the students Predicted Reading Success Score went up even if just by a percent or two. Six out of the sixteen students the test was administered to show their score went down. The scores were entered into a table and then calculated to show much percent the score increased or decreased. Table 1 below offers a visual of how the scores were compared. The overall average difference in the students' PRS score was a 7.6% increase

**Table 1**

Students' Predicted Reading Success Score from FAIR Test			
	Fair 1-8/13	Fair 2-1/16	How Many Point Difference
Student 1	62%	49%	-13%
Student 2	67%	91%	+14%
Student 3	62%	90%	+28%
Student 4	41%	21%	-20%
Student 5	47%	80%	+33%
Student 6	84%	91%	+7%
Student 7	41%	43%	+2%
Student 8	67%	89%	+22%
Student 9	91%	92%	+1%
Student 10	54%	57%	+3%
Student 11	94%	92%	-2%
Student 12	76%	72%	-4%
Student 13	89%	91%	+2%
Student 14	89%	88%	-1%
Student 15	46%	24%	-22%
Student 16	12%	84%	+72%

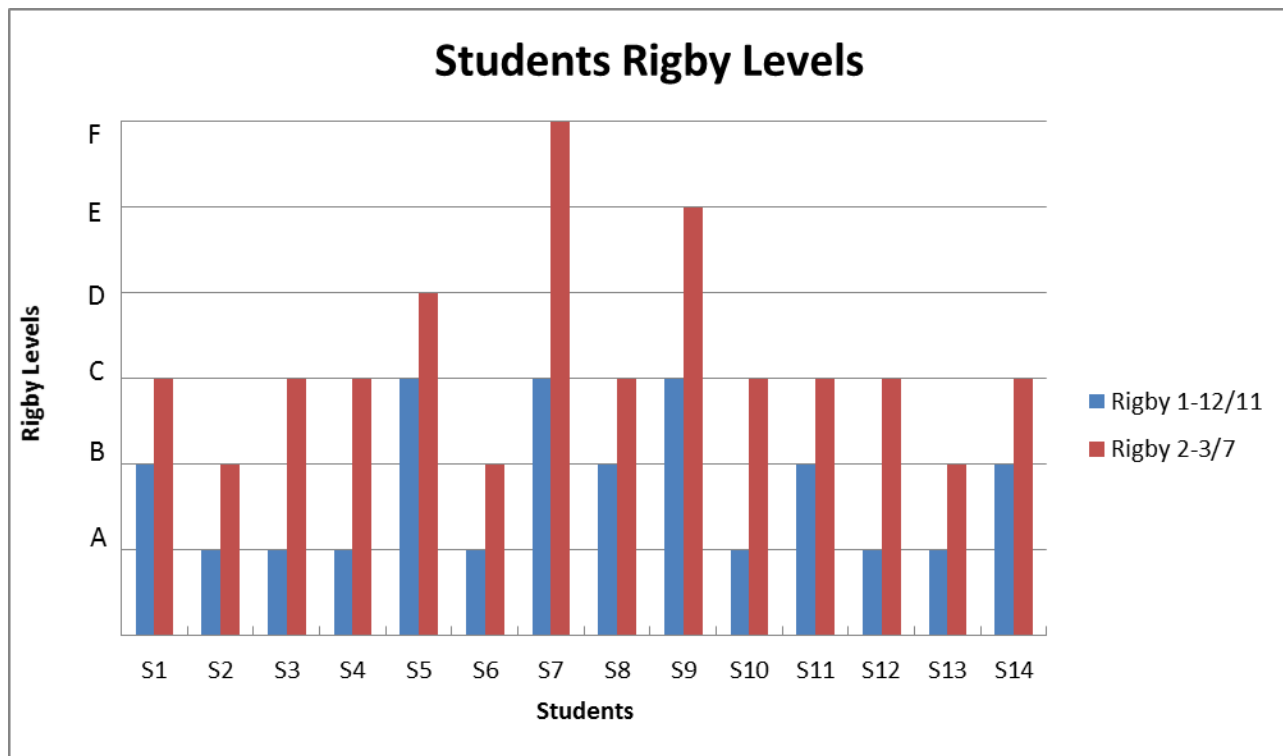
**Sight Word Fluency Checks.** Sight word checks are an assessment that all the primary teachers perform typically once or twice a semester with all the students. Sight word checks were done with the students every other week for 8 weeks during this action research study. The students were shown a list of 120 High Frequency Sight Words. The students were asked to read each word as the teacher pointed at the words going down the list. They were told to read as many of the words as they knew. The scores for the students' sight word checks showed consistent improvement. All of the students showed dramatic improvement from before the intervention began to the completion of the intervention. The average overall increase of High Frequency words of the 16 students was 43.1 words over the 8 week study. The scores were entered into a line graph for each student to show each student's progress over the 8 week study. Figure 1 gives a visual of how those scores were compared. All the students that were a part of this study showed some sort of increase in the recognition of high frequency words.

**Figure 1**



**Rigby Scores.** The Rigby running record is a reading assessment done with the students once a quarter starting in the second quarter of the school year. This is an assessment where a student is given a book and asked to read the book to the teacher while the teacher takes data on the mistakes and self-corrections made. When the book is finished the teacher asks the students comprehension questions about the story they just read. After the teacher calculates the percent read correctly by dividing the number of words read correctly by the total number of words in the passage and the percent of comprehension questions answered correctly. If the students score at least 94% read correct and 90% of questions answered correct the teacher gives the students the passage from the next level. If students score 70% or higher read correct then the teacher list the instructional level to be the level of that passage. If the student scores below a 70% read correctly then the teacher scores their instructional reading level to be the level below that reading passage. This assessment was administered to the students in December before winter break for the first time and before intervention began. The students were given the assessment again in the beginning of March after the intervention was completed. Eight out of the 14 students increased by one Rigby level, five out of the 14 increased by two Rigby levels, and one out of the 14 students increased by three Rigby levels. The scores were placed into a bar graph to show what level students scored on the first session and then what Rigby level they scored on the second session. Figure 2 gives a visual display of how those scores were compared. The first session is in blue and the second session is in red.

**Figure 2**



## Limitations

As this research study was conducted in an inclusive Kindergarten class not all of the students' data was able to be included for the entire study. The first limitation encountered was this study was originally anticipated to be conducted with 18 students and two students withdrew from the school before intervention began. There were two more students who were added part way through the intervention so their scores were not able to be included either. Only 16 of the students in the class were here for the entire action research plan.

A second limitation was the original study intended to conduct a pre and post parent survey as part of the data collection process but when the pre survey was sent home the teacher had trouble getting the parents to send them back. The parents the teacher was able to get in contact with said they preferred not to fill out and return the survey.

Another limitation was two of 16 students that were included in the study were absent for the second Rigby assessment so their scores were not able to be included in the display of results. That is why there are 16 scores for the FAIR data and for the sight word fluency checks. The students did not come back to school in time to make up the Rigby assessment and have them included.

There were limitations with averaging the number of overall increase on the high frequency word recognition, a few ESOL students so their sight word recognition did not increase at the same rate as the other students so the average is lower due to those scores. Also some of the parents practiced the high frequency words with the students consistently and others did not practice with them.

The final limitations came with the FAIR test being given too close to the start of the intervention and therefore was not able to show the gains anticipated. The FAIR scores are not as accurate due to the fact that the same areas were not assessed every time the test is administered. Teachers do not know how the PRS is calculated because the whole assessment and scoring process is done through the website. They also have no control over the areas being tested for each student and every student is not assessed on all the same areas. The system assessed some students on areas but not others and some students were given the opportunity to be assessed on the same areas they were assessed on the first time and others were assessed on different areas.

## Implications

Since this intervention the students in this class continue to use music and poems to help them increase their sight word recognition and reading fluency. This intervention seemed to have a greater impact on the ESE students in class and help them raise their reading comprehension more than any of the other students. If this study was done again it would be a good idea to use other types of assessments as well as student work samples and other data sources. Student scores and progress can be better monitored through the use of more data sources. This intervention would also be more effective if it were done over a longer period of time. Assessing students weekly on sight words in the classroom setting was not really realistic so having a longer intervention time would be able to give more scores and a higher overall increase. Future studies should consider taking more base line data with different types of data sources to get a more accurate gauge of how much the students' scores increase after the intervention in comparison.

## Dissemination

The results of this intervention have been shared with colleagues at the school. There are hopes of having this be a team wide intervention starting at the beginning of the year for the Kindergarten classes. This is a good intervention that can be used with all the students in the school as one of the intervention strategies to help the struggling students in their pull out and push in groups. This study is going to also be shared among my peers in my master's program.

## References

- An, S. A., Ma, T., & Capraro, M. M. (2011). Preservice teachers' beliefs and attitude about teaching and learning mathematics through music: An intervention study. *School Science and Mathematics, 111*(5), 236-248.
- Bintz, W. P. (2010). Singing across the curriculum. *Reading Teacher, 63*(8), 683-686.
- Burton, J. M., Horowitz, R., & Abeles, H. (2000). Learning in and through the arts: The question of transfer. *Studies in Art Education, 41*(3), 228-257.
- Carlson, J. R. (2010). Songs that teach: Using song-poems to teach critically. *English Journal, 99*(4), 65-71.
- Davidson, C. W., & Powell, L. A. (1986). The effects of easy-listening background music on the on-task-performance of fifth grade children. *Journal of Educational Research, 80*(1), 29-33.
- Hines, S. J. (2010). Name that word: Using song lyrics to improve the decoding skills of adolescents with learning disabilities. *TEACHING Exceptional Children, 43*(1), 16-21.

- Kim, J., Wigram, T., & Gold, C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: A randomized controlled study. *Journal of Autism & Developmental Disorders*, 38(9), 1758-1766.
- Obiozor, W. E. (2010). The use of music to teach life skills to students with emotional disabilities in the classroom. *US-China Education Review*, 7(1), 17-26.
- Patel, P., & Laud, L. E. (2007). Using songs to strengthen reading fluency. *Teaching Exceptional Children Plus*, 4(2), 1-17.
- Sevik, M. (2011). Teacher views about using songs in teaching English to young learners. *Educational Research and Reviews*, 6(21), 1027-1035.
- Trinick, R. M. (2012). Sound and sight: The use of song to promote language learning. *General Music Today*, 25(2), 5-10.
- White, K. N. *The effects of background music in the classroom on the productivity, motivation, and behavior of fourth grade students..* (898324714; ED522618).

## About the Author

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