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IMPACT OF SHORT-TERM INTENSE FLUENCY INSTRUCTION ON STUDENTS' READING ACHIEVEMENT: A CLASSROOM-BASED, TEACHER-INITIATED RESEARCH STUDY

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Abstract

Reading fluency continues to be a critical factor in elementary students' reading development. Many students, who struggle in reading, manifest difficulties in some area of fluency. In the present study, a fourth grade teacher implemented the Fluency Development Lesson (FDL), an intensive fluency instructional routine, with her six lowest achieving students. In a twelve-week implementation of the FDL all students made significant and substantial progress in both fluency and reading comprehension. The authors make a call for more studies of intensive fluency interventions to demonstrate and confirm their effectiveness.

Keywords: Fluency, Comprehension, Reading, Struggling Readers

Introduction

Recent policy positions and scholarly research in reading education have identified reading fluency as a critical and essential reading competency that is necessary for full proficiency in reading. Both the National Reading Panel (2000) and the Common Core State Standards (2016) have noted reading fluency as foundational for reading growth and should be mastered in the elementary grades. Research has found that approximately 75% of students who struggle in high stakes tests of reading achievement demonstrate difficulty in one or more components of reading fluency (i.e., word recognition accuracy, word recognition automaticity, and reading prosody) (Valencia & Buly, 2004). Moreover, other research has shown many students beyond the elementary grades continue to struggle in reading fluency and that measures of reading fluency continue to be highly correlated with overall reading proficiency (Paige, Magpuri-Lavell, Rasinski, & Smith, 2013; Paige, Rasinski, & Magpuri-Lavell, 2012; Rasinski, Padak, McKeon, Krug,-Wilfong, Friedauer, & Heim, 2005). Indeed, comprehensive and scholarly reviews of research related to fluency have concluded that it a critical component for success in learning to read (Chard, Vaughn, & Tyler, 2002; Kuhn & Stahl, 2003: Rasinski, Reutzel, Chard, & Linan-Thompson, 2011).

Literature Review

Fluency is important because it is a prerequisite to more sophisticated levels of reading comprehension (Rasinski, 2012). Once students are able to read words in texts accurately, automatically and with expression that reflects meaning, students are more able to focus their cognitive resources on making meaning - comprehension—rather than on the more basic and foundational competencies in reading – word recognition.

Despite the scholarly work that has consistently demonstrated the relevance of reading fluency to reading achievement, there seems to be a degree of dismissiveness toward fluency within the literacy community. In the annual *What's Hot; What's Not* survey of literacy experts (e.g., Cassidy, & Grote-Garcia, 2014) reading fluency has been consistently identified as a reading competency that is *not hot* and *should not be hot.* While the *What's Hot; What's Not* survey does not speculate as to the reasons for this reaction to fluency, it may be that the negative reaction to fluency has been caused by the way in which fluency instruction has been manifested in many programmatic approaches to fluency. In these programs, fluency is measured by students' reading speed as measured by words read correctly per minute (WCPM). Research acknowledges that this is an appropriate measure of word recognition automaticity which itself is related to general reading proficiency (Fuchs, Fuchs, Hamlett, Walz, & Germann, 1993; Fuchs, Fuchs, Hosp, & Jenkins, 2001). Given the correlation between reading speed and word recognition automaticity, many fluency instructional programs as well as many well-meaning teachers have implicitly reversed the logic and made instruction that focuses on increasing reading rate as the primary method for improving fluency. We see this manifested in the regular use of *timed readings* in which students are asked to read and reread relatively short passages at an ever

quicker pace. This type of speed-oriented reading is in opposition to the authentic meaningful reading that most reading scholars feel is key to reading growth. Moreover, there is no compelling research that has demonstrated that explicit instruction in increasing students' reading speed results in improved overall reading.

Literacy scholars suggest that reading fluency is best developed through some very basic reading activities. These include word recognition instruction, listening to fluent readings of texts, wide reading, repeated reading, and assisted reading in which students read a text while simultaneously hearing the text read to them in a fluent manner (Rasinski, 1989, 2010). Individually there is a good body of research that supports wide reading, repeated reading, and assisted reading (Rasinski, Reutzel, Chard, & Linan-Thompson, 2011). However, even greater effects can be anticipated when these individual instructional approaches are combined in a synergistic and authentic manner.

The Fluency Development Lesson. The Fluency Development Lesson (FDL) (Rasinski, Padak, Linek, & Sturtevant, 1994) was developed as a fluency intervention that can be applied to large groups of typically developing elementary grade student or more intensively to smaller groups of students who have yet to achieve proficiency in fluency and who also struggle in overall reading achievement. The FDL is a daily lesson in which students are given the task of mastering to the point of fluency a new relatively short (100-200 words) text each day. The lesson takes approximately 20 minutes and can be implemented with classroom groups, small groups, or individual students. Throughout any part of the FDL there is never an explicit or implicit focus on increasing reading rate. The general daily protocol for the FDL involves the following steps:

1. In preparation for the lesson the teacher selects a text for the day. The text can be a passage from a story, an informational piece, a poem, or a song. The texts should be at or slightly above the students' instructional reading level and should be a reading with good phrasing and expression. The teacher makes two copies of the text for every student, and also makes a larger display copy for group reading.
2. Modeling Fluent Reading. The teacher introduces the display copy of the text to students and reads it to the students two to three times while students follow along silently. The teacher can read the text with various forms of expression or lack of expression.
3. Following the teacher's reading, students are led in a brief discussion of the text and the nature of the teacher's oral reading.
4. Assisted Reading. Next, the teacher and students read the display copy of the text two to three times chorally. The choral readings can change from the whole group reading the text to having different subgroups read the passage.
5. Assisted and Repeated Reading. Following the choral reading, students are divided into groups of two or three, given their individual copies of the text, and are given about five minutes to practice the text in their groups. One student reads the passage while his or her partner(s) follow along silently, provide help as needed, and

give positive feedback. Each student is given the opportunity to practice in this manner.

6. At this point students are able to read the text with some degree of fluency. In order to make the FDL an authentic activity, students are invited to perform their text for an audience. The audience can simply be other classmates, but it can also be made up of volunteer adults stationed outside the classroom, or even other classrooms of students.
7. Word Work. At the end of the performance the teacher and students select 5-10 words from the passage and engage in quick word study activities. These can include finding other words that contain a selected rhyme or word family from the passage (e.g. From the poem *Rain Rain Go Away*, other –ay words such as *day, play, stay*, and *stray* can be discovered and displayed for students to read), sorting the corpus of words in various ways, examining the morphological nature of certain words (e.g. *tract* is a morpheme in *tractor* means to pull; other words that contain the tract morpheme and that mean to pull include *distract, attract, extract,* and *contract*) , and playing word games (e.g. word ladders using words from the passage). The formal FDL ends with the word study.
8. Repeated Reading. The FDL continues at home. Students take their second copy of the passage and are encouraged to read the passage to family members at home a select number of times, usually five or more.
9. Repeated Reading. A new Fluency Development Lesson is implemented the following day with a new text. However, before beginning to read the new text, the teacher leads students in reading and celebrating their mastery of texts from previous days.

Teachers employing the FDL are encouraged to vary the protocol to meet their own style of instruction and needs of the students. The key elements required in any FDL are modeling fluent reading, assisted reading, repeated reading, and word work. The key goal for any FDL is for students to master a new text (poem) with each lesson to the point of reading the text with good fluency - -word recognition accuracy, automaticity, and expression.

The present action research study attempted to determine the effects of the Fluency Development Lesson when employed in a regular classroom setting with students identified as struggling in reading. The following research question guided the study: What are the effects of a regular classroom implementation of the Fluency Development Lesson on the reading achievement of fourth grade struggling readers?

Methodology

Implementing the FDL in a Real Classroom Setting. Kristy DiSalle is a fourth grade teacher who attended a series of professional development workshops by Timothy Rasinski. During his workshop Rasinski argued for the need for intensive fluency instruction for struggling readers (students who are reading at least one grade level below their assigned grade level). He described the FDL in depth and provided a simulation activity for teachers attending the workshop. Having six students in her class who were struggling in reading,

DiSalle decided to implement the FDL with them daily in addition to their regular reading curriculum. The regular reading curriculum included guided reading activities in which groups of students read, discuss, and respond to stories and informational texts, word study, and writing.

DiSalle had 6 students who were reading at a 2nd grade level, according to the reading assessment used by the school (Renaissance Learning, 2016). Kristy began using the FDL with her 6 struggling students (3 girls and 3 boys) for 4 to 5 days a week for approximately 20 minutes per lesson for a three-month period. She also added reciprocal teaching comprehension activities (Oczkus, 2010) to the FDL to create a more intense focus on comprehension. Five of the six students (Students 1 through 5 in Table 1) also received Title 1 reading services 4-5 days per week for 20 minutes. Up until the implementation of the FDL, Kristy's six struggling readers had not been making adequate progress (their reading achievement had remained stagnant from the beginning of the school year until the beginning of school until the implementation of the FDL protocol) in reading despite regular classroom reading instruction and Title I intervention for 5 students. The FDL was chosen and implemented for it's potential to accelerate students' growth in reading.

Over the course of the implementation period the FDL was administered approximately 50 times to the group of students (because of absences not all students participated in all lessons). The FDL intervention was implemented at a table in the back of the classroom. The remainder of the class worked independently at their seats on vocabulary building activities during the FDL. Kristy chose a new poem for each lesson. She used seasonal themes and difficulty of the poem as chief criteria for poem selection. Poems were selected from a variety of authentic sources (e.g., Liatsos, 1995; Scholastic, 2004).

DiSalle began the FDL by having students skim and scan the daily poem to make predictions about the content and structure of the poem. Then as students progressed through the FDL, they worked to clarify words or phrases they didn't understand, formed questions about content in the selection, and created a summary of the poem. With the poem projected on the Smartboard, students read and performed the poem to the rest of class using music stands donated by the middle school band teacher. Kristy's word study activities included identifying common word families in poems and playing word games using words from the selected each poem. The home portion of the FDL involved the students reading the poem three times to family members. One parent commented, "The poems are a great tool to use at home, as we enjoy reading together. We appreciate the reading fluency lesson, as Jay is benefiting greatly. Thank you!"

Assessment Method. The STAR Reading assessment (Renaissance Learning, 2016), the reading assessment that was chosen be the school to measure students' reading achievement and progress, was used to measure students' growth in reading. It is a computer-adaptive assessment of general reading achievement and comprehension of students in grades 1 through 12. The assessment provides information on students' general performance in reading comprehension. The difficulty of items is adjusted automatically to reflect the skill level of all students, including students with special needs. Students read a

series of selections, with the length and difficulty dependent on the student's level and progress during the assessment, and answer multiple-choice comprehension questions. The STAR Reading assessment generates a Grade Equivalent (GE) score to measure proficiency level in comprehension. The National Center for Response to Intervention's analyses of the STAR Reading assessment reports validity coefficients ranging from .68 to .92 and reliability coefficients from .81 to .92 (National Center for Response to Intervention, 2016).

The Estimated Oral Reading Fluency (Est.ORF) is part of the STAR Reading assessment and is a measure of proficiency in fluency (word recognition accuracy and automaticity), foundational reading competencies that many students who struggle in reading are not proficient (Valencia & Buly, 2004). The Est.ORF was developed by linking STAR assessment data with known oral reading fluency assessments of over 12,000 students in grades 1 through 4. The Est. ORF is reported in words read correctly per minute on grade level material.

Results

Students Gain in Comprehension and Fluency. Students were tested on November 30, 2015, and March 9, 2016, to determine progress. Testing included the STAR Reading test to determine a student's growth in reading comprehension and an estimated oral reading fluency. The results of both assessments can be seen in Tables 1 and 2.

The tables provide a summary of the assessments of students. Table 1 details the results for each student while Table 2 summarizes results for all 6 students. In approximately 12 weeks of using the FDL, the students made on average slightly over a year's growth in reading comprehension. Oral reading fluency increased from 69.2 to 96.8 word read correctly per minute (WCPM), a gain of 27.6 WCPM during the implementation of the FDL.

Although only one of the six students achieved grade level proficiency in comprehension, the gains all six students made in both comprehension and fluency are remarkable in terms of their magnitude. In approximately one third of a school year, students made slightly over a year's growth in reading comprehension. Moreover, at the initial assessment students' reading comprehension was, on average, at a 2.8 grade level equivalent. This means that in roughly 3.3 years of reading instruction (Grades 1 through 4) prior to the initial assessment the six students in the present study made, on average, slightly over a half year's progress in comprehension per year of instruction. During the 12 week FDL implementation students made as much progress in comprehension as had been previously made in approximately 2 years.

Similarly, all six students in the present study have not achieved benchmark levels for oral reading fluency as set by the STAR Reading assessment. Still, the gains made by students in fluency are remarkable. Assuming 3.3 years of reading instruction prior to implementing the FDL, the six students in the present study made, on average an increase of 21 WCPM per year. In the 12 week implementation of the FDL, students in the present cohort made an

average gain of 27.6 WCPM. In other words, the students in our study using the FDL made a greater gain in a 12 weeks implementation of the FDL than students had on average made in an entire year of reading instruction.

During the period of the FDL intervention period all six of Kristy's struggling readers made significant progress in both comprehension and reading fluency. Other gains were measured by student feedback. One student commented, "FDL helps me present in front of the class. It is fun and I like the poems because they are silly. Now I read better, like I have more expression. It also helps me learn new words that I don't understand." Another student shared, "It (FDL) helps me understand words. It also helps me with my expression and to not be scared to perform in front of people."

Table 1: Student Progress Using the Fluency Development Lesson

Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	1 (boy)	2.8	4.23	73	125
3/9/16		3.4	4.62	93	139
G Gain		+0.6	+0.39	+20	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	2 (boy)	2.4	4.25	63	125
3/9/16		4.1	4.62	105	139
Gain		+1.7	+0.37	+42	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**

11/12/15	2 (boy)	2.4	4.25	63	125
3/9/16		4.1	4.62	105	139
Gain		+1.7	+0.37	+42	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	3 (girl)	2.4	4.23	63	125
3/9/16		3.1	4.62	82	139
Gain		+0.7	+0.39	+19	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	4 (boy)	2.4	4.23	63	125
3/9/16		3.4	4.62	91	139
Gain		+1.0	+0.39	+28	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	5 (girl)	2.9	4.23	79	125
3/9/16		3.4	4.62	93	139

Gain		+0.5	+0.39	+14	+14
Date	**Student**	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	6 (girl)	2.8	4.23	74	125
3/9/16		4.6	4.62	117	139
Gain		+1.8	+0.39	+43	+14

Table 2: Student Progress Summary Results

Date	**Comprehension Grade Equivalent**	**Expected Grade Placement**	**ORF Scores (WCPM)**	**Expected Grade 4 ORF**
11/12/15	2.6	4.23	69.2	125
3/9/16	3.7	4.62	96.8	139
Gain	+1.1	+0.39	27.6	+14

Discussion and Implications

What Does This Mean? We acknowledge that this non-traditional form of research has many limitations. The number of students participating is quite low and makes it difficult to generalize to other situations. We did not have a control group against which we could compare results. Given that the research was done within an actual classroom setting meant that we could not control other instructional and other variables that may have impacted the results. We also note that prosody, an important component of reading fluency, was not assessed in the present study. Although parents and teacher observations as well as student comments noted improvements in prosody, it was not formally assessed.

On the other hand, the fact that this study was done within the context of an actual classroom also meant that it took place in an authentic school placement in which the teacher (Kristy DiSalle) had to deal with all the classroom exigencies that teachers deal with on a daily basis. She was unable to control for when students may have been ill or called out of the classroom for other reasons. Moreover, she still had to deal with issues related to her other students in her classroom during the FDL instruction. In other words, the real-life-classroom nature of the study means that the results that were observed from using the FDL can occur when teachers intentionally implement the lesson in order to meet the specific needs of students.

Despite the acknowledged limitations noted above, we do think there is much to take from the present study. Previous research has demonstrated that fluency is a critical variable for reading achievement. As reading fluency is achieved, readers are able to channel their cognitive resources to comprehension of text, the true goal of reading. Moreover, research has also shown that many students struggle to achieve appropriate levels of reading fluency. Clearly instructional interventions to improve and even accelerate students' fluency development are called for. Many current commercial approaches to fluency implicitly or explicitly tend to focus on an extraneous variable to fluency – speed of reading. These programs improve reading speed, a measure of fluency, by focusing students' attention on increasing speed. Although reading speed may increase, there is limited evidence that word recognition automaticity and reading comprehension also improve.

Rather than focus on increasing reading speed, the Fluency Development Lesson combines widely acknowledged components of exemplary reading fluency instruction to create an authentic reading activity in which students rehearse a text in order to eventually perform it for an audience. The present study found that implementation of the FDL with students who have demonstrable difficulty in reading fluency can dramatically accelerate their growth in both reading fluency and comprehension in a relatively short period of time. The present study suggests that the FDL, as well as other synergistic fluency protocols, can make a real difference in helping struggling readers move toward proficiency in both the foundational reading competencies and reading comprehension.

One study of six students is clearly not definitive. However, we hope that the present study will prompt other teachers and school staff to implement the FDL in their own classrooms and schools. The results of many small scale studies conducted in real classrooms can move the field of literacy education forward to the point where many students have new hope for gaining full proficiency in reading.

About the Authors

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