

Using Poetry to Improve Fluency and Comprehension in Third-Grade Students

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Abstract: This study examined the effects of repeated choral reading of poetry on fluency and comprehension of third-grade students ($N = 76$) in the southeastern United States. Student attitudes toward poetry were also measured. Students served in regular, remedial, and special education were taught reading using the school's basal series for four weeks. Choral repeated reading of poetry was then added to the curriculum. The DIBELS ORF test, STAR reading assessment, and an attitude survey were used to assess student performance. Statistically significant gains were made during the poetry intervention in fluency ($M = 18.78$, $p < .01$) and comprehension ($M = 0.33$, $p < .05$). Slight improvements in students' attitudes toward poetry were also observed.

Reading is an important life skill. Leon (1998) stated that "if a youngster does not learn to read in our literacy-driven society, hope for a fulfilling, productive life diminishes" (p. 14). Oral reading fluency is one of the five major components of overall reading performance and instruction (National Reading Panel, 2000), and it can be used as an indicator of general reading competence (Fuchs, Fuchs, Hosp, & Jenkins, 2001). Poetry may be an effective vehicle for delivering fluency and comprehension instruction.

The Progress in International Reading Literacy Study was conducted in 2001 (Ogle et al., 2003). Nine-year-old students from 35 different countries participated in the study. The literacy evaluation consisted of three different aspects: the purposes of reading, comprehension, and reading attitudes and behaviors. The scores on this assessment were reported on a scale of 0 to 1000, with an average of 500. The combined reading literacy score for fourth-grade students in the United States was 542, which was higher than 23 of the 34 other countries participating in the study. The average combined reading literacy score was significantly higher in Sweden (561), the Netherlands (554), and England (553) than in the United States.

Literacy rates are low in the rural areas of the southeastern United States. Adult literacy proficiency was measured on the National Assessments of Adult Literacy (NAAL) in a survey of over 13,000 individuals (National Center for Education Statistics, 1992). Literacy proficiency was ranked on a scale of 1 to 5, with Level 1 being the lowest level of reading proficiency and Level 5 being the highest (*Defining literacy and sample items*, para. 4). Reder (1997) produced synthetic estimates of adult literacy using data from the 1990 Census and the 1992 NAAL. In Georgia, he determined that 23% of adults were reading at Level 1 and another 31% of adults were reading at Level 2 (CASAS, n.d.). He also produced estimates for small census areas across the United States. In the county where the research was conducted, Reder determined that 28%

of adults were able to read at Level 1 proficiency and another 38% of adults were reading at Level 2. Looking at totals, the research county had 66% of adults reading below Level 3 as compared to United States totals of 54% below Level 3 (CASAS, n.d.).

In 2003 (National Center for Education Statistics), 41% of Georgia's fourth-grade students scored in the below-basic range on the National Assessment of Educational Progress (NAEP) reading test and an additional 32% scored in the basic range. Black students scored lower (58% below-basic proficiency) than White students (28% below-basic proficiency).

Increasing the literacy rates in this region is important to improve economic development and the quality of life for citizens who reside here. Poverty is a major issue in the county where the researcher lives and works. According to the school's Southern Association of Colleges and Schools (SACS) self-study, over one-fifth (21%) of school-age children in this county live below the poverty level, with 16% of households earning less than \$10,000 per year. The State Department of Education reported that in early 2005, 64.33% of the students who attend the research school were eligible for free or reduced-price meals.

In April, 2005, third-grade students were administered the Criterion-Referenced Competency Tests (CRCT). On the Reading CRCT, 13% of the research school's third-grade students scored in Performance Level 1 (does not meet standard), and 48% of the students scored in Performance Level 2 (meets standard). This test indicated that comprehension remained a weak area for the students in the school where the current study was conducted. Nearly one fourth (23%) of the third-graders who participated in the test did not meet the standard in the Reading for Locating and Recalling Information domain, and 18% did not meet the state criteria for the Reading for Critical Analysis domain.

Teachers in this school used the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Oral Reading Fluency (ORF) assessments to monitor the students' oral reading rate during the 2004-2005 school term. At the beginning of the school year, 26% of the students were identified as needing intensive intervention. These students had an oral reading rate below 53 words per minute. At the end of the school year, 23% of the students continued to be identified within the intensive range (below 80 words per minute read orally).

Improving oral reading fluency in elementary students can assist them in comprehending text. Jenkins, Fuchs, Van den Broek, Espin, and Deno (2003) examined the relationships among reading comprehension, word-list fluency, and context reading fluency. In that study, 113 fourth-grade students of varying abilities also answered questions from the Iowa Test of Basic Skills Reading Comprehension subtest, read a folktale in context, and read a random list of words from the same passage. There was a strong positive correlation between reading speed in context and reading comprehension ($r = .83$), and a moderate positive correlation between word-list reading speed and reading comprehension ($r = .54$). The researchers conducted a regression analysis to determine the predictive value of context fluency on reading comprehension. Context speed accounted for a 42% variance, and context fluency speed was a stronger predictor of reading comprehension than word list speed. (Jenkins et al., 2003).

Hintze, Callahan, Matthews, Williams, and Tobin (2002) reported similar findings. They used multiple regression analysis to determine which factors – socioeconomic status, ethnicity, gender, oral reading fluency, and age – could serve as predictors of reading comprehension. Age and oral reading fluency accounted for 42% of the variation in reading comprehension. Neither socioeconomic status nor ethnicity contributed significantly to the prediction of the reading comprehension scores.

Kuhn (2005) examined which of three interventions had the most impact on the reading fluency and comprehension of second-grade students. The first intervention, repeated reading, occurred over a 3-day period for each text: echo reading with the researcher on the first day, partner-reading alternate pages of the text on the second day, and choral reading on the final day of instruction. The second intervention, non-repetitive reading, consisted of a single reading of 18 different texts. Echo reading and choral reading were incorporated into the instruction of this group. Listening only, the third intervention, consisted of the researcher reading aloud the same books that were used in the non-repetitive reading intervention. Kuhn concluded that, while the small number of students ($N = 24$) and the short intervention period (6 weeks) limited her findings, the repeated-reading intervention and the non-repetitive reading intervention caused greater improvement in students' word recognition, the number of words read correctly in one minute, and prosodic (expressive) reading than the listening-only intervention or the control group.

In a small study, Chafouleas, Martens, Dobson, Weinstein, and Gardner (2004) investigated which of three conditions would improve reading fluency most: (1) repeated readings, (2) repeated readings with feedback, or (3) repeated readings with feedback and a reward. The researchers concluded that all three interventions improved fluency to some extent but, of the three different conditions, repeated readings alone caused the largest increases in the fluency rates of the students.

Valleley and Shriver (2003) found repeated reading to be effective in increasing the oral reading fluency of secondary students. The participants in their study were four high-school students with reading disabilities who lived in a residential treatment facility in the Midwest. The intervention consisted of the students reading and rereading the same passage until three consecutive fluency improvements were made. The intervention continued three sessions per week for 20 minutes over a ten-week period. As a result of the intervention, the range of increase in the number of words read per minute was from six to twenty words per minute from pretest to posttest.

Comprehension was also a focus of the Valleley and Shriver (2003) study. On comprehension questions from the intervention passages, the researchers noted that the number of comprehension questions that the students were able to answer correctly did not increase over the course of the intervention. The researchers concluded that repeated readings was an effective instructional strategy for older students with reading difficulties, but that it was not shown to be helpful in raising comprehension levels.

Partner reading is an instructional technique in which two students read alternate pages of text together. Vaughn et al. (2000) compared the effects of partner reading and collaborative strategic reading. The participants in the study were 111 third-grade students and 8 third-grade teachers in a small school district which represented both urban and rural settings. In the partner-reading intervention, a higher-ability student (Partner 1) was paired with a lower-ability student (Partner 2). Partner 1 modeled appropriate reading for Partner 2, then supported Partner 2 as he or she reread the text. Then the students each took a timed reading and graphed the number of words read in one minute. Students in the collaborative strategic reading (CSR) intervention were trained to use previewing, using context to determine the meaning of unknown words and ideas during reading, and summarizing strategies during content-area partner reading. Students in both treatment groups made gains in fluency but not in comprehension.

Less evidence is available in the literature about the effects of choral reading. Choral reading is simultaneous reading by a group of students. In a 1992 study (Wolery & Ault, 1992),

choral responding was evaluated in teaching word recognition to students with moderate mental handicaps. The researchers taught eight community-sign words, four with a choral response and four with an individual response, to a group of six participants over seven sessions. Choral response was the more efficient instructional strategy for most of the students in the group.

Poetry can be used to enhance instruction in the primary grades. Glazer and Lamme (1990) discussed how poem picture books can be used in an elementary classroom. They suggested reading poem books aloud to students and having the children to orally chant familiar phrases. Nowak-Fabrykowski (2000) explained how poetry can be used to foster young students' imaginations and help them express their feelings. She went on to discuss how elementary students can use poetry writing to answer questions about the world around them.

At the secondary and post-secondary levels, poetry can also be incorporated into the curriculum. Connolly and Smith (2003) sought to determine if the quality of the classroom discussion of poetry in two ninth-grade honors English classes changed if the instructor taught a poem that was unfamiliar to him as well as to his students. The researchers first observed the instructor teach a poem that was familiar to him but not to his students. The researchers found that the teacher averaged 43% of the turns in the discussion, averaged over both classes. Then they compared the discussions of two poems that the teacher and the students read together for the first time. The instructor took fewer turns, 31% averaged over the two classes, when he read the poem for the first time along with the students. Student perceptions also changed when the teacher initially experienced the poetry along with the class. The students felt less intimidated during the discussion when they knew the teacher had not previously read the poem. McCall (2004) suggested that critical literacy can be improved by integrating poetry into the social studies curriculum. She advocated personal interpretations of the poetry, as opposed to formal observations of symbolism, to reduce student anxiety regarding the genre. McCall also encouraged teachers to select poetry based on diverse perspectives. No empirical evidence was found in the literature that demonstrates that poetry can be used to improve oral reading fluency or comprehension.

The school involved in the current study is a Reading First school. Reading First is a federally-funded initiative which allows school districts to implement research-based literacy programs in Grades K-3 (*Applicant information*, bullet 2). According to Reading First guidelines, teachers were required to use the core program, *A Legacy of Literacy* (Cooper & Pikulski, 2004) to the fullest extent possible. This program focused on three broad areas of study: reading, word work, and writing and language. The reading portion of this program featured high-quality literature with a focus on vocabulary development and inferential comprehension. Based on the experiences and observations of the researcher, oral reading fluency was not explicitly taught, and there were no formal lessons within this curriculum that fostered fluency development. Oral reading fluency is one of the five critical components of reading (National Reading Panel, 2000), but was not a major focus of the core program. The poetry genre was included in the *A Legacy of Literacy* program but could be easily omitted by teachers.

Based on current school data and current literature, there was a need to study a practical and simple intervention to increase oral reading fluency and comprehension. The purpose of this study was to determine the effectiveness of the repeated choral reading of poetry on the oral reading fluency of third-grade students. The study also attempted to determine if there was a correlation between an increase in oral reading fluency and an increase in reading comprehension. The effects of the intervention on the students' attitudes toward poetry were also examined.

Research Questions

Research question 1. Will the repeated choral reading of poetry increase students' oral reading fluency and reading comprehension?

Research question 2. Will the repeated reading of poetry improve student attitudes toward the poetry genre?

Definition of Variables

Repeated choral reading. Repeated choral reading is an instructional activity in which all students read aloud simultaneously across multiple attempts.

Oral reading fluency (ORF). ORF is the number of words a student can read correctly in one minute (WPM), as measured by the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Oral Reading Fluency (ORF) test.

Reading comprehension. Reading comprehension is the ability to understand what is being read as measured by the STAR Reading Test.

Attitudes. Attitudes are the thoughts and feelings of the students toward poetry as measured by a teacher-created survey.

Methods

Participants

Third-grade students ($N=76$) from a Grades 3-5 elementary school in a rural county in the southeastern part of the United States participated in this study. Students were assigned to third-grade classes at the beginning of the school year by the school administration. Students who enrolled or were withdrawn during the course of the study were not included. Convenience sampling was used to select the participants.

Class A (researcher's class) consisted of students served in regular education ($N=13$) and special education ($N=5$). Exceptionalities included two students with mild intellectual handicaps, one student with low vision, one student with an emotionally-based behavior disorder, and one student served in speech for articulation difficulties. Students identified as gifted were counted among the regular education students.

Table 1

Demographic Data of Participants

| Class | Ethnicity | | | Gender | | Instructional Delivery | | |
|-------|-------------------|-------------------|-------------------|------------------|--------------------|----------------------------------|----------------------------------|----------------------------|
| | Black <i>N</i> | White <i>N</i> | Other <i>N</i> | Male <i>N</i> | Female <i>N</i> | Regular Education <i>N</i> | Special Education <i>N</i> | EIP Program <i>N</i> |
| A | 3 | 14 | 1 | 10 | 8 | 13 | 5 | 0 |
| B | 6 | 9 | 1 | 9 | 7 | 16 | 0 | 0 |
| C | 5 | 6 | 1 | 4 | 8 | 0 | 0 | 12 |
| D | 4 | 15 | 0 | 9 | 10 | 19 | 0 | 0 |
| E | 8 | 3 | 0 | 7 | 4 | 0 | 0 | 11 |

The instructor of Class A, who held a Master's degree in Early Childhood Education, had 13 years of previous teaching experience. Class B was a regular education class ($N=16$), and Class C was an EIP class ($N=12$). These classes were taught by an instructor who has a Master's degree in Early Childhood Education with 20 years of experience. The third teacher participant taught reading and language arts to Class D, a regular education class ($N=19$) in the afternoon, and to Class E, an EIP class ($N=11$) in the morning. She has 28 years of teaching experience and currently holds a Bachelor's degree in Early Childhood Education. Table 1 shows the demographic data for the student participants.

Intervention

The first four weeks of the study (the control phase) consisted of gathering baseline data. During Weeks 1-4 of the study, *A Legacy of Literacy* (Cooper & Pikulski, 2004) basal reading series was used to administer reading instruction to the students during the school's 135-minute literacy block. This program is a basal series with instruction divided among three major sections: reading, word work, and writing and language. The students participated in whole-group reading activities, small-group reading, literacy centers, spelling and decoding, and writing and language instruction.

The intervention phase began in Week 5 of the study. In addition to the *A Legacy of Literacy* basal reading program, the participants chorally read the same poem each day for five consecutive days. The poems were written on chart paper large enough for each student to see clearly. A different poem was read with the class for each of four consecutive weeks. The intervention took approximately 10 minutes each day in addition to the basal program and outside of the required 135-minute literacy block.

During the intervention weeks, the teachers employed a variety of choral reading strategies. On Day 1, the teachers modeled fluent and prosodic reading of the poem while the students listened. Then, the whole class read chorally. On Day 2, boys and girls (or other small

groups) read alternate verses chorally. On Day 3, the teachers led the class in an open-ended discussion of the poem. The class then read the poem together. Fluency instruction on Day 4 consisted of chorally reading the poem with the whole class after interesting vocabulary words were defined. Day 5 instruction consisted of the repeated choral reading of the poem by the students. The students were given an opportunity to copy the poem and create an illustration to accompany it on Day 5.

The first poem selected for the poetry intervention was from *Poetry Place Anthology* (Alexander, 1990). The poem, “Runny Nose” by Kay Winters, was selected based on the prior knowledge of the researcher. When used with the previous class, it appealed to the students and provided an opportunity for the students to apply their visualization skills to aid with comprehension. The other poems (Appendix A) were selected for the intervention based on the following criteria: student interest, poem length, amount of rhyme, and topic. The other poems were “My Glider” (Prelutsky, 1994), “Choices” (Bagert, 2002), and “Spaghetti” (Silverstein, 1974). The combined readability of the four poems was approximated to be 4.5 using the Fry readability graph, a widely-used instrument for determining the reading levels of different types of text.

Data Collection Techniques

Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Oral Reading Fluency (ORF) Test (University of Oregon, 2002). The DIBELS assessments are one-minute measures of pre-reading and early-reading ability. In the third-grade, the ORF subtest is administered individually to assess fluency. Concurrent and alternate-form validity of the ORF have been established (University of Oregon, 2002). At the beginning, middle, and end of the year, benchmarks are given. A student reads three different passages for one minute each and the median number of words read correctly in one minute is used as the benchmark score. The students are placed in the intensive (high-risk), strategic (some-risk), or benchmark (low-risk) groups depending on their fluency rate. Progress monitoring, which is completed between the benchmark assessments, occurs when a student reads one passage and the number of words read correctly in one minute is recorded. It can be done weekly, bi-weekly, or monthly depending on the student’s ability level. For this study, the beginning benchmark score was used as beginning data, Progress Monitoring Form 4 was used as mid-point data, and Progress Monitoring Form 9 was used as ending data.

Descriptive and inferential statistics were used to analyze the data gathered from the DIBELS ORF assessment. Means and standard deviations were computed for each instructional delivery mode, and one-tailed *t*-test analyses were used to determine if differences were significant. Beginning to mid-point scores were compared, as well as mid-point to ending scores. Cohen’s *d* was also computed to determine effect size.

STAR Reading Test (Renaissance Learning, 2001). The STAR reading test is a 25-item computer-based assessment in which students read a sentence with a missing word and choose the correct word to fill in the blank. This test is used to measure comprehension. The computer software was programmed to analyze student responses and allows the teacher to view students’ grade-equivalent scores, percentile rank, and normal curve equivalent (NCE) scores. The STAR test was given at the beginning, mid-point, and end of the study. Construct validity and external validity have been established for the STAR reading test (Renaissance Learning, 2001).

T-test analyses were conducted on the STAR mean grade-equivalent gains to determine if significant differences existed between beginning and mid-point data and the mid-point and ending data. Pearson *r* was used to determine if positive correlations existed between any DIBELS ORF and STAR reading scores. This analysis paralleled the work of Chafouleas et al. (2004), Jenkins et al. (2003), and Kuhn (2005).

Poetry Attitudes Survey. The Poetry Attitudes Survey is an 8-item teacher-developed instrument that was administered to each student at the beginning and end of the study (Appendix B). The Poetry Attitudes Survey utilized a 3-point Likert scale. It was developed to measure elementary students' feelings about poetry across a variety of settings, such as choral reading with the whole class (Question 6) and reading poems alone (Question 1). The instrument was reviewed by three peers in a graduate cohort and two school-based colleagues to help determine construct validity. The survey was piloted with eight students and revised based on student feedback. The survey was analyzed by determining the means and standard deviations for each question. A *t*-test analysis was conducted to determine if the intervention made a significant difference in the students' perceptions about poetry.

Results

The research was conducted to determine the effects of repeated choral reading of poetry on oral reading fluency and comprehension of third-grade students. During the control phase of the study, 76 students participated in reading instruction using the research school's basal reading series. The same students chorally read a poem for five days during each of the four weeks of the intervention phase, in addition to the continued use of the basal reading series. Three data collection instruments were used to examine the effectiveness of the intervention.

DIBELS ORF scores from the control phase (beginning to mid-point ORF scores) were compared to those of the intervention phase (mid-point to ending ORF scores) to determine if students' oral reading fluency increased. Means and standard deviations for the DIBELS ORF results during the control phase and intervention phase are given in Table 2.

A loss in oral reading fluency was observed during the control phase of the study for students served in regular education ($n = 46$, $M = -1.23$) and EIP ($n=23$, $M = -3.30$). Students served in special education showed an increase in oral reading fluency during the control phase of the study ($n = 5$, $M = 5.40$). The improvement, however, was not statistically significant ($p > .05$).

During the intervention phase of the study, the sample demonstrated a mean gain in oral reading fluency of 18.78. Regular education students showed the highest gain in oral reading fluency ($M = 21.21$). While special education students continued to show increases in oral reading fluency ($M = 7.20$), the difference in ORF scores was not statistically significant ($p > .05$).

Table 2

DIBELS ORF Mean Score Comparisons for Whole Sample and Each Instructional Delivery Mode

| Instructional Delivery Mode | Control (Basal-Only) Phase | | | | | Intervention (Basal + Poetry) Phase | | | | |
|-----------------------------|----------------------------|--------------------------|---------------|-------|------|-------------------------------------|-----------------------|-------------------|-------|------|
| | Mean (M) WPM (beginning) | Mean (M) WPM (mid-point) | Mean (M) Gain | SD | p | Mean (M) WPM (mid-point) | Mean (M) WPM (ending) | Mean (M) WPM Gain | SD | p |
| Whole Group (N = 76) | 80.67 | 79.43 | -1.42 | 16.70 | 0.39 | 79.43 | 98.41 | 18.78 | 17.14 | 0.00 |
| Regular Education (n = 48) | 90.23 | 89.30 | -1.38 | 17.02 | 0.43 | 89.30 | 110.50 | 21.21 | 17.51 | 0.00 |
| EIP (n = 23) | 70.61 | 67.30 | -3.30 | 17.99 | 0.29 | 67.30 | 84.17 | 16.22 | 15.70 | 0.01 |
| Special Education (n = 5) | 35.20 | 40.60 | 5.40 | 5.13 | 0.38 | 40.60 | 47.80 | 7.20 | 16.50 | 0.27 |

Cohen's d was used to calculate the effect size of the poetry intervention on the DIBELS ORF scores for the sample and each instructional delivery mode. The poetry intervention had a very large effect on the DIBELS ORF scores for students served in regular education ($d = 1.32$) and EIP ($d = 1.18$). An average student served in regular education who participated in the poetry intervention would be expected to outscore approximately 90% of the regular education students who only received fluency instruction from the basal reading series. An average EIP student who participated in the poetry intervention would be expected to outperform nearly 88% of students in the same instructional delivery mode who only received fluency instruction from the basal reading series. While the effect size for the special education students on the DIBELS ORF assessment was small ($d = 0.16$), average students in this instructional delivery mode who participated in the poetry intervention would be expected to outperform about 56% of other students in the same instructional delivery mode who only received fluency instruction through the basal reading series.

STAR grade-equivalency scores from the control phase to the intervention phase were compared to determine if students' reading comprehension increased as a result of the intervention. Means and standard deviations for the STAR comprehension test during the control phase and intervention phase are given in Table 3.

Table 3

STAR Reading Grade Equivalent Mean Score Comparisons

| Instructional Delivery Mode | Control (Basal-Only) Phase | | | | | Intervention (Basal + Poetry) Phase | | | | |
|-----------------------------|----------------------------|-------------------------|------------------|------|------|-------------------------------------|----------------------|------------------|------|------|
| | Mean (M) GE (beginning) | Mean (M) GE (mid-point) | Mean (M) GE Gain | SD | p | Mean (M) GE (mid-point) | Mean (M) GE (ending) | Mean (M) GE Gain | SD | p |
| Whole Group (N = 76) | 2.8 | 2.9 | 0.03 | 0.69 | 0.45 | 2.9 | 3.2 | 0.33 | 0.92 | 0.02 |
| Regular Education (N = 48) | 3.1 | 3.0 | -0.06 | 0.77 | 0.46 | 3.0 | 3.5 | 0.47 | 0.99 | 0.01 |
| EIP (N = 23) | 2.4 | 2.6 | 0.23 | 0.50 | 0.07 | 2.6 | 2.6 | -0.05 | 0.68 | 0.37 |
| Special Education (N = 5) | 2.3 | 2.3 | -0.02 | 0.43 | 0.47 | 2.3 | 2.9 | 0.72 | 0.71 | 0.06 |

Small losses in comprehension grade-equivalent scores on the STAR test were observed during the control phase of the study. Students served in regular education demonstrated the most loss ($M = -0.06$), but students served in special education showed a loss as well ($M = -0.02$). Students served in EIP classrooms demonstrated the highest gain during the control phase ($M = 0.23$). However, the difference in scores from beginning to mid-point was not statistically significant ($p > .05$).

Gains in comprehension scores were made by two of the three different instructional groups during the intervention phase. Students in regular education produced a mean gain on the STAR reading test of 0.47, which was statistically significantly different at $p < .05$. While the students served in special education produced a mean gain of 0.72 on the STAR reading test, the gain was not statistically significant ($p > .05$). Students in EIP classrooms saw a small loss of comprehension on the STAR reading test ($M = -0.05$), but the loss was not statistically significant different from the control scores ($p > .05$).

Overall, the poetry intervention had a small effect ($d = 0.37$) on the STAR grade-equivalency scores for the entire sample of students in the study. An average student in the intervention group would be expected to outperform approximately 64% of the students in the control phase. For the special education instructional group, however, the effect of the poetry intervention on comprehension scores was very large ($d = 1.41$). Special education students in the poetry intervention would be expected to outperform 92% of special education students in the control (basal-reading series only) phase.

Were correlations evident in the current study between oral reading fluency and reading comprehension? Researchers (Jenkins, et al., 2003, Fuchs, et al., 2001) have previously documented positive correlations between oral reading fluency and reading comprehension. Pearson r was used to calculate the correlations between the mean gains on the DIBELS ORF

test and the STAR reading test for the sample and each instructional subgroup. The results are presented in Table 4. Positive correlations existed between the DIBELS ORF mid-point scores and the STAR grade-equivalent mid-point scores in the current study. For the whole group, there was a high positive correlation ($r = 0.68$) between the DIBELS ORF and STAR grade-equivalent scores. Scores on the DIBELS ORF test can be used to predict approximately 46% of the STAR grade equivalent scores for this sample. Moderate positive correlations existed for the students served in regular education ($r = 0.64$) and special education ($r = 0.51$) between the DIBELS ORF and STAR scores, and a high positive correlation ($r = 0.68$) was found between the data for students in EIP classrooms.

Table 4

Correlation Coefficients between DIBELS ORF and STAR Reading Mean Scores

| Instructional Delivery Mode | Control (Basal-Only) Phase | | | | Intervention (Basal + Poetry) Phase | | | |
|-----------------------------|----------------------------|-----------------------------|------|----------------|-------------------------------------|---------------------------|------|----------------|
| | DIBELS Mean (M) (midpoint) | STAR Mean (M) GE (midpoint) | r | r ² | DIBELS Mean (M) (ending) | STAR Mean (M) GE (ending) | r | r ² |
| Whole Group (N = 76) | 79.43 | 2.9 | 0.68 | 0.46 | 98.41 | 3.2 | 0.65 | 0.42 |
| Regular Education (N = 48) | 89.30 | 3.0 | 0.64 | 0.41 | 110.50 | 3.5 | 0.61 | 0.37 |
| EIP (N = 23) | 67.30 | 2.6 | 0.68 | 0.46 | 84.17 | 2.6 | 0.56 | 0.31 |
| Special Education (N = 5) | 40.60 | 2.3 | 0.51 | 0.26 | 47.80 | 2.9 | 0.87 | 0.76 |

After the poetry intervention, the strength of the correlation increased to 0.87 for the students served in special education. DIBELS ORF scores can be used to predict approximately 76% of the STAR grade-equivalent scores for students served in special education. The correlation between the DIBELS ORF and STAR grade-equivalent scores remained nearly constant for the students in a regular education setting ($r = 0.61$), while the strength of the correlation decreased to the moderate positive range ($r = 0.56$) for students in EIP classes. Scores on the DIBELS ORF test can be used to predict about 31% of the STAR reading grade equivalents for students served in EIP.

The Poetry Attitudes Survey was given to students prior to the poetry intervention and at the conclusion of the intervention. Means and standard deviations for the 8-item Likert-type responses are reported in Table 5. Prior to the intervention, students reported a slightly better than neutral attitude ($M = 2.31$, $SD = 0.80$) toward reading poems with the entire class (Question 6).

Table 5

Comparison of Pre- and Post-Intervention Poetry Attitude Survey Responses

| Question | Pre- Intervention Mean | SD | Post- Intervention Mean | SD | p | Gain |
|------------------------------------------------|------------------------------|------|-------------------------------|------|------|-------|
| 1. I enjoy reading poems by myself. | 2.58 | 0.67 | 2.50 | 0.73 | 0.24 | -0.07 |
| 2. Poems are easy to understand. | 2.49 | 0.59 | 2.62 | 0.50 | 0.07 | 0.13 |
| 3. I enjoy talking about poems. | 2.22 | 0.80 | 2.31 | 0.79 | 0.26 | 0.09 |
| 4. I like to write poems. | 2.49 | 0.63 | 2.39 | 0.78 | 0.18 | -0.10 |
| 5. I like to listen to the teacher read poems. | 2.70 | 0.57 | 2.86 | 0.44 | 0.03 | 0.16 |
| 6. I like to read poems with the whole class. | 2.31 | 0.79 | 2.44 | 0.76 | 0.15 | 0.13 |
| 7. Poems help me imagine things. | 2.45 | 0.63 | 2.43 | 0.76 | 0.45 | -0.02 |
| 8. I have a poem book at home. | 1.72 | 0.84 | 1.68 | 0.86 | 0.39 | -0.04 |
| Overall Survey Results | 2.37 | 0.30 | 2.40 | 0.34 | 0.42 | 0.03 |

After the intervention, students' attitudes increased 13% toward reading poems with the entire class. Students showed a 17% increase in their enjoyment of discussing poetry (Question 3) and in their enjoyment of listening to the teacher read poems (Question 5) after the intervention.

The students reported a slight decrease in attitude in four areas measured on the Poetry Attitudes Survey. In their attitudes toward writing poetry (Question 4), students reported a generally positive attitude before the intervention ($M = 2.49$, $SD = 0.63$). At the conclusion of the intervention, students reported a more neutral attitude toward writing poetry ($M = 2.39$, $SD = 0.78$), a decrease of 10%. Students reported a 7% decrease in their enjoyment of reading poems alone (Question 1) and a 4% decrease in owning a personal poetry book (Question 8). Differences in attitude were not statistically significant from pre-intervention to post-intervention, with the exception of the enjoyment of listening to the teacher read poems orally (Question 5, $p < .05$).

Discussion

Conclusions

Did the repeated choral reading of poetry increase students' oral reading fluency and reading comprehension? According to the results of the study, the repeated choral reading of poetry was a beneficial and practical instructional activity. Students made improvements in both in oral reading fluency and comprehension during the intervention phase of the study. Overall, the intervention was most effective for students served in regular education. These students demonstrated a mean gain of 21.21 words per minute during the intervention phase according to

the DIBELS ORF test, and this gain was determined to be statistically significant ($p < .01$). Students served in regular education also demonstrated a statistically significant gain during the intervention in comprehension according to the STAR reading test ($M = 0.47$, $p < .05$). The results are consistent with findings from the Jenkins study (Jenkins et al., 2003) that a positive correlation exists between oral reading fluency and comprehension ($r = .83$), though the correlation was weaker in the current study ($r = .65$). Kuhn (2005) determined that repeated reading in the form of choral reading, partner reading, and echo reading led to improvements in oral reading fluency, expressive reading, and word recognition skills. The current study, which utilized repeated choral reading, reflected Kuhn's results.

Students served in the Early Intervention Program demonstrated mixed gains as a result of the intervention. These students made a significant gain in oral reading fluency ($M = 16.22$, $p < .05$), but demonstrated a loss in comprehension on the STAR reading test ($M = -0.05$, $p > .05$). In the current study, 61% of the students enrolled in EIP classes were non-White. However, Hintze et al. (2002) determined that neither ethnicity nor socioeconomic status were strong predictors of reading comprehension scores.

The students served under the umbrella of special education showed slight improvements in oral reading fluency and strong gains in reading comprehension. This instructional group was the only one to show improvement in oral reading fluency in the control phase of the study ($M = 5.40$). Growth continued for these students in oral reading fluency during the intervention phase ($M = 7.40$). Wolery et al. (1992) found that eight students with moderate mental handicaps had more success with choral responding as compared to individual responding when learning new words. Though the current study did not compare choral reading to individual reading, it seems to support the benefits of choral reading for exceptional children. Valleley and Shriver (2003) used repeated readings in a study of four secondary students with reading disabilities. They found that the repeated reading instructional strategy was beneficial in increasing oral reading fluency, but not comprehension. The current study, which included 5 elementary students with special needs, demonstrated that repeated readings can have a positive effect on comprehension scores as well. Students with various mild handicaps in the current study demonstrated a mean gain in comprehension of 0.72, but the gains were not statistically significant. One possible explanation for the gains in oral reading fluency and comprehension but the lack of statistical significance could have been the readability level of the selected poems. Choosing poems that are of a lower readability (but are still sufficiently challenging) may cause the intervention to be more successful with these students in the future.

In an informal discussion after the study, the teacher participants reported that the intervention was simple to incorporate into their daily classroom routines and that they would like to continue the intervention after the study. The intervention showed practical significance as reflected in the effect sizes of the study. The effect size of the intervention on the DIBELS ORF scores was very high for both the regular education and EIP instructional delivery models. The intervention had a small effect on the STAR reading test scores for the entire sample.

Did the repeated reading of poetry improve student attitudes toward poetry? Students' attitudes toward the poetry genre slightly improved ($M = 0.03$) as a result of the intervention. The intervention allowed students to participate in whole-group discussions, allowing students to increase their understanding of the genre. Student attitudes toward listening to the teacher read poems increased, and the improvement was statistically significant ($p < .05$). In a discussion article, Nowak-Fabrykowski (2000) mentioned that poetry could foster the imaginations of young children, but the current study did not support her assumption. Students in the current

study reported a 2% decrease in their responses to Question 7 on the Poetry Attitudes Survey, which asked students to respond to the statement, “Poems help me imagine things.” Student enjoyment of both reading poems alone and writing poems also decreased during the study. These concepts however, were not an integral part of the intervention.

A student recently approached the researcher and thanked her for coming to his class to show him how to “do poetry.” He reported that the poetry reading, “...helped me read better.” In the opinion of the researcher, knowing that students were personally impacted by the intervention made the project a worthwhile experience.

Significance/Impact on Student Learning

As a result of the repeated choral reading of poetry, students significantly increased their oral reading fluency, and, to a lesser extent, their reading comprehension. As reading skills are increased, students’ overall academic achievement and confidence should improve. Upper elementary students are expected to move from learning to read to reading to learn.

The intervention impacted student affect as well. The poetry reading was enjoyable to the students as reflected in the survey, and was short enough in duration to keep their attention. Teacher modeling had a positive impact on students’ attitudes toward listening to poetry. It was observed that children were rereading the poems that were used in the study several weeks after the intervention ended.

Factors that Influenced Implementation

Several factors influenced the implementation of this study. Two 2-day holidays during the intervention phase interrupted the flow of the project. One drawback to a project of this magnitude was that the researcher spent time out of the classroom in order to give the surveys and collect data. The computer lab facilitator administered the STAR reading tests to the students in the sample, which was very helpful to the researcher but could have influenced the results of this test. The students may have perceived the testing as unimportant due to the fact that their classroom teacher was not present during the administration, and therefore may not have tried their best. The Hawthorne Effect may have played a role as well; however, having all students participate in a control phase as well as the intervention phase may have reduced this phenomenon.

Implications & Limitations

The findings of this study lend credence to other research as to the effectiveness of repeated reading in increasing students’ oral reading fluency and reading comprehension. Increasing a student’s automaticity in word recognition skills as well as improving intonation and expression will help children be more able to focus their attention onto the meanings an author is trying to convey with the written word. Findings from the control phase of the study demonstrate that using the basal series alone in the research school probably will not lead to large gains in oral reading fluency.

Results of the intervention were mostly positive; therefore, the researcher will continue using choral repeated rereading of poetry as an instructional method. Building administrators in the research school may seek to use poetry reading as a way to explicitly teach fluency, or they might want to consider any number of recently published fluency programs. Teachers relying solely on the use of a basal reading series may consider using this intervention to aid students in building oral reading fluency, and therefore increasing reading comprehension, as well.

To a small extent, the current study supported the idea of the inclusion-model classroom. Students who have been identified as having a mild intellectual disability or behavior issues increased their DIBELS and STAR reading test scores not only during the intervention, but

during the control phase as well. Serving these exceptional children side-by-side with regular education students inherently raises academic and social expectations for all students.

There are several limitations that must be brought to light in examining the results of this study. Action research in general brings about several considerations. First of all, the control and treatment were not as stringent as they would have been in a pure research project. The students in the study were students in the school in which the researcher was employed, so researcher bias may have played a role in the achievement of the students. Other factors, such as small-group reading, phonics instruction, or participation in the school's Accelerated Reader program, could have influenced the results. The short length of the project (eight weeks), small numbers of students in EIP ($n = 23$) and special education ($n = 5$), and the inexperience of the researcher also limited the study. Adding any type of explicit instruction in oral reading fluency might have caused the DIBELS ORF scores to increase.

Further research is needed in order to validate the findings of this study. While the effectiveness of repeated reading is fairly well-documented in the literature, more studies should be conducted on the effects of choral reading. Studies comparing the effects of the repeated choral reading of poetry to published fluency programs might be conducted to determine which is more effective. The inconsistent performance of the students served in remedial education demonstrates a need for closer examination. Research needs to be done in the area of increasing literacy skills for exceptional children. It is suggested that another study be conducted to determine how the repeated choral reading of poetry affects the reading achievement of those students facing a specific learning disability, a mild intellectual handicap, or an orthopedic impairment.

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Appendix A
Poems

Poem 1

Runny Nose
Kay Winters

It's just not funny
When your nose is runny:
You feel all soggy,
Hoarse and froggy.
Your throat is scratching;
The germs are hatching.
You know it's catching –
KERCHOOO!

Alexander, R. (Ed.). (1990). *Poetry Place Anthology*. Jefferson City, Missouri: Scholastic.

Poem 2

My Glider
Jack Prelutsky

My glider is graceful,
my glider is grand,
I launch it aloft
with a flick of my hand.
It smoothly ascends,
then it pauses and swoops,
it hovers in space
and turns intricate loops.

My glider is delicate,
nimble and rare,
it rises on gossamer
currents of air.
My glider is presently
useless to me-
my glider is stuck
in a very tall tree.

Prelutsky, J. (1994). *A Pizza the Size of the Sun*. New York: Scholastic.

Poem 3

Choices
Brod Bagert

Daddy agrees I need a pet,
And Mom, you know it's true,
So I made a little list
But the choice is up to you.

An elephant, a whale,
A tiger with a tail,
An eagle to soar in the air.
A horse, a donkey,
A gorilla, a monkey,
A camel, a boar, or a bear.

Or...a cuddly little kitten,
I'll like whatever you do.
So now you have my list
But the choice is up to you.

Bagert, B. (2002). *Giant Children*. New York: Scholastic.

Poem 4

Spaghetti
Shel Silverstein

Spaghetti, spaghetti, all over the place,
Up to my elbows, up to my face,
Over the carpet and under the chairs,
Into the hammock and wound round the stairs,
Filling the bathtub and covering the desk,
Making the sofa a mad mushy mess.

The party is ruined, I'm terribly worried,
The guests have all left (unless they're all buried),
I told them, "Bring presents." I said, "Throw confetti."
I guess they heard wrong
'Cause they all threw spaghetti!

Silverstein, S. (1974). *Where the Sidewalk Ends*. New York: Harper Collins.

Appendix B



POETRY ATTITUDES SURVEY

The purpose of this survey is to find out how you are feeling about poetry. In order to protect your privacy, **DO NOT WRITE YOUR NAME ON THIS PAPER.**

DIRECTIONS: Read each statement. If you agree with the statement, fill in the space under the “happy face.” If you disagree with the statement, fill in the space under the “sad face.” If you are not sure, or if you feel neither happy nor sad, fill in the space under the “straight face.” This survey will not affect your grade. Please be honest in your responses.

Note: the face graphics from the original document were not available

- | | | | |
|------------------------------------------------|-----------------------|-----------------------|-----------------------|
| 1. I enjoy reading poems by myself. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 2. Poems are easy to understand. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 3. I enjoy talking about poems. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 4. I like to write poems. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 5. I like to listen to the teacher read poems. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 6. I like to read poems with the whole class. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 7. Poems help me imagine things. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | | | |
| 8. I have a poem book at home. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |