



IEJEE

International Electronic Journal of Elementary Education

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Dear *IEJEE* readers,

Dr. Rasinski has shown his scholarly passion to get us understand the importance of reading fluency once more. But this time, he has made his contribution to the field of reading as a special issue editor and author. He gathered a group of active reading fluency experts and materialized this unique special issue of International Electronic Journal of Elementary Education. We just want to show some sample pieces from their scholarly well written articles below. We wish you a fluent reading!

"Reading fluency is made up of two distinct components at two ends of the reading spectrum – automaticity in word recognition and expression in oral reading that reflects the meaning of the text. In a sense, reading fluency is the essential link between word recognition at one end of the spectrum and reading comprehension at the other."

Dr. Timothy RASINSKI, Kent State University, USA

"If educators hope to improve either the oral reading fluency or the reading comprehension of struggling readers then expanding reading volume, it seems, must necessarily be considered."

Dr. Richard L. ALLINGTON, University of Tennessee, USA

"The hallmark of a truly fluent reader is the ability to engage in reading appropriately challenging and interesting self-selected texts. Providing students with scaffolds needed to support the development of reading fluency during independent, silent reading time will require major revisions in teacher and student behaviors, roles, and expectations."

Dr. D. RAY REUTZEL, Utah State University, USA

Doctoral Candidate Stephanie JUTH, Utah State University, USA

"In order to infuse expression and volume in a speech, the student must first consider the intended meaning of the speech. Then, the student adjusts his or her expression to match the meaning."

Dr. Chase YOUNG, Texas A & M University, USA

Dr. James NAGELDINGER, Elmira College, USA

"Fluency is an adaptive, context-dependent process. On a text of an appropriate level of difficulty for the reader, it involves the extraction of maximum meaning at maximum speed in a relatively continuous flow, leaving spare simultaneous processing capacity for other higher order processes. Various components of the reading process are involved in fluency, and Paired Reading offers a way of working with many of them – so that in a pair, two readers who have different reading strengths and weaknesses can learn to compensate for them in an interactive process."

Dr. Keith J. TOPPING, University of Dundee, SCOTLAND

"Research indicates that when the texts being used were not sufficiently challenging, students did not make significant progress. It is the scaffolding of challenging texts provided through the Fluency Oriented Reading Instruction (FORI), Wide Reading Fluency Oriented Reading Instruction (Wide FORI), and Fluency Development Lesson (FDL) approaches, whether through repetition or modeling (e.g. the use of echo, choral, and partner reading), that allows students to read text that would otherwise be considered frustrating. "

Dr. Melanie KUHN, Boston University, USA

Dr. Timothy RASINSKI , Kent State University, USA

Dr. Belinda ZIMMERMAN, Kent State University, USA

"In order to understand fluent reading it is helpful to discuss what is not reading fluency, or what is often called "disfluent" reading. To begin with, fluency is not reading excessively fast. Very quickly "scanning" the text, hoping to get the general gist or idea is not fluent reading. Fluent reading is not reading that is excessively slow, even if the text is read with high accuracy. Reading at a conversational pace while mispronouncing the words is not fluent reading and monotone or flat, expressionless reading is not fluent either."

Dr. David D. PAIGE, Bellarmine University, USA

Dr. Theresa MAGPURI-LAVELL, Bellarmine University, USA

"Successful reading requires readers to not only decode (sound) the words in print; they must also access the meaning of the words they decode. Although word decoding is easier in Turkish than English, if readers are not automatic in their word recognition, Turkish readers, like readers of English, must employ their cognitive resources for word recognition that could otherwise be used for higher level comprehension tasks. "

Dr. Kasım YILDIRIM, Muğla Sıtkı Koçman University, TURKEY

Dr. Timothy RASINSKI, Kent State University, USA

We want to express our sincere gratitude to Dr. Rasinski and all the contributors to this special issue of International Electronic Journal of Elementary Education. We also want to thank to Dr. Gökhan ÖZSOY, Dr. Hayriye Gül KURUYER, Doctoral candidate Hasan TABAK for their tireless support at the invisible but demanding part of the publishing process.

Sincerely,

Editors in Chief

Dr. Kamil ÖZERK, University of Oslo, NORWAY

Dr. Turan TEMUR, Dumlupınar University, TURKEY

Introduction to the Special Issue: Reading Fluency

Timothy RASINSKI

Kent State University, Kent, OH, USA

Anyone who has been following trends and issues in the teaching of reading knows that the impact and importance of reading fluency on reading instruction has waned in recent years. In the International Reading Association's annual "What's Hot, What's Not" survey of literacy scholars, reading fluency has been identified as a "not hot" topic for the past several years. In recent years fluency has been minimized or dropped from many reading curriculum, and it has been misinterpreted in its instruction by many curriculum developers. In its current downward trajectory I fear that reading fluency will be eventually relegated to a footnote in reading curricula and instruction. Allington noted in 1983 that fluency was a neglected goal of the reading instruction. Thirty plus years later it may be the case that reading fluency continues to be ignored. And, if fluency is ignored instructionally and conceptually, I think that many students in the elementary, middle, and secondary grades around the world will pay the price as they will undoubtedly struggle to achieve full proficiency in reading.

Recognizing how fluency is becoming increasingly marginalized in our school reading programs, I was honored and delighted to be asked by the editors for the International Electronic Journal of Elementary Education to edit an issue of the journal devoted specifically to reading fluency. This, I felt, may be a chance for noted fluency scholars to share their own thoughts, insights, and findings on reading fluency – what fluency is, why it is important, and how it might be taught and fostered in schools around the world. I gladly accepted this wonderful opportunity. It has been a long time since an entire issue of an academic journal was devoted to reading fluency. (To the best of my knowledge, the last time an academic journal devoted an entire issue to reading fluency was in 1991, *Theory into Practice*).

I contacted scholars who have been intimately involved in conceptualizing, critiquing, and most importantly exploring why fluency is important and how it can best be taught. Not one of my invitations was turned down. And so, in this issue we present to you some of the latest thinking about reading fluency -- what it is and how it can be fostered and taught in students. In the first article I try to make that case that fluency does matter for readers and that it is a major concern for many students who struggle in reading. Next, Richard Allington, the same scholar who called our attention to reading fluency in the early 1980s, makes the point that fluency is a matter of authentic reading practice, and that many students do not have sufficient opportunities to engage in authentic reading. Ray Reutzel and Stephanie Juth note that reading fluency is not just an oral reading phenomenon. Fluency is important for silent reading and they offer approaches for fostering fluency during silent reading. The next article by Chase Young and Jim Nageldinger explores various contexts and texts for fostering fluency. Effective fluency instruction is much more than making students read fast. Three are

several text types that can be considered for fluency and there are a variety of authentic instructional contexts for fluency. Keith Topping has been researching Paired Reading for a number of years. In his article he offers current insights into how to develop fluency and overall reading proficiency using forms of Paired Reading. Melanie Kuhn, Belinda Zimmerman and I next describe specific and integrated methods of fluency instruction that may be particularly potent for struggling readers. Then, David Paige and Theresa Magpuri-Lavell argue that reading fluency is not an issue only for the elementary grades. Many middle and secondary school readers continue to struggle with fluency and deserve appropriate instruction to become fluent readers. In the final article in this issue, Turkish literacy scholar Kasim Yildirim and I make that case that fluency is a reading proficiency that extends beyond reading English to reading in most other languages.

I am confident that as you read through the articles presented here you will have a much more complete view of reading fluency. And, I hope that you will see that fluency must be accepted as a competency that must be taught and nurtured in ways that are authentic, engaging, and effective. I wish you great fluency as you embark on this journey with me.





Fluency Matters

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Abstract

Although reading fluency has been dismissed and overlooked as an important component of effective reading instruction, the author makes that case that fluency continues to be essential for success in learning to read. Moreover, many students who struggle in reading manifest difficulties in reading fluency. After defining reading fluency, the article explores proven methods for improving reading fluency, and finally explores questions regarding fluency that when answered may lead to a greater emphasis on and understanding of reading fluency as a necessary part of teaching reading.

Keywords: Fluency, Reading, Struggling Readers, Automaticity, Prosody

Introduction

In the late 1970s I was working as an intervention teacher, providing instruction mainly to primary grade students who were experiencing difficulty in reading. For many of these students simply helping them master and put into practice their knowledge of sound-symbol relationships was sufficient to move the students forward. For a fairly significant number of students, more and different phonics instruction was not enough. They were already fairly good at sounding out written letters and decoding words. However, reading orally was clearly a painful experience. Although most of the words they encountered were read correctly, their reading was marked by excessively slow, letter by letter and word by word reading, lengthy pausing, and lack of expression. And, of course, this sort of reading also resulted in poor comprehension. It was clear that these students were not enjoying the experience nor were such experiences advancing their growth in reading

For my part, I did not know exactly what else I should be doing. I had been doing instruction that was conventional for the day – language experience approach, phonics, read aloud to students, discussions of the texts had read. Yet, none of these approaches seemed to tap into the needs that were manifested in these students. Fortunately I had been working on my masters' degree at the time and one professor had us reading some professional articles that were beginning to appear on this concept called reading fluency. One piece in particular by Carole Chomsky (1976) entitled "After decoding: What? " described an intervention where students were asked to read a text repeatedly while simultaneously listening to a fluent oral rendering of the text until they were able to read the text well on

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their own without the assistance of the recording. Then students would continue the routine using a new text.

The approach seemed deceptively simple and since I was out of instructional ammunition I decided to give Chomsky's approach a try with my own students. Remarkably, my students began to make significant progress in reading. Moreover, I found that as students achieved levels of reading performance that was the equal of their more normal developing classmates, they began to see themselves as readers and were developing confidence in themselves as readers. Although I had stumble on an approach to improving reading through reading fluency instruction, I discovered that fluency was not all that popular a topic in reading education. I recall digging through the teacher's edition of the reading series we used in school, looking for reading fluency and how it was taught. Although I found detailed strands of instruction for phonics, vocabulary, and comprehension, I found very little that dealt with fluency and the development of fluency in students. I decided then that fluency was a topic I need to learn more about.

Defining Fluency

I have found that reading fluency can mean different things to different people. So, I would like to share my understanding of reading fluency. Reading fluency is made up of two distinct components at two ends of the reading spectrum – automaticity in word recognition and expression in oral reading that reflects the meaning of the text. In a sense, reading fluency is the essential link between word recognition at one end of the spectrum and reading comprehension at the other.

Automaticity in word recognition refers to the ability to recognize or decode words not just accurately, but also automatically or effortlessly. In their seminal article on reading fluency, LaBerge and Samuels (1974) noted that all readers have a finite amount of attention or cognitive energy to accomplish two essential tasks in reading – word recognition and comprehension. Attention expended for one task cannot be applied to another, it is used up. And so, when readers have to use excessive amount of their cognitive energy for word recognition, even if they are able to decode the words accurately, they have reduce the amount of cognitive energy available for comprehension and thus, comprehension suffers. These were the readers I was working with in my intervention class. They were able to decode most of the words, but simply listening to the excessive slowness of their word decoding, it was not difficult to tell that they were using up plenty of their cognitive resources analyzing and decoding the individual words in the text, they had little attention left for making sense of what they were reading.

Automatic word recognition takes phonics to the next level. Automatic readers not only recognize words accurately, they do it with minimal employment of their cognitive resources. The best examples of automatic readers are you, the person reading this article. As you read this piece, how many of the words did you have to analyze in order to sound out correctly? My guess is few if any. Most of the words you encountered in this article were identified by you instantly and effortlessly. Your minimal employment of attention means that you can reserve your attention for making meaning, or understanding the text itself.

Expression in oral reading, or prosody, is fluency's connection to meaning or comprehension. In order to read something with appropriate expression that reflects the author's purpose and meaning, the reader must have some degree of comprehension of the passage itself. Indeed, when reading orally with appropriate expression the reader is enhancing his or her own comprehension by using various prosodic elements (volume, pitch, phrasing, etc.) to expand on the meaning. Again, as I reflect on the students I had been

working with many years ago, their lack of expression and confidence in their oral reading was clearly apparent.

Why Reading Fluency Matters

Fluency matters simply because it is an essential element of proficient and meaningful reading. In his “interactive compensatory model” of reading fluency, Stanovich (1980) argued that the automaticity component of fluency is a distinguishing factor between good and struggling readers. Good readers are so automatic or effortless at the bottom up word processing requirement for reading, they can use employ their finite cognitive resources for the more important top-down requirement for reading – comprehension. Struggling readers, on the other hand, are not automatic in their word recognition, so they must use their cognitive resources for the more basic bottom-up of word recognition, thereby depleting what they will have available for more important top-down task – making meaning.

In offering an alternative explanation of reading fluency that focused on prosody, Schreiber (1980) suggested that good readers employ prosody in their reading to phrase text into syntactically appropriate and meaningful units that are not always explicitly marked by punctuation. Additionally, the oral emphasis placed on particular words or phrases in a written text create inferences that allow readers to understand text at level deeper than literal comprehension.

Over the past 30+ years, a growing body of evidence has demonstrated the link between both components of fluency and proficient and meaningful reading (Rasinski, Reutzel, Chard, & Linan-Thompson, 2011). Moreover, research into students who are identified as struggling readers or who perform poorly on high stakes silent reading comprehension tests has found that poor reading fluency appears to be a major contributing factor to their poor reading (Rasinski, & Padak, 1998; Valencia & Buly, 2004). Further, although reading fluency is identified as a foundational reading competency in the United States by the Common Core State Standards (Common Core State Standards Initiative, 2014), an expanding body of research has shown that many students in the upper elementary, middle, and secondary grades have not achieved adequate levels of fluency in their reading and thus experience difficulty in others of reading, including silent reading comprehension (Rasinski, et al, 2009; Rasinski, Rikli, & Johnston, 2010; Paige, Rasinski, & Magpuri-Lavell, 2012). Although reading fluency has been studied extensively for readers of English, the concept of fluency in reading should apply to the reading of other written languages and at least one study has demonstrated a relationship between reading fluency and proficiency in reading among fifth-grade Turkish readers (Yildirim, Ates, Rasinski, Fitzgerald, & Zimmerman, 2014).

Despite the growing evidence of the importance of fluency in reading, it is ironic that in the United States its perceived importance among literacy scholars and educators has been on the decline. For the past several years, annual surveys of literacy experts have consistently identified reading fluency as of one of the few topics that is considered “not hot” (Rasinski, 2012). Moreover, the same respondents also indicated strongly that reading fluency should not be considered a hot topic in reading. This disconnect may be due to the way reading fluency is commonly assessed and taught in many schools and in many commercial instructional programs aimed at teaching fluency.

Assessing and Monitoring Reading Fluency

In order to determine if fluency is a concern among readers and how progress in fluency can be monitored, we need to have methods of assessing fluency. Since automaticity refers to the ability to recognize words instantly and effortlessly, reading speed or rate offers a simple

approach to measuring this component of fluency. Readers who are automatic in their word recognition tend to read at a faster rate than readers who are less automatic; moreover readers who are automatic in word recognition should also be better in reading comprehension. Research has consistently demonstrated significant and substantial correlations between measures of reading rate and reading comprehension or other general measures of overall reading proficiency at a variety of grade levels (e.g., Deno, 1985; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011). The most common protocol for assessing reading rate automaticity is to have a student read a grade level text for 60 seconds and simply count the number of words read correctly in that minute. The reading rate score can then be compared against grade level norms for students in the elementary and middle grades (e.g. Hasbrouck & Tindal, 2006). Students who fall significantly below the 50thile score may be considered at risk in terms of the automaticity component of fluency.

While reading rate has been established as a strong measure of automaticity, a major potential problem occurs when reading fluency becomes instruction on how to increase one's reading rate. Such an approach seems to have dominated reading fluency instruction over the past decade in the United States. The unintended consequence of such instruction is the development of readers who understand reading to be all about reading as fast as possible. Of course, reading becomes the quest for speed, reading comprehension often falls by the wayside (Rasinski & Hamman, 2010).

Reading speed is an outcome of automaticity, it is not the cause of automaticity. Automaticity in word recognition, as described in the next section is developed through extensive practice of authentic reading experiences. As I mentioned earlier in this article, I think most readers of this piece would consider themselves fluent in terms of their word recognition automaticity; yet I would conjecture that few, if any, of you experienced the kind of reading speed instruction that seems to have dominated reading fluency. Rather, we developed our automaticity in reading simply by reading extensively. Plenty of exposure to words and word patterns caused those words and patterns to become fixed in our memories and easily retrieved when exposed to them in subsequent readings.

Prosody or expressiveness in reading is the other component in reading. While there have been recent studies that have used high tech methods for assessing components of prosody, the most practical approach for assessing prosody is for informed teachers to simply listen to students read orally and to rate the students' expressiveness on a guiding rubric (e.g., Zutell & Rasinski, 1992). Although a subjective measure of prosody, studies have found that such approaches are valid, reliable, and well correlated with other general measures of reading proficiency. Still, the subjective nature of assessments of prosody means that such assessments are often ignored or employed on a limited basis in schools. As a result, since prosody is not overly emphasized in summative or formative assessments it is often not taught or emphasized in instructional environments. As a result, an important aspect of fluency instruction is often minimized, thus also leading to its identification as "not hot" among reading experts.

Teaching Reading Fluency

Think of how you became fluent at any task and you'll probably get a good sense of how reading fluency can be taught. I consider myself a fairly "fluent" driver – despite driving over 12,000 miles per year, I have not been in an accident in over 20 years not have I received a traffic violation ticket over that same period. How did I become the fluent driver that I am today?

First, I watched my parents, and other adults in my life, drive during the first 16 years of my life. I observed the protocol my parents used for starting, backing, driving, and parking

the family car in various scenarios. I also became acquainted with the various controls on different cars and the rules for driving as well as the signs that help to direct drivers. When I turned 16 and received my learners' permit to drive, I was finally able to get behind the wheel and drive the family car on my own. However, I was never alone in these situations. I always had one of my parents or another adult sitting next to me, offering me instructions, guidance, and encouragement as I gradually learned the skill of driving. As I became more and more proficient in my driving, my parents continued to sit next to me, but they offered less and less guidance. Finally, my driving skills were tested at the local drivers' licensing station, I was found to be competent to a minimally acceptable level, and was issued a state drivers' license that allowed me to drive by myself, without the guidance or support of an adult passenger sitting next to me. I must admit that even though I had my license to drive, I was not a skilled driver. I had several minor accidents and also was issued a few warnings and traffic tickets by the local police who observed me making deriving errors. However, I continued to "practice" my driving, driving a variety of automobiles over the course of several years.

Today, I consider myself a "fluent" or very competent driver of nearly any type of conventional automobile. What I find interesting is that I am so competent (accurate and automatic) in my driving ability I am able to engage in some other tasks while driving – I can listen to the radio, chat with a passenger, or even talk on the cell phone while driving legally and safely. This analogy also applies to reading where fluent readers are able to multi-task – they are able to read the words in the text so accurately and automatically that I can, at the same time, focus my attention on making meaning from the text.

Essentially my road to fluency in driving began with modeling of fluent driving by my parents, supported driving where my parents or other competent adult driver sat next to me while I drove to offer guidance, and finally independent practice in driving. The independent practice involved repeated practice on my parents' car at first, but as my driving proficiency increased I was also able to drive a wider variety of automobiles, from my brother and sister's cars to cars owned by other relative and friends. Learning to become a fluent reader is in many ways analogous to learning to drive.

Model Fluent Reading

Just as I spent a significant amount of time observing my parents drive during my early years, children need to observe fluent reading by adults and other fluent readers. The value of adults reading to children is compelling (Rasinski, 2010). Reading to children increases children's motivation for reading, enlarges their vocabulary, and also improves their comprehension. Reading to children also provides children with a model of what oral reading should sound like – embedded with expression that helps to enhance the listener's understanding of the text. Often when I read to students we will follow up a quick discussion of the story itself with a discussion of how "Dr. Rasinski read the story." I will try to make note of various prosodic features I embedded in my reading (e.g. "Did you notice how I changed my voice when I became a different character?" "What were you thinking when I made my voice louder and faster as this particular point in the story?) and help them see that these features helped with their satisfaction with and understanding and enjoyment of the text itself.

Occasionally when I read to students I will purposely start by reading in a less-than-fluent manner (too fast, too slow, too much of a monotone). After a couple sentences I stop and ask them what they noticed in my reading. They are not generally impressed with this sort of reading. Their satisfaction and understanding of the text was impaired by such disfluent reading. Of course, my message to the students is that they do not understand well or have

much satisfaction with texts read in such a manner, they should try not to read in such a manner themselves when reading independently as it will limit their understanding and enjoyment of their texts.

Provide Fluency Support through Assisted Reading

When I first began driving, I had the assistance of an adult who sat next to me in the car and provided expert support while driving. Support or assistance can also be made available to students while reading in order to improve their fluency. Essentially assisted reading involves the novice reader reading a text while simultaneously listening to a fluent oral rendering of the text. As you may recall, Carole Chomsky's research that was so influential to me involved a form of assisted reading – students read a text while listening to a pre-recorded version of the same text. Assisted reading provides support in at least two essential ways. First it allows the students to decode all the words in the text successfully, even those that they would not be able to decode if reading on their own. Second, by listening to a fluent reading of the text, students are provided with a positive model of an expressive and meaningful reading of the text. Students hear prosody in action while reading the same text. Assisted reading, then, essentially supports both word recognition accuracy and automaticity as well as prosodic reading.

Assisted reading can take a variety of forms. One of the most common is a novice reader sitting next to a more fluent partner reader, with both readers reading the same text together. Various names and protocols have been used and developed to operationalize partner reading. In their review and summary of research on partner reading Rasinski, Reutzel, Chard, and Linan-Thompson report that the various iterations of this form of assisted reading to result in positive reading outcomes for students.

Technology offers some interesting assisted reading applications. Students reading a text while listening to a fluent recorded version of the same text are engaged in assisted reading. Recent developments in technology have freed students from cassette tapes, tape recorders, and compact disc recordings. Using readily available voice recording applications, teachers (or others) can record their reading of a text, save the recording as a digital file, provide access to the recording via the internet, and have students read while listening to the digital recording on a mobile device. Although the studies using technology –assisted reading is limited, the results of the existing studies demonstrate great potential for improving students' fluency and overall reading achievement (Rasinski, Reutzel, Chard, & Linan-Thompson, 2011).

Reading Practice

Once I had developed a minimally acceptable level of proficiency in my driving to be permitted to drive independently, I needed to continue practice my driving in order to achieve a level of high fluency. Similarly, developing readers need opportunities to read independently in order to achieve high levels of fluency, both automaticity and prosody, in their own reading.

Reading practice can actually take two general forms. The first and most common form of practice is wide reading. This is the type of reading that adults typically engage in and it is also the type of reading that usually occurs in school settings. Students read a text, discuss the reading with the teacher and/or classmates, perhaps engage in some extension activities related to the text, and then move on to the next text or book chapter. Wide reading is essentially on reading after another. Clearly this form of reading is important, in both silent and oral forms. Perhaps one of the most common forms of wide reading is found in the daily independent reading or sustained silent reading time often to students. The cliché, "The

more you read, the better reader you will become” has a lot of surface level truth to it. It is difficult to imagine a person becoming a proficient reader without practicing the craft of reading independently. Although not universally endorsed as an instructional activity (e.g. National Reading Panel, 2000), a growing body of scholarly writing (e.g. Stanovich, 1986; Morgan, Mraz, Padak, & Rasinski, 2008) and research (e.g. Allington, et al, 2010) suggests that increasing the volume of students’ independent reading will yield improvements in students’ reading fluency and other measures of reading proficiency. Reutzel, Jones, Fawson, and Smith (2008) argue that students often do not have much guidance or accountability in many independent reading protocols and suggest that providing greater structure and accountability during independent reading will yield even more positive results in students’ reading outcomes.

When learning to drive I found that I practiced only on my family’s car for several weeks before moving on to driving other cars. Reflecting back on this experience, it seems to me that if I had moved from one car to another after only driving each car once I would have not achieved a sense of mastery over the first car and experienced considerable difficulty quickly switching to new cars as new each car would be somewhat different from the others. By practicing only on one car for a period of time, I was able to master that car. Then, when I finally transferred by driving skills to other cars, what I had learned on that initial car was able to be transferred to other automobiles.

I think this repeated practice analogy also applies to reading. Many of our struggling readers read a text only once during wide reading and they do not read it well. Yet, they move on to a new text and read it once (and not very proficiently) as well. It will be difficult for these students to achieve fluency in general, if they are not given opportunities to achieve fluency over particular texts. Repeated practice on the same text (or car when learning to drive) allows students to achieve this form of fluency or mastery than can easily transfer to new, never-before-read texts.

In his landmark study on repeated readings (Samuels, 1979) had struggling readers read a text repeatedly until they achieved a certain level of proficiency on that text. Of course with practice they demonstrated improvement on the text practiced. The more interesting finding from Samuels’ research was that when students moved on to new texts that were as or more difficult than the previous text, there were vestiges of improvement on the new text as well. In the same way that I was able to transfer skills from one automobile to another after repeated practice of the first car, so to students are able to transfer competencies in reading fluency from one text to another by engaging in repeated reading of the original text. In their review of subsequent research on repeated reading with guidance and feedback provided to students, Rasinski, Reutzel, Chard, and Linan-Thompson (2011) conclude that such practice “has been shown to effective in promoting fluency growth among a variety of students across differing reading levels and text levels” (p. 301).

While repeated readings has been shown to be effective in improving reading, a problem in implementing repeated reading has caused some educators to question its value. In many programs for developing fluency, because automaticity is often measured by reading rate or speed, the goal of the repeated reading is to increase students’ reading rate from one reading to the next. This is not a terribly authentic reading experience as very few adult reading experiences requires adults to practice a text repeatedly for the purpose of reading the text fast. As mentioned earlier, the result of such overt emphasis on reading speed is a diminished focus by students on prosody and meaning while readings.

It seems that a more authentic approach to repeated reading where adults do, indeed, practice or rehearse a text. Rehearsal is truly a form of repeated reading where the rehearsal

is aimed at developing a prosodic and meaningful oral interpretation of the text. Texts that are often rehearsed and then preformed for a listening audience include scripts, poetry, song lyrics, speeches, and more. Several classroom-based studies have found that when students engage in a more authentic repeated reading and performance experience they make exceptional gains on various dimensions of reading, including measures of reading fluency (Griffith & Rasinski, 2004; Martinez, Roser, & Strecker, 1999; Young & Rasinski, 2009).

Next Steps

It is clear that reading fluency is an important competency that needs to be addressed in the literacy classrooms around the world. Research and scholarly writing have demonstrated that fluency is conceptually an important reading competency, that it can be measured relatively easily and quickly, and that instructional methods have been developed that have shown to be effective in improving students' fluency. Still, although much is known about fluency, there are many questions and concerns that remain. Here are just a few based on my own understanding of the concept.

First, the concept of fluency itself may be a source of confusion as it appears to include two separate subordinate competencies (automaticity in word recognition and prosody) and related to a second major competency (word recognition). For some scholars and practitioners fluency in reading is automaticity, for others it is word recognition accuracy, for still others it is prosody, and for some it simply means generally proficient reading. It may be helpful if scholar began to sort these concepts out for clarity sake. One possibility would be to simply refer to word recognition accuracy, word recognition automaticity, and prosody as three distinct reading competencies. Reading fluency could then be used as a synonym for overall proficient reading.

The role of text type and text difficulty clearly needs further consideration for fluency development. In many existing programs for teaching fluency informational text is the primary text students used. The rationale for using such texts is that greater emphasis is being placed on students engaging in informational text reading, even in the primary grades. While there are compelling reasons for students to read more informational texts, I wonder if reading fluency instruction is good place for such texts to be used. Informational texts are generally rather lengthy. If students are asked to engage in repeated readings, the texts used cannot be excessively long as the repeated reading of a lengthy text would take more time than what would normally be allotted for fluency instruction. Secondly, the nature of informational texts does not easily lend themselves to expressive oral reading (prosody).

It may be wise to consider other text genres, genres that are meant to be performed orally. If texts are meant to be read orally for an audience they need to rehearsed (repeated reading) with the purpose of the rehearsal being expressive reading to aid the understanding of the audience. As mentioned earlier, texts that are meant to be rehearsed and performed include scripts, poetry, and song lyrics among others. Poetry and song lyrics also have the added feature of being relatively short, making them ideal for repeated reading over a short period of time. Interestingly though, these genres of texts have been regularly reduced in terms of their perceived importance and inclusion in the elementary grades.

Text level of difficulty is another issue that needs to be considered as we move forward in fluency. Should students be asked to read easy texts or texts that considered more challenging. On the surface it would seem that easier texts or texts that are within students' instructional levels would be the appropriate choices as students are more likely to achieve fluency more quickly on such texts. There is a body of scholarly thought and evidence to support the use of such text levels especially with struggling readers (Hiebert & Mesmer,

2013). However, in their review of fluency instruction, Kuhn and Stahl (2004) noted 6 studies that found that students experienced greater benefits when the reading texts were somewhat above the students' instructional reading levels as opposed to when the materials were below their instructional levels. Is it possible to accelerate students' reading fluency progress by providing them with materials to read, along with appropriate support, that are above the level they normally would be asked to read instructionally? Clearly, this is an area of great importance.

The issue of stamina in reading is one that has not been addressed sufficiently in fluency research. In most studies fluency is assessed during the first minute of reading a text. Moreover, fluency instruction generally occurs using relative short passages that can be read in less than five minutes. We do not know the impact on fluency or fluency's impact on comprehension as students become more involved in a text at one setting. Does fluency improve or decline in the 20th minute of reading?

Finally, reading fluency has been identified as a foundational reading competency that should be mastered no later than grade 5 or below (Common Core State Standards Initiative, 2014). Yet, a growing body of research is demonstrating that significant numbers of students have yet to achieve sufficient levels of fluency, both automaticity and prosody, in the middle and secondary grades. Moreover, these students are likely to manifest difficulties in other areas of reading including silent reading comprehension. How is it that so many students appear to flow through the cracks? What can be done to assure that students attain and maintain adequate levels of reading fluency beyond the primary grades? I truly believe that reading educators can make a significant impact on student reading achievement and academic achievement in other areas that require fluency when answers to these and other questions can be found.

Despite the rocky road that reading fluency has traversed over the past several decades, many reading scholars continue to view it a critical foundational competency for students to achieve. Instructional methods and materials have been identified to improve fluency in students, especially those students who struggle in gaining fluency. Not only can fluency instruction be effective in improving students' reading proficiency, it can also be an authentic, engaging, and pleasurable experience for students. As Omar, a student whose teacher used readers theatre scripts to improve his reading fluency and overall reading performance, indicated, "Readers theatre is the funnest reading I ever did before" (Martinez, Roser, & Stecker, 1999, p. 333).



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How Reading Volume Affects both Reading Fluency and Reading Achievement

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Abstract

Long overlooked, reading volume is actually central to the development of reading proficiencies, especially in the development of fluent reading proficiency. Generally no one in schools monitors the actual volume of reading that children engage in. We know that the commonly used commercial core reading programs provide only material that requires about 15 minutes of reading activity daily. The remaining 75 minute of reading lessons is filled with many other activities such as completing workbook pages or responding to low-level literal questions about what has been read. Studies designed to enhance the volume of reading that children do during their reading lessons demonstrate one way to enhance reading development. Repeated readings have been widely used in fostering reading fluency but wide reading options seem to work faster and more broadly in developing reading proficiencies, including oral reading fluency.

Keywords: Volume, Fluency, Voluntary reading, Comprehension, Accuracy.

Introduction

Fourth-grader Abdul is a good reader. Few teachers would then be surprised to learn that Abdul also reads voluntarily, hooked currently on the Diary of a Wimpy Kid books. In many respects, Abdul is a good reader because he reads extensively voluntarily (Cipielewski & Stanovich, 1992). Few teachers would be surprised to learn that Abdul is also a fluent oral reader, reading with both accuracy and expression. At the same time, too few teachers realize that it is at least as much the case that his extensive voluntary reading produced his high levels of reading accuracy as well as his ability to read aloud accurately and with expression. Abdul, like many effective young readers has never participated in a single lesson designed to foster his fluent reading. He has never engaged in any repeated readings activities. Abdul just reads. A lot. And voluntarily.

Abdul's development as a reader represents the path followed by many proficient readers, especially students who completed first-grade prior to 2001. That is, before reading fluency was named one of the five scientifically-based pillars of reading development by the National Reading Panel (2001).

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In this article I hope to provide a brief history of reading fluency in American education and then share what we know about the relationship between fluency and reading proficiency broadly considered and reading volume. In truth, this chapter is more about the potentially powerful, but typically overlooked, role of reading volume. The evidence we have is consistent and clear: Children who elect to read voluntarily develop all sorts of reading proficiencies, not just the ability to read fluently (Mol & Bus, 2011). In this chapter, however, I will largely ignore the other proficiencies fostered through extensive voluntary engagement in reading activity and focus on volume of reading and its role in the development of fluent readers. I conclude with strategies for enhancing voluntary reading among elementary school students.

The research on the relationship between reading volume and reading fluency.

While classroom teachers have paid attention to reading fluency for a long time, researchers largely ignored the development of reading fluency until about 40 years ago when Dahl and Samuels (1977) published a paper contrasting drill on word recognition in isolation with repeated reading of passages to attain a standard reading rate (100 words per minute). They reported that the repeated reading intervention developed struggling readers' reading fluency, accuracy, and comprehension far better than the training to rapidly and accurately read words in isolation.

Shortly thereafter, Samuels (1979) published a paper in *Reading Teacher* on the repeated reading method. Samuels seemed prompted to explore reading fluency primarily as a result of his earlier co-authored paper (Laberge & Samuels, 1974) that set forth automaticity theory as an explanation of early reading development. Basically, this theory argued that automaticity involved developing lower level processes (as in word recognition) to free up attentional space for higher-level processes (comprehension). As sometimes happen in experiments, the Dahl and Samuels (1977) experiment surprisingly demonstrated that repeated reading worked better than isolated training of word recognition in isolation. Their findings have been replicated by other researchers over the years (Homan, Klesius & Hite, 1993; Morgan, Sideris & Hua, 2012; Vadasy, Sanders & Peyton, 2005). In other words, what has now been repeatedly demonstrated is that working to foster automatic word identification through lessons that feature primarily word level work is simply less effective at developing reading fluency than lessons that engage readers in repeated reading activities.

Kuhn and Stahl (2003) reviewed over 100 research studies on repeated readings but noted that the studies were a mixture of models including many studies with no true control group and most did not compare repeated readings with an alternative intervention. However, in the two studies where a repeated readings model was compared to a control group where students read independently for comparable amounts of time they found no difference in fluency outcomes. Overall, they concluded that the repeated reading model improves both fluency and reading achievement. Based on the two studies noted above, they also suggested that it may be the increase in the volume of reading that students do when engaged in repeated reading activities that underlies the success observed with the use of repeated readings in developing fluent reading performances.

The same year that Kuhn and Stahl published their review, Therrien (2003) provided a meta-analysis of repeated readings studies published since 1979 and found repeated readings to be an effective intervention for improving the reading fluency of both general and special education students. This meta-analysis also indicated that repeated reading with an adult present proved to be more effective than repeated reading interventions where students were engaged with a peer or an audio-tape recording. Additionally, Therrien

reports that using instructional level texts as opposed to the more difficult grade level texts also produced faster and larger student fluency gains.

However, while repeated reading activities are more powerful in fostering fluent reading than are word identification in isolation activities, it also seems that reducing time spent engaging in repeated readings and using that time to engage students in wide reading is an even more powerful option than offering repeated readings activities alone. This is the major finding from a recent series of studies of by Kuhn and her colleagues (Kuhn, 2005, Kuhn, et al, 2006; Schwanenflugel, et al, 2006; 2009). In this work they compared use of their wide reading fluency intervention with the traditional repeated reading intervention. Much like earlier studies (e.g., Homan, et al, 1993) they found that reducing the time spent on repeated readings while extending the time spent reading new texts developed fluency faster and developed both word recognition and comprehension better than a steady diet of repeated readings. Reviewing primarily their previous studies, Kuhn, Schwanenflugel and Meisinger (2010, p. 232) argue, "To move beyond this serial processing and toward the autonomous word recognition entailed by fluent reading, learners require the opportunity for extensive practice in the reading of connected text." In other words, while repeated readings activities typically expand the volume of reading that student do (as compared to the more traditional skills in isolation work provided by worksheets and skills drills), simply expanding not only the volume of reading but also expanding the numbers of texts students read fosters fluency development faster.

Improving reading fluency by expanding student reading volume is predicted by "instance theory" (Logan, 1988). Logan explained instance theory in this way:

"The theory makes three main assumptions: First, it assumes that encoding into memory is an obligatory, unavoidable consequence of attention. Attending to a stimulus is sufficient to commit it to memory. It may be remembered well or poorly, depending on the conditions of attention, but it will be encoded. Second, the theory assumes that retrieval from memory is an obligatory, unavoidable consequence of attention. Attending to a stimulus is sufficient to retrieve from memory whatever has been associated with it in the past. Retrieval may not always be successful, but it occurs nevertheless. Encoding and retrieval are linked through attention; the same act of attention that causes encoding also causes retrieval. Third, the theory assumes that each encounter with a stimulus is encoded, stored, and retrieved separately. This makes the theory an instance theory..." (p. 493)

As children read they encounter words, if these words are correctly pronounced then a useful "instance" has occurred. Thus, efforts to expand reading volume need to ensure that students are reading texts with a high level of accuracy. What we've learned in the past 25 years is that it takes very few "instances" of correctly pronouncing a word before it becomes readily recognized when next encountered.

Instance theory underlies the "self-teaching hypothesis" proposed by Share (1995; 2004) who has demonstrated that while reading children are actually also acquiring orthographic knowledge of both whole words and word segments. Readers use this orthographic knowledge to facilitate pronunciation when they next encounter the same word or an identical word segment occurring in a different word. That is, pronouncing the word segment "ism" in the word racism may assist the reader in pronouncing the word schism that contains the same segment. This sort of self-teaching, which is derived from instance theory, is one mechanism by which reading fluency is achieved. Self-teaching is also an important mechanism that supports developing other reading proficiencies, such as vocabulary knowledge (Swanborn & DeGlopper, 1999).

A different role for self-teaching is the development of a core set of words, in skilled readers a huge core of words, that can be pronounced instantly, words that we call "sight words". The larger the number of words that can be instantly recognized is in large part what separates skilled readers from developing (or emergent) readers. The ability to recognize many words with little conscious effort also underlies the ability to read aloud with fluency.

Shany and Biemiller (1995) provide one example where self-teaching seems to have occurred. They studied the effects of teacher-assisted reading and tape-assisted reading on reading achievement. The study consisted of three groups: one control group and two experimental groups. One experimental group received 30 minutes of extra reading practice with adult assistance (pronouncing any mispronounced words) while the other experimental group received 30 minutes of extra reading practice with audio-taped recordings of the texts to assist the reading. Students in both experimental groups read more books in and out of the classroom than the control group. Most subjects "read" through 2.5 years worth of basal stories in 64 days (or 32 hours) of practice! Treatment students read 5 to 10 times as many words as the control group students during this 16 week study. (p. 390)

Shany and Biemiller (1995) evaluated different aspects of reading achievement, comparing the two experimental groups to each other as well as to the control group. They found that students in both treatment groups scored significantly higher in reading comprehension, listening comprehension, and reading speed and accuracy, than the control group that completed less reading activity. Comparing the treatments, the tape-assisted group scored significantly better in listening comprehension. There were similar gains in reading comprehension, reading speed and accuracy between the two treatments and these gains were higher than those obtained by the control group students. Neither treatment improved word identification in isolation, nor decoding proficiency on the Woodcock Reading Mastery Test. The authors', nonetheless, concluded that, "increased reading experience led to increased reading competence." (p. 392) In this study, then, simply expanding the volume of reading, with or without teacher feedback, resulted in improved fluency (as measured by reading rate and reading accuracy) and improved reading comprehension. In other words, the groups that completed the greater volume of reading activity demonstrated a larger gain in reading achievement than the control group students.

The potential role of reading volume in daily classroom reading lessons was demonstrated in a large-scale observational study conducted by Foorman, Schatschneider, Eakins, Fletcher, Moats and Francis (2006). They reported that the key factor of the reading instruction offered by over 100 observed 1st and 2nd grade teachers was the time that they allocated to text reading. Key because it was this measure of reading volume during reading instruction that explained any variance observed on any of the outcome measures including word recognition, decoding, and reading comprehension. None of other time factors, including time spent on phonemic awareness, word recognition or decoding were related to reading growth. These findings suggest that teachers should design their lessons such that student reading volume is expanded, perhaps by reducing the time planned for other, not very useful, activities that too often replace wider reading.

The outcomes from these studies noted above should not be unexpected. Torgeson and Hudson (2006) reviewed several studies, each which demonstrated that neither improving recognition of words of in isolation nor improving decoding proficiencies improved either reading fluency or comprehension. In other words, reading fluency and reading comprehension develop largely separate from word identification and decoding. In the case of struggling readers, too many have huge deficits in reading volume and therefore huge

deficits in the number of words they can recognize automatically, when compared to their achieving peers. As Torgeson and Hudson (2006) contend,

"The most important factor appears to involve difficulties in making up for the huge deficits in accurate reading practice the older struggling readers have accumulated by the time they reach later elementary school... One of the major results of this lack of reading practice is a severe limitation in the number of words the children with reading disabilities can recognize automatically, or at a single glance... Such 'catching up' would seem to require an extensive period of time in which the reading practice of the previously disabled children was actually greater than that of their peers." (p. 148)

If educators hope to improve either the oral reading fluency or the reading comprehension of struggling readers then expanding reading volume, it seems, must necessarily be considered. Considered as in evaluating the reading volume of every struggling reader as a first task to complete prior to attempting to design an intervention to address the student's reading difficulties.

An unfortunate characteristic of current models for diagnosing the difficulties some children exhibit with reading acquisition is almost total neglect of any consideration that reading volume deficits are likely a more critical factor than knowledge of the sounds linked to vowel digraphs. While diagnosticians and school psychologists routinely evaluate struggling readers proficiencies with decoding words in isolation and their proficiency with various decoding subcomponents, I have yet to find a single school psychologist who attempted to track and estimate the daily reading volume of students with reading difficulties that they are evaluating. Thus, reading volume deficits are largely overlooked when explanations of reading difficulties (or fluency problems) are offered and overlooked in designing intervention lessons to remediate the reading difficulty. Reading volume is typically not addressed in Individual Education Plans (IEP) developed for pupils with disabilities even though some 80 percent of these students exhibit reading difficulties. Thus, we have a series of research reports noting that pupils served by special education programs read less than do general education students (Allington & McGill-Franzen, 1989; Vaughn, Moody & Schumm, 1998; Ysseldyke, Algozzine, Shinn & McGue, 1982; Ysseldyke, O'Sullivan, Thurlow & Christenson, 1989) and that struggling readers of all stripes read less during general education classroom reading lessons than do achieving readers (Allington, 1983; 1984; Hiebert, 1983).

Outside of daily reading lessons students have other opportunities to expand their reading volume. Lewis and Samuels (2005) conducted a meta-analysis of 49 studies of providing students with independent reading time during the school day. They concluded that, "no study reported significant negative results; in no instance did allowing students time for independent reading result in a decrease in reading achievement." (p. 13) The overall effect size for the eight true experiments was $d=0.42$ indicating a moderate and statistically significant effect for volume of reading, They also conducted an analysis of 43 studies that were insufficient for including in the meta-analysis. There were 108 student samples in these 43 studies. Of these 108 samples, 85 of the samples were students who improved their reading achievement after participating in some form of an independent reading activity. In fourteen samples there were reported no positive effects on reading achievement, and nine reported negative effects on reading achievement. All of the studies reporting no effects or negative effects on reading achievement were done with older students enrolled in middle or secondary schools.

Topping, Samuels and Paul (2007) provide other necessary aspects to consider when attempting to expand the reading volume of students. Their analysis of the records of some

45,600 students (primarily K-6 students) drew from the national database compiled by the Accelerated Reader firm. They report that until quite good reading comprehension (at least 80% comprehension) was achieved the added engagement in reading added little, if any, growth. As Topping, et al (2007) note:

"The current study suggested that simple information-processing models of reading practice were inadequate. Volume of practice is only one relevant variable, and not all practice is the same. Pure quality of independent reading practice and classroom placement were as important as quantity of reading practice. Theoretical models need to take account of three variables not one, and distinguish between affordances and the extent to which they are actively utilized." (p. 262)

Topping and colleagues (2007) may have provided us with a basis for explaining why the research on expanding reading activity may seem inconsistent. None of the experimental studies of extensive reading that are available attempted to control for 1) the level of accuracy that was achieved while reading, 2) the level of comprehension of the material read, 3) the variety of texts that are available to subjects, 4) the role of self-selection of texts to be read, or 5) the classroom context of students who participated in the studies. Each of these five factors, however, do seem related to the outcomes observed.

So we have a research basis for assuming that expanding reading activity will improve reading achievement and reading fluency as well. The repeated readings model is likely to expand students' opportunity to read and this may be the primary reason for its observed success in developing fluency. Simply expanding the opportunities to read seems to generally produce improved reading fluency and reading comprehension (Krashen, 2011). Thus, perhaps, repeated readings lessons are not actually necessary or can be useful when used for only a short period of time.

Why many children never acquire fluent reading proficiencies and what to do about it.

While the restricted reading volume of struggling readers, when compared to their higher achieving peers, has a strong research base as an important factor in the development, or the lack of development, of reading fluency, there is also evidence that differences in the reading instructional environment, beyond differences in reading volume, may also contribute to dysfluent reading behavior. For instance, many struggling readers read aloud word-by-word with little phrasing or intonation. This sort of dysfluent reading may be the result of being given a text that was simply too difficult given their level of reading development. Fluent reading only occurs when oral reading accuracy is high. On the other hand, many struggling readers still read word-by-word even when given a text that they can read quite accurately. These readers seem to have habituated reading as a word-by-word reading performance.

Thirty-five years ago I published a paper (Allington, 1980) documenting the differences observed during oral reading segments of reading lessons in the primary grades. Using audio-tapes of the oral reading segments of the reading lessons primary grade teachers provided, I noted that when working with the struggling readers in the classroom (as contrasted with working with the achieving readers), the teachers were more likely to:

- 1) interrupt the oral reading of struggling readers,
- 2) interrupt struggling readers more quickly, and
- 3) after interrupting offer different verbal responses to struggling readers and achieving readers.

These differences were actually quite striking with almost every miscue made by struggling readers resulting in an immediate teacher interruption while many miscues made by achieving readers produced no response from the teacher. When teachers responded to achieving reader miscues they typically targeted sense-making or simply rereading the sentence. Teacher responses to struggling readers typically targeted letters or sounds and rarely targeted sense-making. Perhaps, I argued, these differences in teacher responses to miscues occurred because the point at which the teacher interrupted the two groups readers (achieving and struggling) differed. For achieving readers the most common point of teacher interruption, when an interruption was observed, came at the end of the sentence that was being read when the miscue occurred. For struggling readers the most common point of interruption was the utterance of an incorrect word or letter sound. Hoffman, et al (1984) later reported that immediate interruptions had a detrimental impact on students' reading performances when compared to other, more delayed interruption options.

I have argued elsewhere (Allington, 2009) that the common pattern both Hoffman and his colleagues (1984) and I observed, interrupting struggling readers immediately when they miscue, creates both passive and non-reflective readers as well as word-by-word readers. I suggest that the continued use of such interruptive practice will stymie all attempts to produce reading fluency.

Creating a non-interruptive reading environment. What we are attempting to produce is active and reflective silent readers - that is, readers who are engaged with the story and who notice when they miscue and then attempt to self-correct their miscue. But an immediate teacher interruption after an oral reading miscue undermines both of these goals. Interruptions always interfere with reading engagement and prompts to "sound it out", to "look at the first letter", or asking "what is the sound of the vowel" take attention away from making sense of what was read. Perhaps a steady diet of immediate interruptions and letter and sound focused prompts actually foster the non-reflective and word-by-word reading so commonly observed with struggling readers.

It is with these struggling readers who read word-by-word even when they are reading accurately that repeated readings can be an effective solution. Perhaps this is because in most cases the repeated readings are done without a teacher interrupting to "correct" each miscue. Without teacher interruptions students read along with greater fluency. There is no need to read slowly and to look up at the teacher when you encounter a word that is unknown. Assuming the text is being read with a high level of accuracy, it also means that more instances of correct word identification are accumulating. Every instance of correct pronunciation leads to another trace on the reader's brain that will make the response to the next encounter of that word more likely a correct response.

The point is this, if we want to foster fluent reading then we need to create an instructional environment where fluent reading is fostered not suppressed. Shifting away from immediately interrupting students when they miscue on a word and moving towards a delayed response that focuses on making sense rather than on surface level characteristics of the misread word will both foster the development of fluent and reflective reading.

Adopting what I have dubbed the Pause-Prompt-Praise (P-P-P) interaction pattern while listening to students reading aloud is one strategy for becoming a more positive influence on students struggling with fluency. In the P-P-P pattern the teacher waits until the end of the sentence when a student is reading aloud and misreads a word. When the student has reached the end of the sentence, the teacher simply asks. "Does that sentence that you just read make sense to you?" Or, "Did that sentence sound right to you?" The goal is to stimulate self-regulation - the ability to monitor one's own reading. Self-monitoring is central to the

development of fluent reading and self-monitoring is central to self-correcting responses when oral reading miscues occur (Clay, 1969).

Breakout Box

Pause – Wait until the reader had finished reading the sentence before you interrupt and call attention to the miscue.

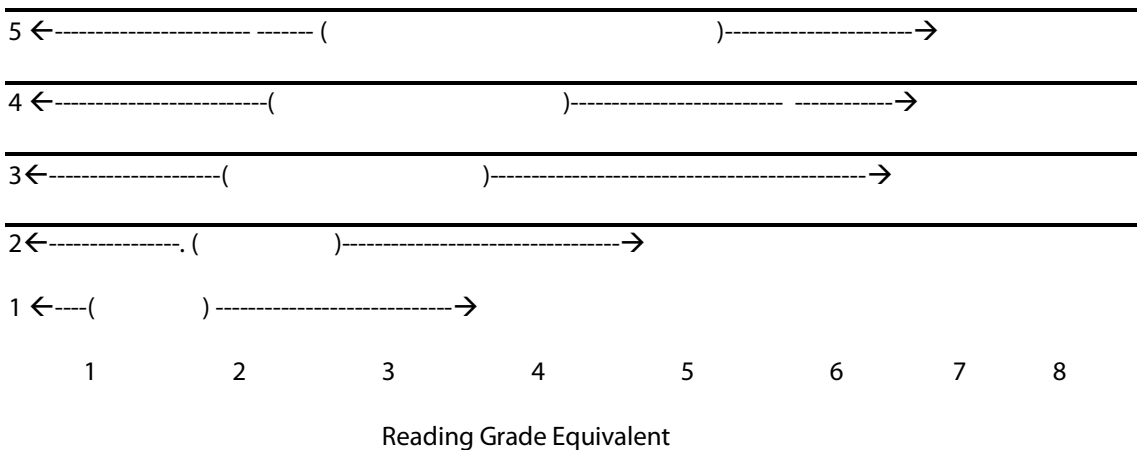
Prompt – The key prompt you want to make is to draw attention to making sense while reading.

Praise -- Two possibilities here—praise making sense or praise the effort to make sense.

If you want to foster better use of available decoding knowledge, fine, but not in the middle of an oral reading segment. Note the miscue and after the reading segment is completed you can discuss the appropriate decoding strategy the child might have used. Many struggling readers do better with decoding in isolation than decoding words while reading.

Enhancing reading volume by expanding access to texts. Once you have created a non-interruptive classroom reading environment you can focus on developing a classroom where all students can locate books they really want to read and can read with a high level of accuracy, say with 98% words correctly pronounced or higher (Allington, McCuiston & Billen, in press). This typically means you will need to develop a classroom library of books that provide texts across the range of reading levels and interests of students in your classroom.

When considering the range of difficulty of the texts you will need in your classroom library remember that, as Hargis (2006) demonstrated so powerfully, that in second-grade you can expect to have some children still reading at the very beginning reading levels (e.g., primer, first reader) and some children who can read fourth- and fifth-grade texts. By fourth-grade this gap between your best and worst readers widens even further with some children reading at the first-grade level and others at the ninth-grade level!



On the left side of the graph is the student current grade placement level. Across the bottom are the grade level equivalencies. The arrowhead on the left indicates the lowest scoring children and the range of scores for the lowest 25% of students. The arrowhead on the right indicates the reading level of the top scoring students and the length of the arrow indicates the range of reading proficiency of the top 25% of students. The area between the brackets is the performance of the middle 50% of students.

Figure 1. Range of reading levels found typically in American elementary classrooms (Developed from the data in Hargis, 2006)

As illustrated in Figure 1 the range of reading proficiency widens as children go through the elementary school year. The data in the Figure showing the range of reading proficiency at each grade level is a good guide as you develop your classroom library. The breadth of proficiency levels at each grade is why you should plan on acquiring 1,000 individual titles for your classroom library.

Classroom libraries provide children with easy access to a range of books that have been selected at appropriate levels of difficulty. Classroom access to books is especially important in schools where many children live in poverty. Classroom access is important because so many poor children own not a single book, much less have a home library such as the ones you can find in many middle class homes.

The number of books in the home is a powerful and significant predictor of children's reading achievement (Schubert & Becker, 2010), even when family income, parental education, language used in the home and other factors are controlled. In a 27 nation international study with over 70, 000 cases Evans, Kelly, Sikora and Treiman (2010) report that the number of books in the home, after controlling for SES, father's occupation, and parental education they reported that the effect of home access to books was about the same as parental education, twice as large as father's occupation, and stronger than family SES.

It is children from low-income families that routinely lack access to books. They rarely have home libraries of books. They live in neighborhoods where few books are available, either to purchase or to check out of a community library. Worse still, in the schools they attend both the school library and the classroom libraries have far fewer books than are found in middle class schools and libraries (Neuman & Celano, 2012; Pribesh, Gavigan & Dickinson, 2011)).

The differences in the availability of children's books are striking. Neuman and Celano (2012) report that there were 358 books for sale at the four stores that carried children's books in the high-poverty neighborhood they studied. At the same time, in a nearby middle-class community there were 16,453 children's books available for purchase. Of course, these communities differed not just on average family income but also in the numbers of books available for purchase from merchants who sold children's books. School libraries in these two communities – one poor and the other not poor – followed the same pattern. There were 26 books per child available in middle-class school libraries but half that number available per child (13) in the school libraries located in high-poverty communities. Pribesh and colleagues (2011) extend this finding and note that schools attended by children from higher-income families purchase more than twice as many books for the school libraries as do schools enrolling mostly children from low-income families.

Access to books is, of course, linked to voluntary reading activity (McQuillan & Au, 2001). And, no matter how you look at the issue, poor children have substantially more limited access to books than do middle-class children.. But when you live in a "book desert," as do too many children from low-income families, one should not expect that these children will engage in much voluntary reading.

Increasing children's access to books has been shown to have dramatically positive effects on reading growth and achievement (Lindsay, 2013). Yet, even with this body of research establishing that the children from low-income families have restricted access to books and that altering the situation so that ease of access to books is improved for low-income children improves their reading achievement we largely ignore the data and attribute the limited proficiencies in reading among poor children to other factors and then focus on those other factors when designing our interventions!

Conclusion

Given the research evidence linking volume of reading to reading achievement and oral reading fluency it seems surprising that American commercial core reading programs only provide roughly 15 minutes of daily reading activity (Brenner & Hiebert, 2010). That means that in too many classroom children have 75 minutes daily to listen to the teacher or to complete low-level worksheets instead of actually reading. Given the findings of Foorman, and her colleagues (2006) that the sole aspect of reading lesson design that was related to reading achievement was the volume of reading done during the lessons, it is undoubtedly time to reconsider the use of such programs as a central characteristic of American reading lessons.

Finally, given that the latest survey of adult reading habits (National Endowment for the Arts, 2007) reports that young American adults (ages 18-24) read less than any other age group and read less today than ever before, it seems that a substantive effort to promote greater voluntary reading, both in and out of school, is needed. We know much about reading instruction that fosters fluency and comprehension. The design of our reading programs and reading lessons must begin to reflect what we know.



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Supporting the Development of Silent Reading Fluency: An Evidence-Based Framework for the Intermediate Grades (3-6)

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Abstract

Developing silent fluent reading is an important goal to be achieved in elementary literacy instruction. This article reviews characteristics of effective silent reading fluency instruction and practice. Next, the authors make the case for four components of effective silent reading fluency practice routines. Finally, the authors describe two evidence-based silent reading fluency routines – Scaffolded Silent Reading (ScSR) and R5. Evidence of efficacy along with richly described and illustrated examples provide readers with all the necessary information to implement these effective silent reading fluency routines in elementary classrooms.

Keywords: Silent reading; Reading fluency, Elementary reading instruction, Independent reading

Introduction

Adelina, a third-grade, English learner, settles into a comfortable chair to silently read a new book titled, *Karate Katie* by Nancy Krulik (2006). Each day in Mrs. Taylor's third-grade classroom time is allocated for independent, silent reading of self selected books. As Adelina begins to silently read her new book, she feels a light tap on her shoulder. She remembers that she should start reading aloud as Mrs. Taylor settles in next to her to listen to her read.

As Adelina reads aloud, Mrs. Taylor uses a digital tablet to record her reading and make notes. After about one minute elapses, Mrs. Taylor asks Adelina to stop reading for a moment. "Adelina, I am glad to spend some time listening to you read today. May I ask a few questions about the book you are reading?" queries Mrs. Taylor.

"Uh, Huh," answers Adelina tentatively.

"Can you tell me where this story takes place and who are the main characters in the story," inquires Mrs. Taylor.

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"Well, it about some kids, Kevin and Katie go to a Karate class together," replies Adelina.

"Can you tell me more," requests Mrs. Taylor.

Adelina nods affirmatively and clears her throat.

"They are both yellow belts. Kevin says he is the best in the class. Katie dreams of winning a Karate match against Kevin."

"That's great, Adelina. I see you are getting the key ideas and details in this book. And, after listening to you read, it seems that you are able to read this book quite accurately and with a reasonable speed for a third grade student. I was also pleased to hear how expressively you were as you read aloud stopping at the punctuation at the end of sentences and raising and lowering your pitch. As you continue to read, remember what you have learned in class about story structure and the parts of the story you should be expecting to encounter and remember. Also, as you read, think about how the voices of the characters should sound and; if you can, imagine in your mind what is going on in the story by making pictures or a movie in your head. All of this will help you enjoy the reading more and comprehend better, okay."

Adelina responds, "Okay, I'll do my best."

"That is all I can ask," replies Mrs. Taylor.

"Before I go, Adelina, we need to set a goal for when you will complete the reading of this book and break that down into daily goal pages. When do you think you can have this book finished?"

"Hum, I think I could finish it in about three weeks. It has, let me see here, 106 pages. If I read about 8 pages a day, I should be able to finish it," responds Adelina. "That's an ambitious goal, Adelina," says Mrs. Taylor as she makes note of Adelina's goal on her digital tablet. "I am proud of you that you set such a high goal for yourself. Next week when I come to listen to you read, we'll review how you are doing in achieving your goal. I also want you to think about our Book Response Menu Options we have previously discussed in class as listed on the closet door and how you'll share your book with others. Next week, I'll ask you to make a choice of a book response option for sharing your book with me and others," comments Mrs. Taylor as she gets up and moves to the next student in the room on her list for individual reading conferences.

After the conference concludes, Adelina thinks to herself about all that transpired in the past five minutes with her teacher, Mrs. Taylor, and realizes how fast the time went. She returns to her book more determined than ever to meet her goals and be prepared for her next week's individual reading conference with Mrs. Taylor.

What is Silent Reading Fluency?

There is a high degree of agreement among researchers about the elements that define fluent reading (Allington, 2006; National Reading Panel, 2000; Rasinski, Blackowicz, & Lems, 2012; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011; Samuels & Farstrup, 2006; Schwanenflugel, Benjamin, Meisinger, Kuhn, Steiner & Groff, 2014). The major elements of fluent reading, whether oral or silent, include: (1) accurate, effortless, and automatic word identification; (2) age- or grade-level-appropriate reading speed or rate; (3) appropriate use of volume, pitch, juncture, and stress to reflect expression; and (4) correct text phrasing, sometimes called "chunking." Most reading experts would also agree that fluent readers simultaneously comprehend what they read (Samuels, 2007; 2012).

Why is it Important?

Elementary teachers develop and encourage silent reading fluency as part of an overall literacy instructional program. Some elementary teachers assess only oral reading accuracy and rate (reading speed) when assessing reading fluency and leave out assessment of expression and comprehension. Such assessment practices reduce fluent reading to automatic and accurate word recognition. Still some elementary teachers think that reading fluency can only be measured by listening to students read aloud and consequently do not encourage independent, silent reading fluency development. It is intrusive and inauthentic to require students to read orally when they want and need to read silently. Nevertheless, questions loom about how elementary teachers might assess whether students can read fluently when they read silently. Finally, reading fluency instruction and practice is often viewed by elementary teachers as only useful during primary grade reading instruction and should be discontinued as an instructional emphasis in the intermediate grades. Such could not be further from the findings of research. Raskinski (2012) argues that intermediate aged readers continue to struggle with reading fluency.

In this article, we outline how to provide the kind of instructional content and contexts that motivate and develop silent reading fluency among elementary school students in the third grade through sixth grade. We will describe developmental considerations, conditions of reading practice, and instructional practices that encourage and motivate fluent silent reading in its fullest sense – eyes on the page, interest in the books, self regulated strategy use, and volume reading!

Silent Reading Fluency: Theoretical, Empirical, and Practical Background

Time spent reading, including reading silently, has consistently correlated strongly with overall student reading achievement (Anderson, et al., 1985; Cunningham & Stavonich, 1998; Hepler & Hickman, 1982; Krashen, 1993; NICHD, 2000). For many years, elementary teachers allocated a block of classroom time for students to go off on their own and read silently. This block of time allocated to independent, silent reading often was known by various acronyms such as Sustained Silent Reading (SSR), Drop Everything and Read (DEAR), Super Quiet Reading Time (SQUIRT), Wonderful Exciting Books (WEB), Daily Independent Reading Time, (DIRT), (Jarvis, 2003; Jensen & Jensen, 2002; Routman, 1991).

The Report of the National Reading Panel (NICHD, 2000) found little research evidence to support offering an unqualified endorsement for continuing the practice of independent silent reading routines in elementary classrooms. Consequently, many school administrators and elementary teachers stopped providing time allocations for students to silently or independently read in school.

In the past, there were many problems with silent, independent reading routines that produced somewhat equivocal fluency outcomes for elementary students. In more recent years, scholars have described and decried many of the conditions of practice associated with past independent, silent reading routines (Kamil, 2008; Kelley & Clausen-Grace, 2006; Reutzel, Smith, & Fawson, 2008; Stahl, 2004).

The chief characteristics of highly engaged readers are the ability to read from self-selected texts, for extended periods of time, focusing on key ideas, all the while self-regulating attention away from distractions and toward remaining immersed in reading the text. As scholars have reconsidered the characteristics of past independent, silent reading routines such as SSR, analyses converged on five major concerns: (1) How Students Self Select Reading Materials, (2) Student Reading Stamina and Time on Task, (3) Student

Accountability, (4) Lack of Student Talk About Text, and (5) Teacher Engagement. As we address these five concerns, we shed light on possible characteristics of independent, silent reading instructional routines that may be amenable to alterations that lead to improved student and teacher experiences when developing silent reading fluency.

Student Book Selection

Proficient readers choose texts to read that are of interest and of appropriate difficulty. When using silent, independent reading routines in the past like SSR, students were given unlimited free choice to select their reading materials. Guthrie and Humenick (2004) showed that interesting texts produced a very large effect size on students' reading comprehension, over 1.6 standard deviations from the mean performance. Although research has shown that choice can increase student interest and motivation (Deci & Ryan, 1985; Turner and Paris, 1995), students must be able to make correct determinations about whether a book is either too hard or too easy in order to 'sustain' their reading. Teacher-guided selection of appropriately challenging and interesting reading materials can help students develop these important skills.

Struggling readers who need to practice reading the most often select books they cannot read (Donovan, Smolkin, & Lomax, 2000; Fresch, 1995). Unguided choice can become a negative force when students select reading materials from a limited range of genres and topics. Students who select books that are too easy experience little growth in reading ability (Baker & Wigfield, 1999; Carver & Leibert, 1995). Conversely, students who frequently select books that are too hard become frustrated and disconnect from reading (Anderson, Higgins, & Wurster, 1985).

These types of poor text self-selection behaviors often result in negative reading attitudes and behaviors for gifted and for struggling readers alike. The net result is time wasted usually through selection avoidance. This happens when students spend much of designated silent, independent reading time milling about to choose something to read. The avoidance of reading can become a habit that spills over to home reading as well (Chua, 2008). Students who are taught and guided to select texts that match their ability level and appeal to their interests are more likely to sustain their silent, independent reading (Stanovich, 1986). Because time spent reading with appropriate texts leads to improvement in word reading and comprehension (Kuhn et al., 2006), selection of text is an important consideration for effective implementation of sustained silent reading time.

Reading Stamina – Eyes On Text

A widely accepted notion that that the more you read the better reader you will become is pervasively accepted in many educational circles (Allington, 1977; Chambliss & McKillop, 2000). However, simply allocating time for reading is insufficient to assure student reading engagement or to promote reading stamina among students. To assure reading engagement and stamina, teachers must combine allocated reading time with motivational practices (Kamil, 2008). It is very difficult to know for sure just how much of the time students are actually reading during silent, independent reading time (Garan & DeVogd, 2008; Kelley & Clausen-Grace, 2006; Stahl, 2004).

Many years ago, Hunt (1965, 1971a; 1971b) recognized the importance of engaged reading time on task and warned that allocated silent, independent reading time could become unproductive. Hunt emphasized the importance of teacher guidance to firmly establish principles of high engagement and reader stamina during allocated time for silent, independent reading. It only makes sense that if we expect readers to build reading stamina, we must expect that their eyes will be on the text most of the time during allocated silent,

independent reading time (Brenner & Hiebert, 2010). To accomplish this aim, teachers must allocate sufficient reading time during the day as well as hold students accountable for reading during reading practice time.

Student Accountability

Accountability is necessary to insure students spend their time silently reading; however, it is an insufficient precondition for building students' reading stamina. Researchers have long noted that students may appear to have their eyes on the text, but when they are not held accountable they may be "reading" the same book day after day, week after week or not reading at all (Kelley & Clausen-Grace, 2006; Worthy & Broaddus, 2001). Stahl (2004) vehemently argued that teachers should actively monitor student reading activity and progress during silent, independent reading time rather than modeling the act of reading. Practices such as asking students to complete reading logs or reader response notebooks, taking anecdotal and running records of students' reading, and documenting wide reading have been shown to be effective in holding students accountable for time spent reading (Garan & DeVoogd, 2008; Newman, 2000; Reutzel et al., 2008; Trudel, 2007; Worthy, Turner, & Moorman 1998).

Talk About Text

Discussions are another important component of effective oral or silent reading practice in the development of a silent reading fluency. Students who know that they will be expected to discuss text with the teacher or other students have a purpose for reading and for use of effective reading strategies. Social interactions around texts are effective in motivating wide, frequent reading, even for reluctant readers (Gambrell, 1996; Palmer et al., 1994; Parr & Maguiness, 2005; Worthy & Broaddus, 2001).

Hunt (1965, 1971a, 1971b), the father of Silent Sustained Reading, viewed text discussions in teacher-student conferences and book talks as "the heart of silent reading time." This was a time to assess if the student comprehended the text and to provide "on-the-spot" instruction, feedback, and guidance. Providing a time to discuss what one reads also opens up the possibility for students to share what they have been reading with other students.

Social interaction is an important aspect of reading motivation. Students who discuss literature with peers or the teacher are likely to be socially motivated to read (Wigfield & Guthrie, 1997). Social interaction promotes development of high-level literacy skills, reading stamina, and increases students' intrinsic motivations to read (Almasi, 1996; Guthrie, Schafer, Wang & Afflerbach, 1993; Slavin, 1990; Wood 1990). The importance of social interactions with text directly affects the role of the teacher during independent, silent reading time.

The Role of the Teacher

For many years, it has been suggested that teachers model reading by silently reading in their own book during independent, silent reading time (McCracken, 1971). Although there is importance in teacher modeling, passive modeling, where a teacher holds a book and reads silently is unlikely to teach students much about why or how one reads (Gambrell, 1996). A teacher becomes a reading model by enthusiastically "blessing" or promoting books, by reading aloud interesting books, by discussing books, and by explicitly teaching the strategies and dispositions of skilled and joyful reading.

Stahl (2004) questioned passive modeling of reading by teachers because it limited the social interaction between teachers and students. Garan and DeVoogd (2008), similar to Manning and Manning (1984), noted an increased effectiveness of independent, silent

reading time when reading conferences were included. Bryan, Fawson, and Reutzel (2003) found that brief student/teacher conferences during independent, silent reading time would keep even the most disengaged student engaged in reading for up to 3 weeks.

The hallmark of a truly fluent reader is the ability to engage in reading appropriately challenging and interesting self-selected texts. Providing students with scaffolds needed to support the development of reading fluency during independent, silent reading time will require major revisions in teacher and student behaviors, roles, and expectations. Several researchers have begun to design and investigate relatively new independent silent reading practice routines that address the weaknesses associated with SSR and other similar routines for providing independent, silent reading practice (Reutzel, Jones, Fawson, & Smith, 2008; Reutzel, Fawson & Smith, 2008; Kelley & Clausen-Grace, 2006). We describe major revisions that are necessary to render time spent in independent, silent reading routines effective in supporting the development of silent reading fluency.

Four Evidence-Based Components That Support Silent Reading Fluency Development

A review of the literature on silent reading fluency reveals four core evidence-based components that support the development of silent reading fluency with elementary students. These are: 1) allocated practice time; 2) supportive classroom environment; 3) engaged reading, and 4) teacher scaffolds and instruction. In what follows, we provide an extended description of each of these four core evidence-based components to help teachers and teacher educators more successfully implement a reading instructional program that supports the development of silent reading fluency in the elementary school.

Allocated Practice Time

An intuitively appealing belief held among many educators is that the more you read the better reader you become (Allington, 1977; Chambliss & McKillop, 2000). Another version of this belief is that practice makes perfect. But, of course, we all know that imperfect practice often leads to imperfect outcomes (Lemov, Woolway & Yezzi, 2012). Thus, as Kamil (2008) so aptly pointed out, an allocation of time for reading practice is a necessary but insufficient condition for improving silent reading fluency!

Time allocations within a classroom are often one of the few elements of life that classroom teachers can largely control. The question, however, of how and to what extent teachers ought to allocate time in the classroom should be based upon evidence and not whim or intuition. The evidence supporting an allocation of time for reading practice in classrooms has steadily been expanding over the years, especially when time allocations for practice are coupled with the other four components we discuss in this article.

From the earliest findings of basic and applied research, results have shown that time spent on almost any learning task correlates strongly with the amount and degree of learning achieved (Bugelski, 1962; Brophy, 1988). Reading research has similarly demonstrated strong correlations of time spent reading with reading achievement (Anderson, Wilson & Fielding, 1988; National Reading Panel, 2000). Without time spent on reading, students aren't likely to become proficient readers, whether the mode of reading practice is oral or silent! Anderson, Hiebert, Scott & Wilkinson (1985, p. 76) many years ago lamented the miniscule amount of time students spent actually reading in classrooms daily, about "7 or 8 minutes per day." This finding surely had prompted Allington's (1977) remarks several years previous, "If they don't read much, how they ever gonna' get good?"

Allocating time daily for reading silently is foundational to the process of developing elementary students' silent reading fluency. As Anderson et al. (1985, p. 77) asserted, "Increasing the amount of time read ought to be a priority for both parents and teachers."

Thus, allocating roughly 15-20 minutes daily would more than double the amount of time students spent reading in school from previous estimates (Anderson, et al., 1985). During allocated reading practice time students should spend the bulk of their time reading, rather than browsing for reading materials, or even worse, using a book as a prop to “fake” reading. Thus, time allocated to reading practice alone will surely not ensure that students spend this time during the school day wisely or well. More is needed. Regularly allocated time for reading practice, coupled with the remaining three core evidence-based components that support the development of silent reading fluency with elementary students provide the “more” that is needed. The first of these three core evidence-based components that support the development of silent reading fluency with elementary students is a supportive classroom environment.

Supportive Classroom Environment

To develop silent reading fluency, the physical arrangement or organization of a literacy classroom can be a powerful tool if designed effectively. (Morrow, Reutzel, & Casey, 2006; Reutzel, Jones, & Newman, 2010; Reutzel & Morrow, 2007; Roskos & Neuman, 2012; Wolfersberger, Reutzel, Sudweeks, & Fawson, 2004). The hub of an effective literacy classroom for supporting the literacy development of silent reading fluency is the classroom library (Reutzel & Fawson, 2002; Reutzel & Clark, 2012). An effective classroom library should be located in a quiet, peaceful area of the classroom, and if possible, furnished with comfortable seating for multiple students.

An effective classroom library is organized to support and guide efficient student browsing and book selection. To scaffold students’ browsing and selection processes in the classroom library, teachers should label classroom library shelves for contents and use book tubs to group books into conceptually related categories or genres so that students can easily locate interesting books by level of difficulty. For example, book tubs can be labeled by genre with a variety of color-coded reading difficulty levels stored within each genre tub (See Figure 1).



Figure 1. *Exemplary Classroom Library*

Free wooden paint stir sticks obtained from a local home hardware or paint store labeled with students names can be used as placeholders for books they’ve checked out of the classroom library. Vinyl rain gutter(s) can be mounted on bookshelves or windowsills to display books with the covers out increasing student interest (Reutzel & Gali, 1998). Experts

have recommended about 10 books per student or 250-300 books total as a minimum for an effective elementary classroom library to support silent reading fluency practice (Stoodt, 1989; Reutzel & Fawson, 2002). Books selected by the teacher for inclusion in the classroom library should vary in terms of content, genre, and be leveled by difficulty.

Another way to scaffold students' book browsing and selection processes in the classroom library, is for teachers to code the difficulty level of books within the classroom library collection using colored cloth tape or stickers placed on the binding or the upper right-hand corner of book covers. One of the most widely recognized book leveling approaches is called Lexiles (See www.lexile.com). The Lexile® system levels books from pre-primer levels (-200L to +200L) to graduate school (1400L - 1800L) (Stenner, 1996; Stenner and Burdick, 1997). Students should be taught to select books in the classroom library for silent reading that are marked by a specific color code representing their individual independent reading levels (95% or more accuracy level).

Student Engagement

One way to motivate readers to engage in reading is to allow choice. Even within proscribed limits, offering students some level of choice of reading materials works to ensure higher levels of interest and as a result sustained engagement with text (Marinak, Gambrell, & Mazzoni, 2013).

Recent experimental research also suggests that wide reading across genres with monitoring and feedback produces equivalent or better oral and silent reading fluency gains in second- and third-grade students (Hiebert & Reutzel, 2010; Kuhn, 2005; Kuhn & Schwanenflugel, 2006; Kuhn & Woo, 2008; Pikulski & Chard, 2005; Reutzel, Petscher, & Spichtig, 2012; Reutzel, Fawson, & Smith, 2008; Stahl, 2004). In wide reading, students read different text types (narrative, expository, and poetic) across a range of genres (fantasy, fairy tales, myths, science fiction, historical fiction, series books, autobiographies, diaries, journals, logs, essays, encyclopedia entries, information books) (Kuhn, Ash, & Gregory, 2012). To encourage students to read widely, many teachers find a reading genre wheel useful (Figure 2). Students select a book from one of the genres in the wheel. After reading a book from a genre in the wheel, students color in each section of the genre wheel as they complete the multiple genres shown within it.

Fawson, Reutzel, Read, & Moore (2009) have shown that reading widely using a genre wheel to guide student choice is more motivating than three other approaches often used by teachers for students to earn a reading incentive: 1) number of pages, 2) number of books, and 3) number of minutes.

Research has shown that discussion and social interaction around texts promotes development of higher-level literacy skills and increases students' intrinsic motivation for reading and writing (Almasi, 1996; Guthrie, Schafer, Wang & Afflerbach, 1993; Slavin, 1990; Wigfield & Guthrie, 1997; Wood 1990). Discussion and social interactions about text also increase students' appreciation and understanding of text (Atwell, 2007; Cole, 2003; Garan & DeVoogd, 2008; Lee-Daniels & Murray, 2000). Hunt (1965, 1971a, 1971b) viewed text discussions and social interactions around text through teacher conferences and student book talks as "the heart of silent reading time." Manning and Manning (1984) also noted increased silent reading fluency when reading teacher-student discussions and social interactions in regular conferences were a part of independent, silent reading time.



Figure 2. *Reading Genre Wheel*

A persistent concern about silent, independent reading time has and continues to focus on whether or not students are actually reading during this time. Researchers have noted that although students may give off the appearance of engagement in reading, because they are not held accountable, they could be “reading” the same book day after day, week after week or not reading at all (Kelley & Clausen-Grace, 2006; Worthy & Broaddus, 2001). According to Kelly and Clausen (2010, p 174) disengaged readers, especially 'Fake' and 'Compliant' readers, need a strong sense of purpose beyond “because the teacher told me to.” However, this can be controlled when the students are paired to discuss their books or when teachers are engaged with their students through reading conferences.

Asking students to keep records of book titles read in logs, write daily reflections, set goals for completion, share daily readings or talk around their books with peers, or complete book response projects offer additional “built-in” student accountability mechanism known to increase student motivation and achievement (Guthrie & Wigfield, 1997; Turner & Paris, 1995). Finally, reaching out to parents and the home encourages and supports their children’s reading at school and at home during free time and, as a result, increases students’ motivation and achievement in school (Olsen & Fuller, 2003).

Teacher Scaffolds and Instruction

Finally, we come to component four for supporting silent reading fluency - teacher scaffolds and instruction. The National Reading Panel (2000) examined the claim that reading practice time independent of instruction had a positive effect on the development of reading fluency among students. The Panel’s conclusion was that there was no evidence that reading practice, by itself, improved reading fluency or reading achievement. The Panel did not conclude that reading practice did not improve reading. To provide a strong test of reading practice time independent of instruction, Kamil (2008) conducted a quasi-experimental study in a school population with a very high proportion of English Language Learners (61%). Even with logging the titles read and an incentive program offering a certificate, t-

shirts, and a faux gold medal, the results of reading practice time independent of teacher instruction showed no significant difference when compared with a control group population of the matching demographic.

In a second follow up study, Kamil (2008) coupled professional development for teachers to support students' reading of information texts with reading practice time. Results indicated that "coupled with instruction, recreational (reading practice time) reading had significant effects on fluency and comprehension" (Kamil, 2008, p. 38). These findings, according to Kamil, argue that the effect of reading practice is dramatically enhanced by scaffolding and instruction that supports students. Without scaffolding and instruction, reading practice time alone has no effect on reading achievement, fluency or comprehension development.

What kinds of teacher scaffolds and instruction have been found useful in promoting enhanced effects of silent, independent reading practice? Explicit instruction has been found effective in helping students spend their reading practice time wisely.

For example, teachers could teach a series of explicit book selection strategy lessons, as suggested by Reutzel & Fawson (2002), since time spent silently reading appropriately challenging and interesting texts has been shown to improve word reading and comprehension (Kuhn et al., 2006). Furthermore, the ability to determine if a book is either too hard or too easy to read is essential in order to 'sustain' or build stamina for reading (Brenner & Hiebert, 2010). One such book selection strategy lesson may focus around the organization and use of the classroom library. Teachers could provide a explicit lesson modeling how to effectively enter, browse, select, check out, and exit the classroom library in a series of short, five to ten minute lessons.

Another possible book selection strategy lesson (Reutzel & Fawson, 2002) may involve teaching students about the "three" or "five" finger rule (3 fingers in primary grades and 5 fingers in intermediate/secondary grades). The 3 or 5 finger rule, as described by Allington (2006) and others, involves students counting with the fingers of one hand the words they don't recognize on a page of a book they have selected to read. If there are three or five unrecognized words on a page, the text is probably too difficult for silent, independent reading unless the student is exceptionally interested in the content.

Yet another possible book selection strategy lesson (Reutzel & Fawson, 2002) may involve explaining the expectations, setting limits, stating rules, and modeling procedures before allowing students to use the classroom library. It is critical to set up clear routines and expectations to ensure the success of silent reading practice time as well as the general use and orderliness of the classroom library. With clear rules, expectations and procedures modeled and taught, you may prevent many common disruptions and inappropriate behaviors that could take place in the classroom library.

Finally, teachers could pave the way for silent reading practice time with short, 5-8 minute lessons that include explanations and modeling of elements of fluent reading or use of comprehension strategies. Following these brief explicit lessons, students are dismissed to engage in 20 minutes of independent, silent reading practice time each day during which time the teacher circulates about the room conducting conferences with individual students to teach, guide, monitor progress, set goals, and assess appropriateness of the student's book choice.

Two evidence-based silent reading fluency interventions have combined these four core evidence-based components of effective silent reading fluency instruction into two different but complementary instructional interventions - one called Scaffolding Silent Reading (ScSR)

and the other, R5. Research has demonstrated positive effects for both ScSR and R5 on silent reading fluency development. We begin with a description of the protocol and research support for ScSR and follow up with a similar description of the protocol and research support for R5.

Scaffolded Silent Reading (ScSR): Four Silent Reading Fluency Components Put into Practice

ScSR begins with carefully arranging the classroom library to support and guide students' book reading choices toward appropriately challenging and interesting books (Reutzel, Jones, Fawson, & Smith, 2008; Reutzel, Fawson & Smith, 2008). Since students will receive less feedback and support from the teacher in ScSR than in other forms of reading practice, students are directed to read texts they can process accurately and effortlessly, what some call the independent reading level of 95% or above reading accuracy (Stahl & Heubach, 2006). Student book selection is guided by placing reading materials into clearly labeled shelves or plastic bins representing different genres.

To further assist students in their book selection, books are color coded according to levels of difficulty levels within the classroom library genre tubs by using different colors of stickers placed on the upper right hand corner of the book covers. Students are taught explicit lessons on how to enter the classroom library and select books marked by a specific color code representing each assigned child's independent reading level (95%+ accuracy level).

Because the opportunity to choose reading materials increases student motivation to read, students read widely from a variety of literary genres guided by the use of a genre wheel (Gambrell, 1996; Guthrie & Wigfield, 1997; Turner & Paris, 1995). Students are expected to read a minimum of 5 books each nine-week period of the school year. Once students finish reading books from each genre in the genre wheel, they begin a new genre wheel. They are expected to read enough books each year to complete at least two reading genre wheels.

Having planned the organization, display, and storage of the reading materials in the classroom library, a series of explicit book selection strategy lessons are taught (Reutzel & Fawson, 2002). These lessons address several book selection strategies including: 1) orienting students to the classroom library, 2) book talks and getting children excited about books, 3) selecting a book in the classroom library, 4) selecting a "just right" or appropriately leveled book from the classroom library, and 5) checking the reading level of books. During one explicit book strategy selection lesson, students are taught the "three finger" rule for book selection.

Each day ScSR practice time begins with a short, usually about 5-8 minute, explanation and modeling of a teacher selected text: 1) an aspect or element of fluent reading or 2) how to use a comprehension strategy. Following these brief lessons, students are dismissed to select a new book or retrieve a previously selected book. Other leveled books are stored in crates distributed strategically around the room to disperse student traffic flow evenly throughout the room. Children are then free to select a spot in the classroom library, on the carpet, or at their seats for ScSR practice time. During ScSR, the students engage in 20 minutes of silent reading practice time each day.

As students read, the teacher uses a clipboard or digital tablet device to track weekly individual teacher-student reading conferences. During each individual reading conference, students read aloud from their book while the teacher records a running record analysis of their reading. After reading aloud for 1-2 minutes, the teacher initiates a discussion with the

student about the book. To monitor comprehension, teachers ask students to, "Please tell me about what you just read." After the free recall by the student, the teacher may often follow up with general story structure questions if the book read aloud is narrative. If the book read aloud was about information, teachers might ask students to talk about unfamiliar vocabulary concepts or answer questions about facts related to the book's topic. This brief discussion around the book takes about 2 minutes. Finally, at the end of each individual reading conference, ScSR teachers ask students to set a goal for a date to finish the book they are reading. They are also asked to think about how to share with classmates what their book was about from a displayed menu of "book response projects" such as drawing a wanted poster for a book character, drawing a story map or filling in a graphic organizer.

After each individual reading conference, ScSR teachers record student running record results including accuracy, rate, and expression. Teachers record the student's comprehension of the book as indicated in the free recall and answers to teacher questions. Teachers also record the student's goal for book completion, and the student's selected book response project that is to be completed after finishing the book. A form for recording the results of individual teacher-student conferences is shown in Figure 4.

During a 20 minute ScSR session, teachers meet with 4-5 students per day in teacher-student conferences to monitor individual's reading progress weekly. In this way, ScSR teachers ensure that students are engaged and accountable for the time spent reading silently. At the end of the 20 minute daily ScSR time, we have recently added a 2-3 minute share your book with a buddy time. Students either tell about what they read that day or read a small part of the book to a classroom peer during this time. After the share time is complete, students quietly return their reading folders to the storage crates around the room and quickly transition to the next part of the daily routine.

Results of research on ScSR have demonstrated efficacy of this approach for developing students' silent reading fluency in a year-long true experiment in the third-grade (Reutzell, Jones, Fawson, & Smith, 2008; Reutzell, Fawson & Smith, 2008). Students in ScSR performed as well as students receiving a comparison treatment of the National Reading Panel's (2000) recommended guided oral repeated reading with feedback on fluency and comprehension measures. Thus, ScSR represents a complementary practice of equivalent efficacy to the recommended practice of guided oral repeated reading with feedback.

R5

R5 is another way of organizing independent, silent reading to support silent reading fluency development originally conceived by Kelley & Clausen-Grace (2006). R5 consists of five essential elements that align with the four evidence-based components discussed earlier: 1) teachers assist with book selection, 2) students keep track of their reading in a reading log, 3) students complete a response project about their reading, 4) teachers and students engage in discussion, and 5) the teacher monitors student engagement during the independent, silent reading time. To help students more productively engage during R5, three simple rules are implemented (Kelley & Clausen-Grace, 2006; 2007):

1. Students must have reading materials selected prior to the beginning of R5.
2. Students cannot get up for any reason during R5. Restroom and water breaks are provided prior to R5 time.
3. Students cannot talk to others, unless in a teacher conference or during the Rap part of R5.

R5 consists of five “Rs” divided into three phases: 1) Read and Relax, 2) Reflect and Respond, and 3) Rap.

Student Name _____
Date of Reading Conference _____
Title of Book Student Is Reading _____

Part A: Fluency Teacher’s Running Record of Student’s One- to Two-Minute Reading Sample
<div style="border: 1px solid black; height: 150px; width: 100%;"></div>
Number of Words Read _____
Number of Errors _____
Word Read Correctly Per Minute _____
Part B: Comprehension
Oral Retelling
Narrative Text: <input type="checkbox"/> Setting <input type="checkbox"/> Characters <input type="checkbox"/> Problem <input type="checkbox"/> Goals <input type="checkbox"/> Episode(s) <input type="checkbox"/> Resolution
Expository Text: <input type="checkbox"/> Topic <input type="checkbox"/> Main Idea <input type="checkbox"/> Supporting Detail(s) <input type="checkbox"/> Use of Vocabulary Terms
Discussion Questions
Narrative: Ask story structure questions about setting, characters, problem, and so forth. Expository: Ask about the topic, main idea, supporting details, and so forth.
Part C: Goal Setting Book Completion Goal Date _____ Goal Pages to Be Read by the Next Reading Conference _____
Part D: Book Sharing Book Response Project Selected and Approved by Teacher _____ _____ _____

Figure 3. Individual Student Reading Conferences Tracking Form

Read and Relax

During the Read and Relax phase, students choose a comfortable location in the classroom to read. Teachers complete a brief status-of-the-class (Atwell, 1990) chart to monitor student book selection, reading progress, provide feedback and maintain a simple record of conferences (Kelley & Clausen-Grace, 2006; 2007; 2008a). Typically, in R5 one-on-one conferences take about 10 minutes and occur on a monthly basis. During one-on-one conferences, the teacher records information on a form. Students bring their book in a reading folder to the conference. The reading folder contains a running log of books read, daily strategy reflections, and a copy of the current strategy goal-setting plan. Students share something about the book being read, including the title, a brief summary, and knowledge about the book's genre. During the conference, the teacher asks the student to describe how they have used their reading strategies taught during whole class instruction. After a strategy discussion is concluded, teachers ask students to set a student goal to work on until the next conference. Throughout the conference, the teacher provides positive feedback based on the student's growth.

Reflect and Respond

After the 10-20 minutes of allocated time for reading and relaxing, students reflect and respond. They often reflect and respond by writing a brief response in a reading log including the title, author and genre and something about what they have read.

Rap

The Rap phase of R5 is divided into two parts. In Rap phase 1, students discuss their books and reflections in pairs. For Rap phase 2, the teacher pulls the class together into a whole class share. In pairs, students take turns telling the class what their partner shared with them. The teacher then asks the other students to identify the reading strategies mentioned in the whole class share. Rap time in R5 is usually 10-15 minutes. R5 time averages between 30-40 minutes in length. Authors of R5 caution that the time taken for each R5 phase varies from the beginning of the year to the end of the year; as students take on more responsibility for their reading, and build increasing reading stamina.

Research findings have shown that students in R5 read more widely and increased reading proficiency over the duration of the study (Kelley & Clausen-Grace, 2006; 2007; 2008a; 2008b). Unfortunately, the R5 study was not designed using a control or comparison group to determine relative effects of the R5 intervention on reading fluency or comprehension. Having offered this caution, results did show statistically significant gains in reading proficiency for R5 students from pre to post testing occasions.

Conclusion

Research findings in the past decade have illuminated the conditions and contexts for effective silent reading fluency development in elementary classrooms. Many questions remain as to which of the four evidence-based silent reading fluency development components contribute the greatest amount of variance to student growth. It is possible that only two or three of these evidence-based components may be necessary to achieve similar results. How often do teachers need to conference with students to maintain motivation and provide adequate progress monitoring? In what ways could silent reading time include more time for students to discuss strategy use, self-evaluations with a peer, or talk more productively around text? In other words, could the structure of this time be more carefully structured to yield the greatest results for student motivation and achievement? Finally, we need more and better research that describes when fluency practice should transition from oral to silent reading practice and how this transition can be done successfully with all

students. But for now, the results of current research strongly support four evidence-based components for supporting the development of silent reading fluency as described in this article: 1) allocated practice time; 2) supportive classroom environment; 3) engaged reading, and 4) teacher scaffolds and instruction. Research has also provided two evidence-based routines: 1) Scaffolded Silent Reading (ScSR), and 2) R5 to enhance intermediate grade (3-6) students' silent reading fluency development.



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Considering the Context and Texts for Fluency: Performance, Readers Theater, and Poetry

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Abstract

This article describes the importance of teaching reading fluency and all of its components, including automaticity and prosody. The authors explain how teachers can create a context for reading fluency instruction by engaging students in reading performance activities. To support the instructional contexts, the authors suggest particular text-types that are well-suited for reading fluency activities.

Keywords: Reading fluency, Text selection, Performance reading

Introduction

Manny (pseudonym) jokes with some of the cast members backstage. In a few minutes, he and some of his classmates will be performing a Readers Theatre piece for their fifth grade class. He's nervous but not overly so. Less than a year ago reading aloud in front of people would have been the last thing he wanted to do. The way he plodded word for word through text was as painful for others to listen to as it was for him to undertake. Today, he looks forward to it. What's happened in the meantime could be telling for schools across the country.

Manny was a struggling reader. Specifically he struggled reading in making sense of what he read. Measures of oral reading fluency and comprehension put him nearly a two years behind his peers. Interventions included practicing word lists, vocabulary worksheets, and drilling in phonics. Then at the urging of a friend, he joined the drama club because, as he put it, "you got to like act like different people and stuff. It's really cool!" As acting exercises progressed and morphed from physical expression to oral interpretation to full integration, scripts were added into the mix.

Initially, he would be given a scene to read and prepare. When it came time for the group to decide on a play to perform, their coach offered up several possibilities and gave them

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opportunities to take the scripts home and decide whether or not they saw a character for themselves to portray. Rehearsing the scene at home would entail reading the scene numerous times to understand the situation and the character. The result? More reading. Importantly, more reading that is akin to what is known as “close reading”.

Decades of research have shown us that reading the same text several times, or repeated reading, improves reading comprehension (Dowhower, 1987; Faver, 2008; Herman, 1985; LeVasseur, Macaruso, & Shankweiler, 2008; Musti-Rao, Hawkins, & Barkley, 2009; Rasinski, 1990; Samuels, 1979) . Close reading is a more focused form of repeated reading that involves “an intensive analysis of a text in order to come to terms with what it says, how it says it, and what it means” (Shanahan, 2012, para. 5). In close reading the reader is given purposes for reading, text dependent questions to guide their thinking, and opportunities to interact with others about the content (Fisher & Frey, 2012). In order to understand a character he is considering portraying, Manny has to read close for deeper meaning. His purposes for reading and guiding questions from the text are inherent in his efforts to develop a character. All scripts, including monologues are dialogic in nature and meaning is shaped by interaction with other actors and the audience.

For most kids, especially those who struggle with reading, getting them to read anything more than once can be difficult, especially when they have essentially given up on reading as a source of enjoyment. Although Manny’s involvement in a school theatre program was not intended to bolster his reading achievement, there is reason to believe it did. He not only found a source of compelling literature, and an avenue of expression, but he was developing important higher level thinking skills in the process (Kuhn & Stahl, 2003; McMaster, 1998) . In addition, the confidence he gained in the theatre program led him to volunteer for the Readers Theatre performance his class was presenting. Manny is becoming a fluent reader.

In order to appreciate that important role that reading fluency plays in overall reading proficiency, we urge you to consider the broad definition and its constituents. Reading researchers typically define reading fluency as smooth, effortless reading (Kuhn & Stahl, 2003) . More specifically, fluent readers recognize words automatically, read at an adequate pace, and with appropriate expression. When we consider all of components in the definition, reading fluency serves as foundational skill that promotes reading comprehension, the goal of reading.

According to automaticity theory, when students begin to recognize words automatically, cognition is freed to focus on higher order process such as reading comprehension (LaBerge & Samuels, 1974) . Whitaker (1983) described the development of automaticity on a continuum. In the beginning, learners engaged in an effortful and laborious process to complete a given task. Though, as the processes became more automatic, the act eventually occurred on an unconscious level. As readers became more automatic and accurate in word recognition, reading rate generally increased (Samuels, 1979). Rasinski (2000) asserted that it was important for students to read at an appropriate pace. However, reading at an “appropriate rate” has several implications.

Reading is not a race, but speed does matter if for no reason other than efficiency. A student that can read and comprehend at a faster rate will acquire more new information in less time (Rasinski, 2000). But comprehension is the operative word here. Rate is often dependent on the context. For example, when we read nonfiction, it is important adjust the rate for optimal learning, often achieved by slowing down. Other forms of reading require rate adjustments, such as dramatic oral readings, including plays, poetry, or speeches. Dramatic oral readings also require appropriate expression, or prosody (Tyler & Chard, 2000).

Early research on eye tracking revealed that good readers move their eyes forward and backward over the page, jumping ahead and slowing down both within and between sentences (Huey, 1908). Later research confirmed that good readers make meaning of text by adjusting rate, parsing complex sentences into meaningful phases (Schreiber, 1991; (Rasinski, 1989) , and applying emphasis even when reading silently (Kentner, 2012) . (2009) did work showing that the audio imaging experiences that occur during silent reading allow a reader to experience the prosody of an already familiar character. In a recent study, Petkov & Belin (2013) using neuroimaging and neuronal recording work confirmed that inner processes at play during reading involve experiencing voices, and that voice-sensitive brain regions can be activated even when the quotation is from a fictional person and the voice is unknown.

Research has indicated that appropriate prosodic reading is a good predictor of overall reading proficiency (Daane, National Assessment of Educational Progress, & National Center for Education Statistics, 2005) . Daane et al. revealed a strong correlation between prosodic reading an overall reading achievement. In another study, Miller and Schwanenflugel (2008) corroborated this finding and reported that students who read with “adult-like” prosody in first and second graders are more likely to competently comprehend text by the end of third-grade.

Because we are aware of prosody’s important role in the reading process (Schrieber, 1991), we suggest that reading fluency activities should possess both a practice component that builds automaticity and a prosodic component that encourages expression. We believe that both of these components occur in performance activities. Thus, we recommend teachers include a performance element in reading fluency instruction.

Performance Activities

The minute a teacher stands in front of their class, the performance begins. We know the feeling. It is a wonderful, thrilling rush that we cannot achieve anywhere else. There is nothing quite like a five-star teaching performance. Which makes our request even more difficult to stomach: Teachers— share the stage. I know you think we are traitors. We are not; we are reading fluency researchers carrying out our life’s mission to create a global society of fluent readers. In order to do that, you must invite and encourage student performances of text.

There are many different instructional activities that call for performance. We would like to focus on a couple research-based strategies that can increase your students’ reading fluency. First, we will discuss Readers Theatre, an activity that is similar to a putting on a play, but simplified in order to focus on fluency instruction. The next, Poetry Café, is similar to Readers Theatre, but the students perform poetry. Finally, we discuss other texts that students can perform to increase reading fluency.

The following examples are from particular classrooms, which are always unique by nature. We encourage you to consider the protocols carefully; perhaps modifications are necessary to meet the needs of your students. However, when modifying, we recommend that you keep the most important element—consistency. The research supporting these strategies all came from classrooms that committed reading fluency instruction throughout the school-year. Therefore, to increase the likelihood of positive results, you should consider making fluency instruction a part of your daily routine.

Readers Theatre

Readers Theatre is an educational activity that requires students to perform a text. These texts can be from existing literature, nonfiction, poetry, parodies, or student generated. Readers Theater requires no props, no memorization, and no costumes. Students entertain audiences with their expressive oral reading (prosody), while the prior rehearsal gives a purpose for repeated readings, a well-research method for increasing reading fluency (Mercer, Campbell, Miller, Mercer, & Lane, 2000; Vadasy & Sanders, 2008; Vaughn, Chard, Bryant, Coleman, & Kouzekanani, 2000. Research (Griffith & Rasinski; 2004; Tyler & Chard, 2000; Young & Rasinski; 2009) suggests that Readers Theater, in particular, is an effective means of enhancing students' reading fluency and is a motivational reading activity (Martinez, Roser, & Strecker, 1998).

First, the teacher selects a variety of scripts (see figure 1 for suggested resources). The scripts can be trade books, poetry, fiction, newspaper articles, or just about any other text that lends itself to performance. Student generated texts can also be used as scripts (Young & Rasinski, 2011). You can even script excerpts from movies or television. Then again, expressive oral readings can turn almost any text into an exciting performance (even standardized tests!).

www.thebestclass.org/rtscripts.html

www.timrasinski.com

<http://www.teachingheart.net/readerstheater.htm>

<http://www.aaronshep.com/rt/RTE.html>

<http://www.storiestogrowby.com/script.html>

Figure 1. *Sources for Readers Theater Scripts*

Because the text selection is in the teacher's control, teachers can easily differentiate Readers Theatre for a variety of students. For students that struggle, you can select easier or more familiar texts. Conversely, for advanced students, you can increase the text difficulty. Because any text can potentially become a script, the text can be in any language. So whether you are performing the Three Little Pigs in English, German (Die drei kleinen Schweinchen), French (Les Trois Petit Cochons), or Spanish (Lost Tres Cerditos), the procedure is still the same.

Young and Rasinski (2009) described a five-day format that worked well in a second grade classroom. Students in Young's classroom participated in Readers Theatre each week for an entire school year (approximately 8 months). Overall, students word recognition accuracy and comprehension increase. In addition, students' prosody increased by 20% and students doubled the expected growth in words read correctly per minute.

The five-day format is easily implemented on a weekly schedule. On Monday, the students choose their scripts after the teacher reads each of them aloud. The students then read over the script for two purposes. First, the students need to comprehend the overall meaning of the texts. Second, students should decide on which parts they might like to play. The following day, students choose and highlight their parts. On Tuesday, the students focus on word identification making sure they know all the words and can pronounce them correctly. Wednesday's goal is to read with appropriate expression. The students focus on matching the meaning of the text with the expressiveness of their voice. While prosody is the key component in the entertainment value of Readers Theatre, it also requires students to deeply analyze the text and calibrate their oral reading based on their reading

comprehension. Students practice their performance on Thursday, and prepare for Friday's big premier. By performance time, each student will have closely read their script over a dozen times.

Performance day serves as an opportunity for students to simultaneously entertain audience and demonstrate how their practice leads to fluent oral readings of text. Thus, it is important to create a context where their hard work is appreciated. Because entertaining an audience is a motivating factor and the reason for rehearsal, locating an audience is imperative. Fortunately, there are many sources for an audience. You can invite parents, administrators, other classes, or other school staff. If audiences are scarce, the students can always perform for their peers.

With the increased availability of technology, there are other ways to procure an audience. The internet is another context for performance. For example, teachers sometimes film performances, so the students can watch themselves. The videos also make great gifts for their families. With permission, you can upload the performances to a private blog, Youtube, or other media sharing sites. In another technological variation, Vasinda and McLeod (2011) described a performance method that required students read their scripts into a microphone and published the recordings as a podcast. These examples only represent two ideas for performance on the Internet, and leave plenty of room for teacher creativity. We invite you to consider how Web 2.0 tools, websites, social media, and other applications could serve as a venue for Readers Theater performances.

Poetry

Jorge Luis Borges once said, "Truly fine poetry must be read aloud. A good poem does not allow itself to be read in a low voice or silently. If we can read it silently, it is not a valid poem: a poem demands pronunciation. Poetry always remembers that it was an oral art before it was a written art." (1972, p. 9). We whole-heartedly believe these words, and concur that poetry is meant to be performed. Indeed, students today may have a different notion of "fine poetry", so if you would allow us to generalize, we suggest that any poetry can be performed. This could include all genres of poetry (e. g. epic, narrative, prose, or humorous) from any era. There are many ways to ask students to recite poetry, but we strongly recommend time for rehearsal and a context for performance.

Wilfong (2008) described a reading program that she called "The Poetry Academy." The teacher selects a poem with each student's reading level in mind. A volunteer reads the poem aloud to the student. Next, the volunteer and the student read the poem together—often referred to as choral reading. The student then reads the poem aloud to the volunteer independently. Essentially, the volunteer gradually releases the responsibility to the student. After the gradual release, the student and volunteer engage in a conversation about the text, the purpose of the dialogue is to identify the meaning of the poem and build identify any troublesome words. The student then takes the poem home and reads the poem to as many human beings as possible, each of which provide a signature as proof of the performance. Upon returning to school, the student reads the poem to the volunteer to demonstrate mastery. The Poetry Academy is a good example of utilizing volunteers and incorporating friends and family into students' learning, but as always, there are several options, and you get to decide what works best for your classroom.

Another option, often dubbed, "Poetry Café", provides a larger venue for performance. After a quick Google search you will find many variations for implementing the activity. We will share a method that is similar to the five-day format used for Readers Theatre.

On Monday the students select a poem. Students can surf the Internet, peruse the classroom, take a trip to the library, or ask the teacher for suggestions. After the students choose a poem, the teacher makes sure the students can identify all of the words. Though not every student will require additional assistance, some might. We caution you to think carefully before determining if a text is too difficult for a student. Often times the answer is to help the student choose an easier text, but you may want to consider providing implementing a fluency intervention as an alternative to switching poems.

Providing a research-based fluency interventions combined with the opportunity for practice could increase the likelihood of a successful performance. If a student is struggling with rapid word recognition, the teacher may want to employ modeled fluent reading, assisted reading, or repeated readings (National Institute of Child Health and Development, 2000). In the case that the student needs assistance with both word recognition and expression, you might try a method called Reading Together (Mohr, Dixon, & Young, 2012; Young & Mohr, in press; Young, Mohr, Rasinski, in press).

To utilize Reading Together, the teacher first employs the Neurological Impress Method (Heckelman, 1969). The teacher and student read the poem aloud together. However, the teacher stays slightly ahead of the student and reads with appropriate expression while the student “chases” the teacher. Next, similar to repeated readings (Samuels 1979), the student then rereads the poem aloud independently. The teacher carefully listens for accuracy in word recognition and for appropriate expression. Research (Young, Mohr, & Rasinski, in review) suggests that the expression modeled by the teacher can be heard in the student’s rendering of the text. Of course, not all students require such intense interventions.

After the students are comfortable with the poem, the students practice every day until the performance. You can also encourage students to practice at home. Some variations of Poetry Café recommend a week of practice, performing on Fridays. Other research (Young, Valadez, & Power, in revision) suggests that practice of shorter poems can be limited to two days. In this case, students perform twice per week, once on Wednesday and again on Friday. Thus, students select the poem at the beginning of the week and practice on Monday and Tuesday for the performance on Wednesday. After the performance, students select another poem and practice Wednesday Thursday for the performance on Friday.

You can enhance performance days by adding some poetry café elements. Ask the students to dress in black. Dim the lights in the classroom and provide a stool for the young poets. To complete the context for poetry performance, instruct the students to snap instead of clap. Though you may feel as if you are truly sitting in a poetry café, remember that you are still in the classroom building your students’ reading fluency, a foundational component in reading (National Institute of Child Health and Development, 2000).

Speeches, Monologues, and Presentations

Finally, we would like to point out a few other types of text that can be performed—speeches, monologues, and other presentations. Although you can apply the following tips to any oral reading, we will use speeches as an example. Speeches are written for the sole purpose of reading aloud. The speaker rehearses pronunciation, timing, pitch, pause, intonation, inflection, with the hope that their rehearsals increase the impact of the speech. Text of famous speeches can be found on the Internet, all the way from Socrates’ “Apology” to “The Gettysburg Address” delivered by Abraham Lincoln. Students can also write their own speeches.

When students rehearse speeches, they need to focus on several different subcategories in prosody. The multidimensional fluency scale (MFS; Zutell & Rasinski, 1991) captures most

of these. Therefore, it is possible to use the MFS rubric (Figure 1) to help students refine their speeches. We can direct students to consider expression and volume, phrasing, smoothness, and pace.

In order to infuse expression and volume in a speech, the student must first consider the intended meaning of the speech. Then, the student adjusts his or her expression to match the meaning. Volume in a speech is also very powerful when employed effectively. They should think about the most important or dramatic parts of the speech, and consider adjusting his or her volume while reading aloud. Sometimes speaking in a quieter voice draws the crowd in, and speaking at a higher volume may emphasize the speaker's message.

Phrasing is also important when delivering a speech. Sometimes, to add effect, the speaker reads with intentional phrasing, pausing to add effect. Therefore, students need to consider how to phrase their speeches, and ideal occasions for pause. And with any oral reading, smoothness is also essential. Speeches are typically not read in a choppy and laborious manner. It is crucial, then, that students practice enough to read smoothly and effortlessly.

Finally, the pace of the speech is very important. Sometimes speakers slow down or speed up to increase the impact particulars in their speeches. Students should rehearse their speeches, and analyze the parts for opportunities vary the pace of their reading. If students attend to these dimensions of fluency while rehearsing their speeches, the performance should be a successful one.

Additional Questions

Although we know that reading fluency is a foundation for comprehension, we are still unsure of the magnitude that performance methods enhance comprehension as opposed to other fluency building activities. It would be interesting to determine what direct effect performance has on comprehension.

In addition, a most of the research on performance methods is conducted in middle-elementary classrooms, and there are fewer studies in first-grade and kindergarten (see Garrett and O'Connor, 2010). Research has also been conducted in secondary classrooms (see Keehn, Harmon, & Shoho, 2008), but if we are to promote performance methods for all elementary students, we need to increase the classroom-based research in those grade levels.

Conclusion

The lights dim, and the small group takes a step downstage. Scripts in hand, they read the name of the play in unison. It is a script the teacher adapted from Will Hobb's *Crossing the Wire* about a boy from Mexico crossing the border seeking work to save his family from starving. Manny follows along, reading in unison, and then alone. He is playing the part of the young boy, one of the only members of the party that understands English. Throughout the play, Manny reads lines in both English and Spanish, his native tongue and feels a pride at being able to read now in both languages. As the group takes a bow after their final line is delivered in unison, applause erupts and Manny beams. He can't wait to see the scripts from next week.



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Paired Reading and Related Methods for Improving Fluency

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Abstract

The initial vignette outlines some of the complexities of the use of Paired Reading (PR) in a real situation. A description of PR is followed by a brief summary of evaluation evidence. A number of related techniques are briefly described and the evidence for them considered. The utility of PR in relation to fluency is then discussed. The advantages of PR are then listed. Further questions such as “How does PR work?” and “How are gains to be sustained?” are then raised. A conclusion specifically about the effect of PR on fluency is offered.


Keywords: Paired reading, Fluency, Repeated reading, Effectiveness, Advantages.

Introduction

Marlon and Suzy are working together on reading. Marlon is a second grader and Suzy is a fourth grader. Suzy is not that good a reader (she is accurate at sight words whether by phonological or other means, but has some fluency difficulties and is not so good at comprehension). Marlon is also not that good at his own grade level. However, Marlon reads quite differently – his visual attention is not good, so he makes many word recognition mistakes and is consequently dysfluent. However, his comprehension is remarkably good considering how poorly he decodes the text.

Suzy and Marlon are working as a cooperative pair of buddies in a peer tutoring program which takes place in school three times per week for about 25 minutes. Suzy is the tutor and Marlon is the tutee. Marlon wasn't too sure initially how much a girl would be able to help him, but he has now become used to Suzy and the help she gives.

The pair has chosen a book to read which is of high interest to Marlon – it is about American football. Suzy is somewhat less interested in this topic, but she is grinning and bearing it – hopefully the next book will be more to her liking! Crucially, the difficulty level of the book is a little above Marlon's independent reading level – but of course not so high that

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Suzy has difficulty with it. It is in this area of choosing the right level of difficulty that the teacher has given the pairs guidance – while leaving content and interest levels up to the children.

So how does Marlon manage with this hard book? The pair begins by both reading together out loud in synchrony. Learning how to do this and adjust the pace between the pair was hard at first, but after a few sessions of practice the pair is good at it. Of course, Marlon is not just listening to the words and repeating them, the pair is reading together. Because Marlon's visual attention tends to be rushed and impulsive, Suzy is deliberately reading together in a very measured, almost metronomic way, to try to get him to adopt a better pace.

However, when Marlon says a word wrong, he is given a few seconds to correct it (which he doesn't usually do because he is rushing on), and then Suzy interrupts by saying the problem word again for him correctly. Marlon then has to take his eyes back to the problem word and repeat it correctly, before the pair carry on reading together. At first Marlon found this very tedious, but then he realized that the solution was dependent on his own behavior – so he is learning to go slower and read more accurately so he doesn't get interrupted so much.

From time to time (like at the end of a paragraph) Suzy pauses and asks Marlon questions about what he has just read. (As her own comprehension is not so good this puts some strain on her own processing). The pair is not content with yes and no answers, but engages in a spritely discussion about the paragraph. Suzy also takes the opportunity to give Marlon some subtle praise about his efforts. She is aware that not all children respond equally well to praise, and respond differently to public and private praise, so she is careful about this.

After a few minutes Marlon gets into the book and becomes more and more confident. Before this would be when he would begin to race through the book and his visual attention and therefore comprehension would fall apart. But now things are different. He makes a signal for Suzy to stop reading together with him (a signal so as not to interrupt the flow of the reading – a tap on the book or table is usual). Suzy goes quiet and lets Marlon read alone.

Marlon reads alone until he comes to a hard word he can't read correctly (the book is full of these as it is a bit too hard for him). Before he used to rush past these words but now he is more careful. He is given four seconds to try to figure out the word. But if he doesn't get it right within four seconds, Suzy gives him the word, he repeats it, and the pair goes back to reading together. (Marlon is given only four seconds because any longer than that and he would have rushed past the problem word and become detached from the meaning - going back would then confuse him.)

After a little while Marlon again becomes more confident and again signals for Suzy to be quiet. This time he manages to read on his own for a little longer before Suzy has to come in to help him again.

As the pair progress, Marlon is learning to pace his visual attention and consequently comprehends better and is becoming more fluent. For Suzy meanwhile, the reading together is helping her with flow when reading aloud, and consequently is also improving her comprehension and fluency, which asking questions is adding to. For Suzy in particular, the effect on her self-esteem of being considered a good enough reader to tutor somebody else is enormous.

Peer tutoring using Paired Reading is yielding benefits for both members of the pair. This is an important point to make when talking to parents about the benefits of well-organized

Paired Reading – otherwise they might think that the tutor was getting no benefit and was just being “used”.

What Exactly is Paired Reading?

The term Paired Reading has a nice rounded feel to it, which has led to the application of phrase to many things which are actually not the method which has been proven to be effective. The Paired Reading (PR) method for peer or parent tutoring is a form of supported oral reading which enables students to access and comprehend texts somewhat above their independent readability level, within a framework of predictable and non-intrusive error correction. This structured support used with high motivation texts offers dysfluent readers a flow experience, which is likely to impact on their reading style and socio-emotional aspects of the reading process. Importantly, the method also has benefits for tutors, who are likely to improve their reading in similar ways.

Paired Reading is a straightforward and generally enjoyable way for more able readers to help less able readers develop better reading skills (i.e. a form of cross-ability tutoring). The method is adaptable to any reading material, and tutees select texts which are of intrinsic interest to them but a little above their independent readability level (otherwise the support of PR is pointless). This might include newspapers, magazines, community literature or texts in electronic environments. Of course the texts must be within the independent readability level of the tutor, but a relatively modest differential in reading ability is recommended if the hope is to improve the reading of the tutor as well as the tutee.

The pair might use the “Five-Finger Test” of readability:

1. Open a page at random
2. Spread 5 fingers on one hand
3. Place fingertips on the page at random
4. Child attempts to read the 5 words
5. Repeat on another 4 pages.

If the tutee has struggled on several words but not more than five, the book is about right in terms of difficulty. If the tutor has struggled on more than one or two (peculiar) words, the book is too hard for the tutor. This is not perfectly scientific, but gives the pair a ritual to remind them to think about readability. Additionally, if the tutee has a fanatical interest in one topic which is not shared by the tutor, negotiation is needed.

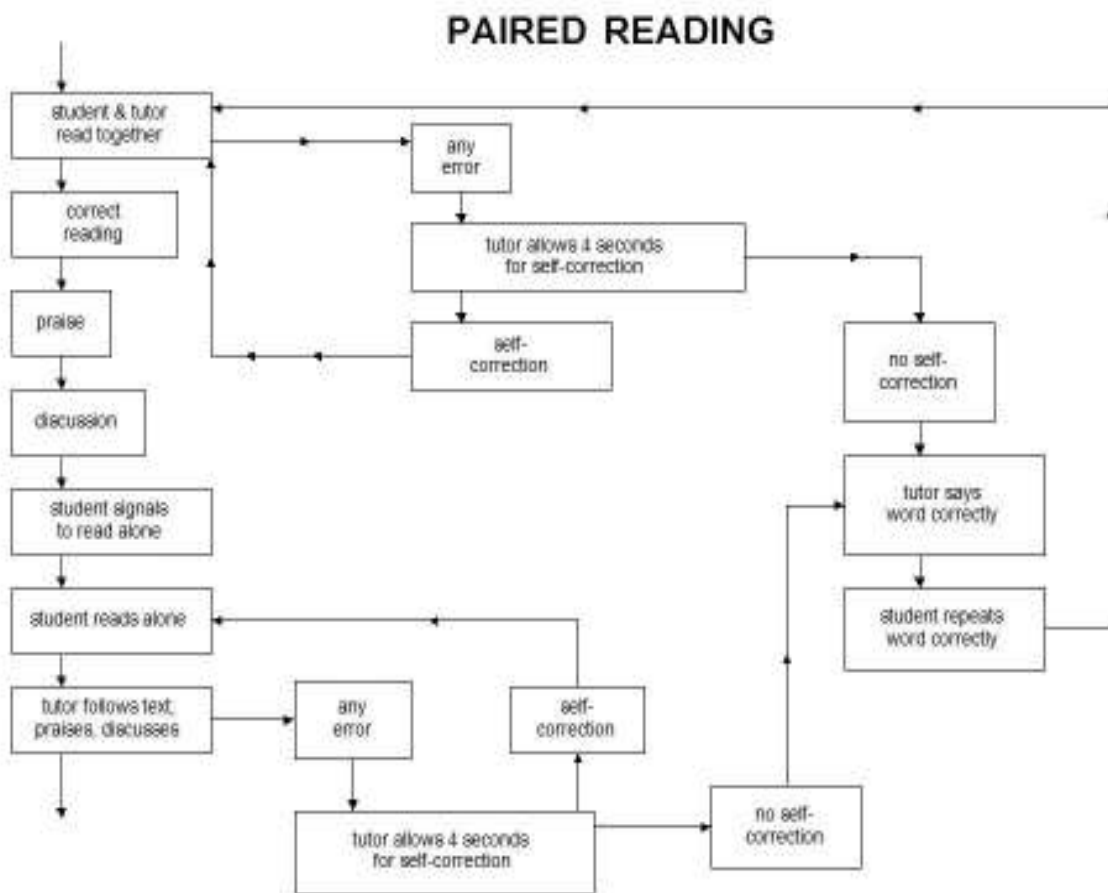
Encouragement to read 'little but often' is usual. Pairs commit themselves to read at least three times per week for at least 10 minutes per session for at least six weeks. This minimum frequency is needed in order to develop automaticity with the technique, and give it a fair test. At the end of 6 weeks, pairs consider if they wish to continue with greater or lesser frequency or at all, or perhaps vary partners or some aspect of the method.

The technique has two main aspects. Initially, tutor and tutee read out loud simultaneously in close synchrony. This is termed "Reading Together". The tutor adjusts their reading speed to the tutee's pace. The tutee must read all the words out loud correctly. Errors are corrected merely by the tutor again giving a perfect example of how to read the error word, and ensuring that the tutee repeats it correctly - then the pair continues reading.

The second aspect is termed "Reading Alone" or independent reading. When the tutee feels confident enough to read a section of text unsupported, the tutee signals by a knock, nudge or other non-verbal signal for the tutor to be silent. The tutor praises the tutee for

taking this initiative, and subsequently praises the tutee very regularly, especially for mastering very difficult words or spontaneously self-correcting.

Any word not read correctly within a pause of four seconds is treated as an error - the tutee is not left to struggle. When the tutee makes an error when Reading Alone, the tutor corrects this as before (by modeling and ensuring perfect repetition), and then joins back in reading simultaneously. (However, tutors often have difficulty learning to give the tutee this time to self-correct – without which they will never learn to self-correct). Throughout there is a great deal of emphasis on praising the tutee for correct reading and pausing from time to time to discuss the meaning of the text. A graphic model of the process is given in Figure 1 below.



Initially, much reading is usually done simultaneously, but as the tutee improves and makes more appropriate choices of reading materials, more and more independent reading occurs (until the tutee becomes more ambitious and chooses harder books, of course). Any tendency to rush on the part of the pupil is usually resolved by consistent use of the correction procedure (although sometimes a shorter pause is needed initially) and/or visually 'pacing' the reading by the reader pointing to each word as it is to be pronounced (usually only on harder texts with smaller print and closer spacing).

Young readers sometimes assume that they are expected to read more and more Alone as they get better at reading. In fact, this is only true if they stick to books of just the same difficulty. It is much more advantageous if, as they get better, they tackle harder and harder books and therefore still need a good deal of support from Reading Together. Some readers regard silent reading as the “grown-up” way of reading and might be resistant to Reading Together, especially if the point of it is not made clear to them and they do not use it to attack texts beyond their independent readability level.

Paired Reading can do a lot of good, but equally important is that it seems to do little harm and be widely ideologically acceptable. Paired Reading works in parallel with a school reading curriculum based on look-and-say, phonics, language experience, pictograms, precision teaching, direct instruction or any other kind of approach. Those who wish to read more about the theoretical underpinnings of Paired Reading and its connections with the wider literature on how children learn to read should consult Topping and Lindsay (1992a).

Does Paired Reading Work?

Paired Reading is a well evaluated method, the focus of a great many studies over the years. The English government included it their review of What Works in Literacy Interventions (Brooks, 2013), and recommend it as part of the national literacy strategy. Importantly, it has been shown to work both in carefully controlled research studies and in naturalistic large scale field trials. It has been used as an intervention for students with reading delay, and also as a broad spectrum mainstream method deployed inclusively for all students. Gains in reading comprehension as well as reading accuracy are very commonly reported. The PR research literature has been reviewed by Topping and Lindsay (1992b) and Topping (1995, 2001).

Studies reported in the literature include 19 control or comparison group studies. Control group studies are generally considered by researchers to yield better quality data capable of supporting firmer conclusions. Overall, the mean experimental accuracy gain was 2½ times larger than the control group gain. For comprehension, experimental gain was 2.1 times larger than control gain. Where effect sizes were calculable for parent tutored projects, the mean accuracy ES was 1.6 for accuracy and 1.4 for comprehension. For peer tutored projects, the overall effect size for reading accuracy was 2.2 and that for reading comprehension 1.6 (but with great variability), including results from peer tutors and tutees. These effect sizes are large when compared to those cited in other meta-analytic reports. Fifteen studies compared PR to some other intervention technique. Overall, PR gains averaged 1.5 times alternative intervention gains.

Topping (1995) reported large scale field study data from one school district, with a substantial majority of district schools participating (i.e. no selection of “co-operative” or “enthusiastic” schools). In 37 comparison or control group projects ($n = 580$ participant and 446 comparison children), scores in both accuracy and comprehension for participant children were statistically significantly greater than for controls. Overall effect sizes for reading accuracy were 0.9 and for comprehension 0.8, less than reported on average in the literature (as might have been expected), but nevertheless substantial (although reduced by high control group variance). Twenty-three projects featured baseline measures (total $n = 374$), using each student as their own control over time. Overall, gains in the intervention phase in reading accuracy were twice as large as gains in the baseline period. Follow-up data were gathered in 17 projects over short periods (typically 4 months) and longer periods (typically 12 months). PR students continued to show accelerated rates of gain over the follow-up period, although not as sharply as during the intensive phase of the intervention (some of these students would have continued with PR, some not). There was no evidence of

“wash-out” of experimental gains over time. It is considered unrealistic to expect acceleration at well above normal rates to continue indefinitely. Gains in reading accuracy were similar for parent-tutored, same-age peer-tutored and cross-age peer-tutored participants. Pre-post gains of peer tutors were greater than those of peer tutees in reading accuracy, but the difference was not statistically significant. There was a tendency for participants of lower socio-economic status to make larger gains in reading accuracy.

Data from ten peer tutor projects were reported in Topping (1987), the follow-up data in Topping (1992a), the socio-economic data in Topping and Lindsay (1992c), data on the effectiveness of paired reading in ethnic minority homes in Topping (1992b), subjective feedback from a great many participants in Topping and Whiteley (1990), and the effect of gender differences in PR peer pairings in Topping and Whiteley (1993). Research on the use of PR with adults of restricted literacy was reported in Scoble, Topping and Wigglesworth (1988).

A large-scale randomized controlled trial (RCT) of PR peer tutoring in 80 schools in Scotland with 9-12 year olds was reported by Topping, Miller, Thurston, McGavock and Conlin (2011). On long-term evaluation, cross-age PR was significantly better than regular teaching, but same-age was not. However, on short-term evaluation, PR tutors and tutees did significantly better than control students in both years, and cross-age and same-age were similarly effective. Low socio-economic students, lower reading ability students, girls, and students who tutored or were tutored in both reading and math did significantly better. Technical aspects of correction were good and tutor mis-correction was very low. Interest in the book and talking were also frequent. However, other important behaviors were rarely seen. Thus, implementation was somewhat variable.

PR studies have emanated from a number of other countries, including Brasil (Cupolillo, Silva, Socorro & Topping, 1997; Murad & Topping, 2000) and South Africa. Research in the UK has developed into Paired Reading and Thinking (PRT). McKinstery and Topping (2003) found PRT very effective in high school settings, and Topping and Bryce (2004) found PRT added value in thinking skills for tutees in elementary school when compared with standard PR.

Related Methods

Various other interventions to enhance fluency have been promoted, and some of these have been evaluated. All are relative to text difficulty for the individual because most students are “surface fluent” at some readability level, even in only reading their own names. (Indeed, some teachers advocate having students read and reread texts below their independent readability level, with the intention of “boosting their confidence.”) Some of these methods seeking to build component skills are construed as contributing to fluency in a rather linear way “from the bottom up-ward”. Others are more holistic and offer the reader alternative pathways to fluency. Yet others aim to give the reader a “virtual” experience of being fluent so that they see what it means, why they should want to get there (and indeed that it is possible to get there). These methods give the student a “higher altitude,” or more “top-down,” view of reading and usually involve some form of support to boost the reader’s limited processing capacity.

Repeated reading is a well-known method aimed at enhancing automaticity by many readings of the same text. LaBerge and Samuels (1974) identified the importance of automaticity many years ago. The instructional implications were then outlined in Samuels (1979). Students were required to read a 100-word passage out loud to an adult, and then they reread the passage silently repeatedly, with occasional further oral readings to check speed and accuracy, until they reached the criterion rate of 100 words per minute (wpm). As

students worked their way through a story doing 100-word segments at a time, results demonstrated that they were learning because each new segment led to increased starting speed and fewer repetitions needed to reach the criterion speed.

Dahl and Samuels (1979) compared RR to other strategies with second-grade struggling readers and found it effective in increasing reading speed and other aspects of reading. Carver and Hoffman (1981) and Dahl and Samuels (1979) found gains in comprehension on texts read repeatedly but no generalization to new texts. However, Young, Bowers, and MacKinnon (1996) found transfer effects in reading comprehension on new passages. Dowhower (1994) found RR had effects on prosodic features. Rashotte and Torgesen (1985) compared different variations of RR but found no effect for any of them. Mathes and Fuchs (1993) compared easy and difficult materials and found no difference in effects. Homan, Klesius, and Hite (1993) found no difference in outcome between repeatedly reading few texts or singular reading of more texts, suggesting simple engagement with print was the main underlying factor. Taking these studies together, it seems that RR can enhance reading speed, comprehension, and expression, but this enhancement is not guaranteed, and generalization of these improvements to new texts is not automatic. The latter might be especially problematic where the new texts contain few or none of the words practiced, and the new words require the redeployment of a range of word-recognition skills.

In some of these studies questions of implementation integrity arose (e.g., concerns about whether the text passages used were appropriately adjusted for difficulty for each child, and concerns about prescribing a set number of readings rather than meeting a performance criterion—"intervention drift"). Kuhn and Stahl (2003) reviewed 15 controlled studies of the effects of RR on fluency. In seven of these, RR outperformed controls (although in one case without transfer effects to new text). The type of control condition varied: Some were no-intervention controls; others read equivalent amounts of text without repeating (i.e., effectively an alternative treatment, but one controlling for exposure to print, albeit not necessarily successful exposure to print). Where Kuhn and Stahl found a difference in fluency, they also found an increase in comprehension. Considering the Samuels version of RR and the variants in relation to the model of fluency, the original version appears to address the predisposing factors better than the variants. However, the RR method appears to address only increases in reading speed (surface fluency), and any transfer to strategic or deep fluency is left to chance or teacher judgment (as reflected in the reported uncertainty of transfer to new texts). Of course, some elaboration to ensure that such connections are made could be added.

One issue that seems little addressed in the literature is student motivation to repeatedly read brief texts that are not of their choosing—hardly an "authentic" literature experience. Another is whether any preteaching of passage vocabulary takes place. Yet another is whether the rationale for these procedures is explained to students (the analogy with sports practice is useful here), or the procedures merely "done to" them—which would be likely to affect student ownership and confidence. Teachers wishing to try out RR should perhaps use Samuels's (1979) original version in the first instance, implement it carefully, ensure the texts are of some intrinsic interest to the students, and consider how they can connect it to other activities to ensure transfer of fluency to comprehension of new texts.

A number of other methods involving various kinds of support for reading have been developed, and many of these seem likely to have positive effects on fluency. They usually involve some combination of modeling, practice, prompting, scaffolding, and feedback. They include neurological impress method (NIM); reading-while-listening (RWL); Prime-OTec; ARROW; talking books; and forms of assisted reading such as the lap method, shadow

reading, and duet reading (details follow of those that are more widely known and/or better evaluated). These approaches can be characterized by components present or absent with respect to the model of fluency.

NIM involves student and instructor reading aloud together in unison. The instructor leads the reading, sitting a little behind the student and speaking directly into the student's right ear while moving a finger along under the word(s) being read. No corrections are made during or after the reading. NIM is intended to be multisensory and to provide a model of accurate and fluent reading. Evaluation evidence is limited (often to case studies), but Heckelman (1986) did report use with delayed readers from 7th to 10th grade who showed gains in fluency and comprehension (no control group).

RWL was a development of NIM, involving practicing reading while listening to an audiotape recording of a fluent reading of the material and pointing at the words. It has been positively evaluated (Schneeberg, 1977). Hollingsworth (1978) used a mass-production version of this method; fourth- to sixth-grade delayed readers who were wired up to hear the same passage simultaneously showed significant gains in comprehension after 62 sessions compared to a control group (but leaving questions about the monitoring demands and quality). Prime-O-Tec is a similar method, which was designed for use with adult disabled readers, as reported in Meyer (1982).

NIM has the advantage of applicability to any text that might be of interest to the reader and of appropriate difficulty, while the texts available for RWL will be limited. However, it is difficult to see how either method could enhance fluency beyond surface fluency unless additional components or activities were added. More comprehensive is the ARROW (aural-read-respond-oral-written) technique, involving young children listening to their own recorded voices as a continuous prompt while reading, writing, or responding orally (Lane & Chinn, 1986). However, all of these are somewhat costly in professional time, preparation, and materials.

Carbo (1978) reported work in supporting reading development through talking books—audiotape recordings of real books. For struggling readers, the problem with many commercially available audio books is that they are *too* fluent; they are spoken fast at a speed designed for listening rather than simultaneously following the text, and they offer a model of fluency so far removed from the student's starting point that the gulf seems enormous and impossible. Carbo made tapes especially for the purpose, stressing phrases and cuing page turnover. Teacher monitoring was much lighter than in the previously described methods, which presumably raises concern about student engagement. Small groups of reading-delayed students made greater-than-normal gains in word recognition (Carbo, 1978), but no control group of any sort was measured. Dowhower (1987) compared RR to audio-supported reading with second graders and found some gains with both methods, although audio support had more impact on prosodic features. Rasinski (1990) replicated this finding with third graders.

The term *assisted reading* has been applied to a number of different methods, some of them not well defined (Hoskisson, 1975). All involve some element of synchronous reading with a more expert helper on difficult words. Hapstak and Tracey (2007) found assisted-repeated reading effective with four students. Shany and Biemiller (2010) investigated the effects of assisted reading practice and contrasted 14 children with below median gains in reading comprehension and 15 with above median gains. Children who gained significantly more vocabulary had also significantly higher gains in comprehension. Reading practice had a large beneficial impact on reading comprehension.

PR and Fluency

Given the difficulties of finding a measure of fluency that is more than superficial, directly researching the impact of PR on fluency is a tough assignment. However, there have been some studies (often small scale) that have explored the impact of PR on fluency, reading style, self-correction rates and reader confidence with both elementary and high school students. More detail of these studies will be found in Topping (1995) – just the main findings are summarized here.

Considering parent and peer tutored studies together, in eight studies error rates have been found to reduce in Paired Readers and in no cases have error rates increased. In seven studies Paired Readers showed decreases in rates of refusal to attempt to read a word and in two cases an increase. In seven studies use of context showed an increase, in one case no difference was found, and in no case was there a decrease. In four studies the rate or speed of reading showed an increase and in no case was there a decrease. In four studies self-correction rate showed an increase and in no case a decrease. In three studies the use of phonics showed an increase and in no case was there a decrease. Although not all these differences reached statistical significance (unsurprising in small scale studies) and only a few studies used either non-participant control or alternative treatment comparison groups, strong consistent trends emerge from all these studies considered together.

In the RCT study (Topping, et al., 2011), class gain in reading test score was plotted against the mean number of mistakes per minute. This indicated that there was an optimum rate for mistakes - about one mistake each two minutes. When talking was plotted against reading test score gain, there were greater gains when the pair stopped reading to talk about the book once between every five to seven minutes (not more frequently, although less made little difference).

If children 'learn to read by reading', one factor in the effectiveness of PR (or any supplemental tutoring intervention) might be the influence of extra reading practice alone. Thus, other things being equal, more time spent doing Paired Reading should be associated with greater gains in reading skill. Some workers have explored this relationship. However, only small correlation coefficients between reading accuracy/comprehension and time spent reading during a PR project have been found, so PR does not work merely by increasing time spent on reading. In the RCT study, significant pre-post gains in self-esteem (improved beliefs about personal reading competence) were seen in both same-age and cross-age pairings, for tutees and tutors, but not for controls. In addition, the scores of cross-age tutors showed further gains in wider self-worth, indicating that working with younger tutees provided extra benefits (Topping, et al., 2011). Whether improved self-esteem has a causative role or is a result of improved reading skill is still open to question.

The general pattern is of Paired Reading resulting in greater fluency, fewer refusals (greater confidence), greater use of the context and a greater likelihood of self-correction, as well as fewer errors (greater accuracy) and better phonic skills. One mistake every two minutes and talking every five to seven minutes seems optimal. There is some evidence that PR might work by developing self-esteem, rather than through more mechanical means.

So far we have by default discussed only PR in English. Does it work in Spanish? Or Polish? Or any other language? Most of the studies of PR in non-English-speaking countries have actually looked at the usefulness of PR in helping students learn English as a Foreign Language. However, some have investigated whether PR works in other languages. For instance, Cupolillo, Silva, Socorro and Topping (1997) found that PR was effective with repeating first graders in Brazil who used the method in Portuguese, tutored by their mothers, siblings or peers. After the six week project, 81% of the project children were more

fluent in reading. This was in contrast to the non-participant children, who showed no improvement at all, despite having received regular school tuition during this period.

What are the Advantages of Paired Reading?

1. Children are encouraged to pursue their own interests in reading material. They have more enthusiasm from reading about their own favorite things, and so try harder. Paired Reading gives them as much support as they need to read whatever book they choose.
2. Children are more in control of what's going on - instead of having reading crammed into them, they make decisions themselves in the light of their own purposes (e.g. about choice of books, going onto Reading Alone, going on longer in the session.)
3. There is no failure - it is impossible not to get a word right within 4 seconds.
4. Paired Reading is very flexible - the child determines how much support is necessary according to the current level of interest, mood, degree of tiredness, amount of confidence, difficulty of the books, and so on.
5. The child gets lots of praise - it's much nicer to be told when you're doing well, instead of just being moaned at when you go wrong.
6. There's lots of emphasis of understanding - getting the meaning out of the words - and that's what reading is all about. It's no use being able to read the words out loud mechanically without following the meaning.
7. Paired Reading gives continuity - it eliminates stopping and starting to "break up" hard words. Doing that often leaves children having forgotten the beginning of the sentence by the time they get to the end. With Paired Reading it is easier for children to make sensible guesses at new words, based on the meaning of the surrounding words.
8. During Reading Together, a child can learn (by example) to read with expression and the right pacing - e.g. by copying how the tutor pauses at punctuation, or gives emphasis to certain words.
9. Children are given a perfect example of how to pronounce difficult words, instead of being left to work it out themselves and then perhaps thinking their own half-right efforts are actually 100% correct.
10. When doing Paired Reading, children get a bit of their own their own peaceful, private attention from their helper, which they might not otherwise have had. There is some evidence that just giving children more attention can actually improve their reading.
11. Paired Reading increases the amount of sheer reading practice children get. Because children are supported through books, they get through them faster. The number of books read in a week goes up, the number of words children look at in a week goes up, and more words stick in the child's memory.
12. Paired Reading gives tutors a clear, straightforward and enjoyable way of helping their children - so no-one gets confused, worried or bad-tempered about reading.

In short, Paired Reading addresses many components of fluency. It is worth giving it a try as a component of your overall reading program.

Further Questions

A number of researchers have tried to answer the question: **How** does PR work? Few have had much success. It is clear that the impact on reading does not relate strongly to the amount of time spent doing PR (i.e. time on task), so the element of sheer practice is not the only factor operating. Recent work on self-esteem (Miller, Topping & Thurston, 2010) suggests that this may be another key factor. Many students have never considered themselves good enough to be tutors for another. The fact that they are so considered gives them much greater self-confidence. It also gives them a purpose for reading in a socially interactive context, which is thereby more interesting than reading on your own. This is especially true when you are given freedom to select your own book provided it is at the right level of difficulty, rather than being guided by the teacher's recommendations.

Another issue is the question of whether the gains from PR are sustained. The research suggests that the gains from PR are still evident up to two years later when there has been no PR in the interim. However, the quality of this evidence is not perfect, so further research is needed. Do the gains from PR transfer to other books which are required reading within the school curriculum? This is a question that has not been investigated, but clearly being able to read books you choose to read well might not necessarily transfer to other books automatically, not least because of motivational factors.

Conclusion

Fluency is an adaptive, context-dependent process. On a text of an appropriate level of difficulty for the reader, it involves the extraction of maximum meaning at maximum speed in a relatively continuous flow, leaving spare simultaneous processing capacity for other higher order processes. Various components of the reading process are involved in fluency, and PR offers a way of working with many of them – so that in a pair, two readers who have different reading strengths and weaknesses can learn to compensate for them in an interactive process.

The general pattern is that PR improves the reading skill in terms of measured reading accuracy and comprehension for both tutees and tutors, provided it is organized correctly. Paired Reading resulted in greater fluency, fewer refusals (greater confidence), greater use of the context and a greater likelihood of self-correction, as well as fewer errors (greater accuracy) and better phonic skills. There is some evidence that PR might work by developing self-esteem, rather than through more mechanical means. PR has also now been broadened into Paired Reading and Thinking (PRT), extending higher order reading skills (Topping, 2001).



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Integrated Fluency Instruction: Three Approaches for Working with Struggling Readers

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Abstract

Effective fluency instruction should focus on reading with understanding, rather than simply reading quickly or expressively. This article outlines three research-based instructional approaches that assist students in developing accurate, automatic word recognition and prosody; at the same time, they ensure learners attend to the text's meaning as they read. All three approaches integrate instructional principles known to improve reading fluency (modeling, scaffolding, repetition, and extensive opportunity for the reading of connected text). They are also clear and easy-to-implement and have proven successful with struggling readers. As a result, these approaches contribute to learners' reading success both within and outside of the classroom.

Keywords: Reading fluency, Struggling readers, Reading instruction, Oral reading, Classroom interventions, Accuracy, automaticity, Prosody, Comprehension, Achievement gains, Reading ability, Teaching methods, Repetition, Word recognition

Introduction

Caleb's mother used to describe him as energetic and creative. However, lately she has noticed that he has become quite a serious and tired second grader, at least when asked to complete his twenty minutes of daily reading homework. On this particular day, Caleb's mother was beside herself. She had just opened a note from his teacher saying that Caleb was not making appropriate progress in reading and that he required more practice at home

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– and perhaps even additional tutoring or intervention in school. His teacher further shared that during self-selected reading, Caleb rarely completed the books he started. More troubling, he was not able to make reading “sound like talk”, and he rarely read in phrases or sentences. Instead, connected text was treated as a list of individual words that Caleb tried to sound out. This word-by-word-reading was painfully slow and his reading accuracy, expression, and comprehension were suffering as well. Whether at home or school, when Caleb was asked to read, his shoulders slumped, he placed his head close to the page, pointed slowly to each word, and often incorrectly proceeded to read the print. Even though his mother tried to encourage him to “take his time” and “sound it out,” she expressed exasperation that she just did not know how to help him. As a result, she watched him struggle daily despite his working incredibly hard. Clearly, Caleb was losing his motivation, confidence, and interest in reading. His teacher continued to search for research-based strategies that would ameliorate the learning to read trajectory for Caleb and the other struggling readers in her class. His mother wondered if this meant he would continue to function well below his peers and would always find school difficult.

This vignette underscores that reading is a complex process that requires much more than word decoding. Fluent readers read with appropriate speed, expression, phrasing, and comprehension. Struggling readers, like Caleb, often lack fluency in their reading, pore over each individual word, and in turn, are unable to self monitor or grasp what the text is about. How can teachers best assist children to prevent or reverse this downward spiral in the classroom – and involve parents in the process?

Normal development of reading fluency, as well as other reading competencies, is the result of practice in reading. As students engage in guided and independent reading, their ability to recognize words improves, their vocabulary increases, their comprehension advances, and their reading fluency, both in terms of word recognition automaticity and prosody, improves. However, despite solid basic reading instruction, a significant number of students will still struggle in their fluency development. For these students a more direct and intensive form of fluency instruction may be appropriate. In this article we discuss several promising intensive and integrated approaches for improving students’ reading fluency.

Integrated Approaches to Fluency Instruction

The fluency instruction approaches or routines presented in this article combine previously identified instructional principles (Rasinski, 1989) into three cohesive fluency curricula (Kuhn, Schwanenflugel, Morris, Morrow, Woo, Meisinger, Sevcik, Bradley, & Stahl, 2006; Rasinski, 1989). First, the approaches provide young or struggling learners with extensive opportunities to read *connected text*. Second, the approaches provide feedback and *modeling* that emphasize appropriate word recognition, phrasing and expression. Third, they incorporate sufficient support – or *scaffolding* – to allow readers to work with challenging reading materials (grade level or higher). Fourth, the instructional routines involve students in *repeated* exposures or readings of texts.

Although similar in the embodiment of these principles, the three approaches to fluency instruction differ in distinct ways: Fluency Oriented Reading Instruction (FORI) uses scaffolded repetition over multiple days as the backbone of its fluency instruction; Wide Reading Fluency Oriented Reading Instruction (Wide FORI) uses the scaffolded reading of a more extensive range of texts; and the Fluency Development Lesson (FDL) employs scaffolded repetitive readings of a text in one day. Current research indicates that all three of these approaches are effective in assisting learners in making the transition to fluency, when used as a part of a larger reading curriculum. In the remainder of this article, we describe the

three approaches in greater detail and discuss issues related to their successful implementation.

Identifying Texts

Before discussing these reading fluency approaches in detail, we want to address the principle of using of challenging texts, since this diverges quite significantly from the conventional notion of using of instructional level texts for reading instruction (Kuhn et al., 2006). When it comes to selecting texts, it is critical to stress the role they will play in the lessons' success. Because the teacher will be providing significant scaffolding or support as part of each lesson, it is essential that the texts used be appropriately challenging. As such, we feel that students need to be reading from material that is generally at or somewhat above their grade level placement (e.g., second graders should be reading texts identified as levels J-P; Fountas & Pinnell, 1999). Such texts can readily be found in a school's basal reading program, literature anthologies, trade books, or, in the case of the FDL, poetry collections.

The structure, support, and repeated exposure and reading embedded in the FORI, Wide FORI, and FDL approaches will help students, even those reading below grade level, to read the assigned material successfully by the end of the lesson and accelerate their progress in fluency and overall reading achievement. When these lessons are used regularly over the course of the year, independent reading skills will gradually improve as a result of the amount of time students spend reading and *mastering connected text*.

FORI

Fluency Oriented Reading Instruction (FORI). Our first instructional approach was designed to help teachers implement their district's mandate that students be taught using only grade-level texts. This was seen as particularly problematic by many of the district's teachers, since many of their students were reading below grade level and these texts would likely be at the children's frustration level. As a result, the teachers and their colleagues at the local University worked together to develop a weekly lesson plan that would help make the material more accessible for their students. The approach presented here, Fluency-Oriented Reading Instruction (FORI; Stahl & Heubach, 2005), follows a basic format that allows for the *gradual release of responsibility* (Pearson & Gallagher, 1983; Vygotsky, 1978) for the reading of a particular text over the course of the week. The lesson plan is based on a five-day cycle, with the teacher providing full support for the material early on and lessening the support as the week continues so that, by the week's end, the children should be able to carry out the reading on their own.

Introducing the text (Day 1). Since the FORI approach relies on intensive repetition over multiple days, a single text is selected for a five-day lesson cycle. The week begins with an introduction of a new text on Monday (assuming an uninterrupted school week). This can be done through a range of pre-teaching activities including the building of background knowledge, the use of webbing, or the pre-teaching of vocabulary. This component of the FORI program should include activities that are typically used for a given selection. For example, if the story deals with life in the 1890's, the teacher would want to build background knowledge by discussing how different the students' lives would have been without cars, television, or even radios!

After introducing the text, the next step involves reading the week's selection aloud to the class while students follow along with their own copies. This is important for a number of reasons. First, it provides students with a sense of the selection as a whole; by doing this, they have an opportunity to understand the story before they have to read it themselves.

Second, the teacher's expressive, skilled rendering of the text serves as a model of fluent reading for students, allowing them to hear what their own reading should ultimately sound like. Finally, this reading presents students with the opportunity to see and track the words as they are being pronounced – without the demands of trying to decode them independently.

Following the read-aloud, the students should participate in a discussion of the text. This discussion may involve traditional question and answer sequences, but can also expand to encompass alternative approaches such as graphic organizers (e.g., story maps) or response-oriented instruction. We consider a comprehension focus early in the lesson to be important because it emphasizes that the construction of meaning is the primary purpose for reading. Since young readers spend significant amounts of energy on word recognition, they may otherwise develop the mistaken notion that correct word identification is the most important component of reading. By focusing students on the construction of meaning early in the lesson, it helps redirect students' attention toward comprehension, something they will hopefully continue to build on in the future (Hoffman & Crone, 1985).

Echo reading (Day 2). On the second day (usually a Tuesday), instruction consists of an echo reading of the text. In this component, the teacher reads two or three sentences aloud to the students who then "echo" or read back what has been read by the teacher. The purpose of reading several sentences aloud at one time, instead of just one sentence or a phrase, is to prevent students from relying on their memory to repeat the text. Instead, they are forced to focus on the words in order to echo the passages correctly. The teacher may also intersperse echo reading of the text with questions to keep students focused on the text's meaning and prevent the procedure from becoming rote. After completing the echo reading, the teacher should provide students with activities associated with expanding their understanding of the text, such as written responses, or the opportunity to work on other aspects of the literacy curriculum.

Students' at-home reading should also begin on the second instructional day since they should now be comfortable enough with the text to begin reading it on their own or with limited help. In order to achieve additional practice, the teacher should ask students to take the text home and read it to (or with) either a family member or a friend. For the remainder of the week, the students' homework is determined by the amount of continued support they will need in order to develop fluency with the selection. If a learner has achieved mastery of the text, he or she should have the opportunity to spend the time reading a book of her or his own choosing independently. If, on the other hand, the student requires additional support, he or she should continue to bring the week's primary reading selection home throughout the week to read again for homework.

Choral reading (Day 3). The FORI lessons continue on day 3 (usually Wednesday) with the teacher leading students in a *choral reading* of the text. This activity is the shortest of the week since it consists of the teacher and her class reading the entire text in unison. It is important that the teacher monitors the children during all the components of the instruction to ensure they are actively engaged in the oral reading of the text. This can be achieved most easily by walking among the learners or by having the students who are most likely to be off-task sit near the teacher or a more diligent student. As noted above, the students should either re-read that week's selection or a book of their own choosing for homework on the third as well as the fourth days.

Partner reading (Day 4). The final re-reading of the text involves a *partner reading* of the selection on day four (usually a Thursday). Partners can be selected in several ways, but self-selected partners and the pairing of more capable readers with their less skilled peers are

highly effective in promoting both on-task behavior and cooperation between partners. Once the students are paired, each is responsible for reading approximately a page of text (completing the sentence or paragraph they are currently working on if it continues onto the next page), before allowing their partner to take over and read the next page. The partners act as a coach for one another, offering assistance and encouragement to their partner as needed. If time allows, upon completing their initial reading of the text, the students can switch assigned pages and read through the selection a second time.

Extension activities (Day 5). On the final day (usually a Friday), students complete extension activities, such as written responses or further discussions of the text, with the teacher or, if the selection has been covered thoroughly, other literacy activities unassociated with the text. Depending on the number of times students read the text at home, the total number of repetitions for each selection will range between four and seven readings over the course of the week. While some discretion can be used regarding the number of days required to cover a given story or expository selection, depending on its length, we have found that the outlined lesson plan works extremely well for the vast majority of passages at these reading levels.

In a study of 18 children, randomly selected from five classrooms, engaged in a FORI of one passage over the course of one week it was found that, on average, the students went from a reading rate of approximately 78 words correct per minute (wcpm) to nearly 120 (wcpm). Using Hasbrouck and Tindal's (2006) fluency norms, these students went from the 25th to the 75th percentile in terms of their reading fluency improvement. We consider this to be significant progress indeed.

Wide Reading Fluency Oriented Reading Instruction

Wide-Reading FORI (Wide FORI) incorporates the same principles presented in FORI; however, rather than reading a single text repeatedly over the course of a week, in this component, students read three texts over the same five day period. The general protocol for Wide FORI is outlined below.

Introducing the text (Day 1). The first day of the lesson plan parallels the FORI lesson. It begins with pre-reading activities for the primary text of the week. This may involve building background knowledge, developing vocabulary, or making predictions about the content of the passage. Next, the teacher reads the text aloud while students follow along in their own copies. Finally, the students engage in a discussion of the selection with the teacher and may also be provided other opportunities to respond to the passage, such as completing a graphic organizer.

Echo reading of Primary Text (Days 2). The second day also parallels the FORI protocol with the teacher and students echo reading the story from the previous day. Again, the procedure involves the teacher reading the section of the text (usually several lines or a paragraph at a time) while the students echo read the same text. The teacher also has the option, depending on the amount of time available, of allowing students to partner read the text after the completion of the echo reading. This provides the students with the opportunity to work with a partner in order to re-read the entire text.

Extension activities (Day 3). Wide FORI begins to deviate from the FORI lesson plan on the third day. Rather than choral reading the material, students complete extension activities for the story (this parallels day 5 of the FORI approach). These can include written responses, such as presenting alternative endings or creating questions for discussion, or oral discussions, for example asking students to focus their attention on plot or character development. Since the Wide FORI protocol involves dealing with the week's primary

selection in three days instead of five, such activities are vital to strengthen the students' understanding of the text.

Echo reading (Days 4 & 5). The fourth and fifth days of Wide FORI involve echo reading and discussing a second and third text with students. Since the students are only working with the material for one day, it is important that the teacher works with them to develop their understanding of the selection. The Common Core State Standards repeatedly refer to this as "close reading" and this reading process is required across all grade levels. Again, if time is available, students can be asked to partner read these texts after completing their echo reading and discussion of the text for its meaning.

As with FORI instruction, both the primary text selection and the additional texts should be sent home for re-reading by the students. Thus, while the emphasis within Wide FORI is on the reading of multiple texts, some degree of repetition is incorporated in the approach.

In a large scale study of the implementation of FORI, Wide FORI, and a more typical reading instruction over the course of school year, researchers found that students in both the FORI and Wide FORI demonstrated statistically significant and substantial gains in word recognition and comprehension over students who received the more conventional reading instruction (Kuhn, et al., 2006). Moreover, students in the Wide FORI treatment also demonstrated significantly greater improvements in oral reading fluency as well. If comprehension improvement is the ultimate goal of fluency instruction, then both FORI and Wide FORI appear to be effective.

Wide FORI or FORI? We recommend the WFORI over the FORI for two reasons: First, we found the students in the Wide FORI instruction did somewhat better than did their peers in the FORI group (although this difference was not significant – and both groups did better than their peers in the control classrooms). Second, research conducted by Mostow and Beck (2005) also indicates that students learn to read a new word more easily when they encountered it in different contexts than when they encountered it repeatedly in the same context. That is, students are more likely to learn the word *blue* in the phrases, the *blue* car, the *blue* dress, and the *blue* sky, than if they were to see the phrase, the *blue* car three separate times. It may be that Wide FORI benefits children by indirectly providing repetition of words (and phrases) across a range of contexts and content.

Having said this, there is a plethora of evidence (e.g., Dowhower, 1989; Kuhn & Stahl, 2003; Rasinski & Hoffman, 2003; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011) indicating that guided and supported repeated readings of texts has distinct benefits for students, especially for selections that introduce students to new concepts and vocabulary, and those benefits appear to extend beyond those texts that are repeatedly read. It may be that the ideal combination is the use of scaffolding with a range of texts read once, or perhaps twice, and the use of scaffolding with particular texts read repeatedly and which is used depends on both the text and the reason(s) it is being read.

Fluency Development Lesson

The Fluency Development Lesson (FDL) incorporates the same principles found in FORI and Wide FORI. However, rather than spreading the lesson components over multiple days, each FDL occurs in one day. The reasoning behind this single day approach is that students with difficulties in reading fluency lag in terms of normal reading development. For them to catch up their progress must be accelerated. This can occur in several ways, including condensing what is normally a multiple day lesson in other fluency instruction (e.g. repeated readings over the course of multiple days) to provide the intensity in instruction that may lead to accelerative progress.

Second, students who struggle in reading often do not view themselves as making substantial progress in their reading development. When students regularly see themselves reading texts in disfluent ways, they begin to view this disfluent reading as normal; this, in turn, limits their potential for developing their reading to the point where it is fluent like their more advanced classmates. Because students essentially learn to read text fluently with each daily lesson when using the FDL, they see themselves as making progress and recognize that they can achieve the same level of fluency as their more high achieving classmates.

Of course, because the goal of the FDL is to read a new text well on a daily basis and because the FDL is limited to approximately 20-30 minutes in length, it is critical that the selection chosen are authentic and that they allow mastery in relatively short periods of time. We have found that poetry and other rhythmic texts, (e.g., song lyrics, speeches) are ideally suited for the FDL. Poetry for children is usually short in length, which lends itself to quick mastery. Moreover, the rhythm and rhyme often embedded in poems for children add to the predictability and memorability of the texts, thus adding to their ability to be quickly mastered. It should be noted that in recent years, poetry has been relegated to an increasingly marginal place in the reading and language arts curriculum (Gill, 2008) despite the fact that new iterations of reading standards (e.g. Common Core State Standards, 2014) specifically mention poetry as a text genre that should be part of an ideal and effective reading instruction program.

Ostensibly, the goal of the FDL is for students to reach a point where they can read a new text accurately, fluently, and with good comprehension each day. The lesson is intended to be implemented daily, though depending on the exigencies of classroom and clinical schedules, it can be modified to 3-4 times per week and still be effective. Each lesson requires two copies of the daily text to be provided for each student; one display copy for teacher modeling and group reading and one for the students to place in their poetry notebooks and share with parents/caregivers. The actual lesson requires about 40 minutes at the outset. However, as the lesson becomes more routinized and teacher and students become more familiar with the instructional protocol, the time involved can be reduced to 20-25 minutes per day. The steps involved in the FDL are as follows:

- 1) The teacher reintroduces the text from the previous day's lesson and invites students, individually or in groups, to read/perform it for the class.
- 2) The teacher next introduces a new text and reads it to the students two or three times while the students listen to the teacher's reading or follow along silently. The text can be a poem, a text segment from a trade book or the class reading program, etc. The teacher can change the prosodic nature of the modeled reading or make some intentional errors in word recognition, phrasing, etc. in subsequent rereadings of the text.
- 3) Teacher and students discuss the nature and content of the passage as well as the quality of teacher's readings of the passage. Which one of the readings did students find most fluent? Why?
- 4) Teacher and students then read the passage chorally several times. Antiphonal reading and other choral variations (e.g. echo reading) are used to create variety and maintain engagement.
- 5) Teacher organizes students into pairs or trios. Each student then practices the passage multiple times while the partner(s) listens and provides support and

encouragement. The goal is to reach a point where all students are able to read the text fluently and meaningfully.

- 6) Individuals and groups of students perform their reading for the class or other audiences such as another class or teacher, a parent visitor, the school principal or other school staff. Students can also record their reading for later playback or to be archived.
- 7) After having read the text several times, students may have it or a portion of it memorized and so when they perform (step 6 above) may not be attending to the words on the pages as they should. So, shortly before or after the students perform, the students and their teacher engage in a study of selected words from the text. The teacher and students harvest four to eight words they think are interesting words from the text to add to the individual students' word banks and/or the classroom word display. The words on the classroom word display are read daily by students. The teacher encourages students to use the words in their own oral and written language.

The teacher leads the students in five to ten minutes of word study. The word study activities can take a variety of forms; here are a few:

- a. Play a word game using the chosen (and other) words (e.g. Wordo – word bingo).
 - b. Sort the words by presence or absence of various features (vowel sound, number of syllables. presence of a consonant blend).
 - c. Expand on certain word families present in the chosen words. For example if the word *gold* was harvested, the teacher can point out the “-old” word family and brainstorm other words that contain that pattern (e.g. *bold, fold, oldest, cold, mold, hold, sold*).
 - d. Create cloze sentences/passages in which the harvested words are used to fill in the missing blanks in the sentence or passage.
 - e. Engage in a word building exercise in which new words are created by changing, adding, subtracting, or rearranging letters from a given word.
- 8) Students take a copy of the passage home to continue their practice of the passage with parents and other family members. The other copy of the passage is kept in their fluency notebook for further practice and performing in school.
 - 9) The instructional routine then begins on the following day by rereading the passage from the previous day (step 1) and then introducing and mastering a new passage (steps 2-9).

Using the FDL on a daily or near daily basis can lead to significant improvements in various aspects of reading. For example, in a university-based reading clinic setting co-directed by two of the authors, there is an ideal opportunity to work exclusively with students who struggle in reading. At the clinic, the FDL serves as the core lesson. In fact, two recent studies examining the usefulness of the FDL to assist primary-aged struggling readers in making gains in fluency and overall reading development (Zimmerman & Rasinski, 2013; Zimmerman, Rasinski, Kruse, Was, Dunlosky, & Rawson, in press), have indicated that the

students receiving the FDL treatment made significant gains from pre-test to post-test in the areas of word recognition, fluency, and comprehension, even when compared to a control group. Moreover, teachers employing the FDL have been very enthusiastic about its use as they see previously “stalled” students now making substantial progress in their reading. It is important to note, however, that the FDL is not just a clinical practice. It is an instructional routine that includes components that any teacher can implement and modify in any reading context to meet the fluency, word recognition, and comprehension needs of students.

Conclusion

As a result of our research and experiences with all three approaches, we consider the FORI, Wide FORI, and FDL fluency lessons to be viable approaches for developing reading fluency among primary grade students or students at other grade levels experiencing difficulty in fluency development. Classroom teachers and interventionists can choose the lesson structure that best fits their particular circumstances. Teachers who have used these approaches have found them to be effective and easy to implement, and the students have genuinely enjoyed them. Moreover, the demonstrable improvements in fluency and other reading competencies make them highly motivating for students as well. Importantly, in this period of high levels of accountability, there is a substantial body of research that supports integrated fluency instruction, based on the known principles of effective fluency instruction, in general and specifically the approaches described in this article (Kuhn, et al., 2006). The research suggests that the results of integrated fluency instruction can be generalized across a range of SES levels and classroom and clinical settings. This research also indicates that fluency instruction, whether based upon more intense repetition or the supported reading of a wider range of texts, is effective.

For us, the most critical feature is the amount of time our students spent reading authentic and connected text – a minimum of 20 minutes per day. We cannot emphasize enough that both of these methods are designed to increase student engagement with print and that it is essential that our students read aloud at least 20-30 minutes per day during this very important phase in children’s reading development. However, there is a second element to this equation. The engagement with text must be undertaken with extensive scaffolding since these methods employ texts that are challenging for most children. We feel that this procedure is especially important for struggling readers because it gives them the opportunity to work with and be successful with grade level texts, even though much of this material is written at a level that is considerably higher than many of these learners can comfortably decode. Research indicates that when the texts being used were not sufficiently challenging, students did not make significant progress. It is the scaffolding of challenging texts provided through the FORI, Wide FORI, and FDL approaches, whether through repetition or modeling (e.g. the use of echo, choral, and partner reading), that allows students to read text that would otherwise be considered frustrating.

This approach is quite different from the commonly used strategy of selecting a text based on children’s reading level. Current best practice generally recommends that instructional level texts be read at approximately 95% level of accuracy, based on the Betts (1946) notion of instructional, independent, and frustration. However, when the goal is fluency and the learners are provided with a variety of supports, such as are available with these fluency-oriented approaches, students are able to read texts at a higher difficulty level than would generally be suggested – texts that would normally be considered to be beyond their ability. Further, reading richer texts benefits children by exposing them to a wider variety and volume of words as well as a greater range of concepts. Both of these factors

contribute to good decoding and comprehension skills (e.g., Beck, McKeown, & Kucan, 2002; Guthrie, 2004). They also serve to narrow the gap between more and less skilled readers that develops – and often widens – as students progress through their school years (Stanovich, 1984).

At the same time, we would not suggest that children should be given a text of that is completely beyond them, even with support. Rather, we agree with Stahl and Heubach's (2005) suggestion that, with strong support, children can benefit from texts that they have an accuracy rate of approximately 85%. The level of support offered to students should be commensurate with the difficulty of the text. More challenging reading material requires more scaffolding for students. Further, it is worth bearing in mind that the more difficult texts are for children's reading ability, the more support they will need from scaffolding, repetition, or additional reading at home. When the texts are closer to the children's reading level, it is likely that less scaffolding will be needed to support their reading development. In fact, scaffolding would likely be of far less benefit when students use text at their independent – or even the high end of their instructional – level since they can handle such material with minimal support (e.g., Hollingsworth, 1970).

Despite the effectiveness of these approaches, fluency oriented instruction is not for all children. For example, students who are already fluent readers are better off working with content area text and challenging fiction, rather than engaging in the approaches outlined here. However, for many children to become successful readers, they need to make accelerated progress. While this progress will look different across the grades and for different goals, one goal involves assisting children in developing their ability to read grade level text with fluency and comprehension. The programs presented here can help students make such progress.



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Reading Fluency in the Middle and Secondary Grades

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Abstract

In this article we discuss the specifics of reading fluency and provide suggestions for identifying when reading is fluent and when it is not. We then discuss the important role that reading fluency plays in the attainment of literacy achievement and briefly review research results that highlight the relationship between fluency and comprehension. This is followed by a discussion of reading fluency and comprehension data gathered by one of the authors in India that highlight the possibilities for the acquisition of fluent reading in those learning English as a second language. Following a review of strategies to assist middle and secondary teachers with the development of fluent reading in their students, we conclude with a discussion of word study strategies that promote syllabic and morphemic analysis. Such strategies aid readers in the development of word automaticity and encourage the development of fluent reading.

Keywords: Reading fluency, Adolescent literacy, Secondary literacy, Prosody, Automaticity, English language learners, International literacy

Introduction

Let's imagine the following scenario where Antonio is a seventh-grade student in Mr. Jackson's (both pseudonyms) social studies class. Antonio has always been an average student at best. Mr. Jackson assigns an in-class reading that he anticipates will take students about 10 minutes to complete. At the end of the 10 minutes some students are finished. However Antonio, as well as a number of others, have only finished a little more than half the reading. While Mr. Jackson is aware that Antonio and others have not completed the reading, time is tight and he must move on. His hope is they will be able to catch-up later. Unfortunately for Antonio, while "later" arrives the "catch-up" does not. He has no choice but to move forward without the requisite background knowledge due to his inability to finish

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the in-class reading. This makes the ensuing lessons more than challenging for Antonio. It also means that the lesson plans designed by Mr. Jackson, which he will work so hard to implement in the coming few days, will be less effective for Antonio and the others who were unable to complete the initial reading.

Far too often middle and secondary students fall short of their academic potential because their poor reading skills do not allow them sufficient access to course content. But disfluent reading doesn't have to be an inevitable outcome for students. As middle and secondary teachers, we have the ability to help students develop fluent reading skills as a means for facilitating comprehension and understanding of disciplinary material. After a brief review of fluency we will discuss several instructional strategies that middle and secondary teachers can use to improve fluency in their students, strategies that can help students like Antonio be successful.

What Makes Fluent Reading?

Reading fluency is defined by the three characteristics or "indicators" (Samuels, 2007, p. 564) of word identification accuracy, pacing, and prosody which interact to encourage comprehension (Paige, Rasinski, Magpuri-Lavell & Smith, 2014; Schwanenflugel et al., 2006). How can we tell if a student is a fluent reader? If we listen carefully to a student read, one can quickly discern their level of fluency. The first indicator is the ability to read words in the text with accuracy without stumbling over their pronunciation. A high level of word identification accuracy suggests the reader possesses the phonics knowledge to correctly match letter blends to the sounds of language to pronounce words. It also means they have engaged in sufficient word study to gain knowledge of a large number of words (Bear, Invernizzi, Templeton, & Johnston, (2012).

Reading text at an adequate pace, what we also call automaticity, is the second fluency indicator. When a reader is automatic with a word, they are able to retrieve it from long-term memory without invoking their decoding knowledge (Logan, 1988). Possessing a large inventory of words which the reader knows instantly by sight is critical to reading text at an appropriate pace. Generally, a good pace for oral reading is one that approximates conversation, about 150-200 words per minute for skilled readers (Rayner & Clifton, 2009). We might refer to this as Goldilocks pacing - it's neither too slow nor too fast, but just right. This interaction of word identification accuracy and automaticity results in what we call "*accumaticity*." While it is common to see this construct referred to in measurement terms as words-correct-per-minute or WCPM, the use of the term accumaticity provides a more descriptive label. Readers who have good accumaticity read with a good flow because they avoid frequent pauses to analyze and decode words. However, there is still one more important indicator critical to fluent reading.

While accumaticity refers to the interaction of two indicators of fluent reading, it is not yet fluency because it ignores prosody. Prosody, or reading with expression, is critical because it forms the cognitive framework important to building comprehension (Frayser, Carlton, & Clifton, 2006). Think of someone you've heard reading in a monotone voice and how difficult it becomes to pay attention. Or imagine a time when you've heard a conversation in a language other than your native tongue. Even mild attention to the conversation makes apparent the pauses, inflections, and chunking of words which create the rhythm of the language. What you're hearing is prosody. So it is prosody which we apply to reading to make the text approximate speech because it aids in our understanding of what we read (Raynor, Pollatsek, Ashby, & Clifton, Jr., 2012). For example, recent research has found that secondary students who use appropriate prosody when reading are more likely to

comprehend what they read (Paige et al., 2014). As such, each of the three fluency indicators contributes to understanding.

The tandem theory of reading hypothesizes how each of the three indicators work together in an interactive basis to aid comprehension of what is being read (Paige et al., 2014). Whether reading orally or silently for comprehension, the reader who is monitoring what they read attempts to identify the words as correctly as possible while using appropriate prosody. The reader then adjusts their pacing or automaticity to facilitate understanding, speeding up when comprehension is easily attained, or slowing down for more complex text. As the majority of reading is done silently, it's important to remember that aside from voice articulation, the same indicators that encourage fluency when reading aloud are also used when reading silently (Raynor et al., 2012).

What is Not Reading Fluency?

In order to understand fluent reading it is helpful to discuss what is *not* reading fluency, or what is often called "disfluent" reading. To begin with, fluency is not reading excessively fast. Very quickly "scanning" the text, hoping to get the general gist or idea is not fluent reading. Fluent reading is not reading that is excessively slow, even if the text is read with high accuracy. Reading at a conversational pace while mispronouncing the words is not fluent reading and monotone or flat, expressionless reading is not fluent either.

You may be getting the correct idea that disfluent readers struggle with one or more of the three fluency indicators. For example, readers who struggle to decode words with accuracy often read with long pauses as they attempt to pronounce the words. Disfluent reading is often punctuated by multiple stops, starts, and rereading of correctly read words or phrases. This results in reading that is laborious, slow, and exhausting for the student. Difficulty grouping words into natural phrases is another frequent challenge for disfluent readers. In other cases disfluent readers decode words quite well, but race through the text ignoring prosodic markers such as commas, periods, and question marks as if in a race to the finish. Other disfluent readers, whether they read slowly, quickly, or at a conversational pace, lack appropriate expression when they read. Difficulty with one of the three reading indicators results in less efficient and more challenged reading, while trouble with two or more most often results in serious comprehension challenges. Because cognitive processing is focused on the decoding process, little attention is available for the reader to focus on making meaning from the text. The reading of complex text only exaggerates the problem. In contrast, *fluent readers* combine the three fluency indicators – identifying words and phrases quickly and accurately, reading at a conversational pace, and using appropriate expression, into smooth and pleasant sounding reading that facilitates understanding and comprehension.

The Role of Fluency in Middle and Secondary Reading

Reading is a language-based skill where in the early elementary grades students are taught phonics, the principles explaining how the sounds of the language are connected to written letters which are then assembled into words to represent speech (Anthony, Williams, Aghara,, Dunkelberger, Novak, et al., 2009; Shankweiler, Crane, Brady, & Macarruso, 1992). An important note here is the single determinant that distinguishes good from poor readers has little to do with intelligence, but rather, involves the student's facility with phonological awareness (Shankweiler, Crain, Katz, Fowler, Liberman, Brady, et al., 1995). Many children struggle with reading because they lack the necessary phonological awareness and skills which are acquired with exposure to instruction (Adams, 1990; Stanovich, 2000). Let's also recognize that phonological disabilities are confined to a small percentage of the population estimated at about 5%, meaning that almost all children are capable of fluent reading

(Interagency Committee on Learning Disabilities, 1987; Shaywitz, Fletcher, & Shaywitz, 1994). The failure to acquire a complete understanding of the alphabetic principle interferes with decoding, resulting in inaccurate and languid word recognition skills and ultimately, poor reading fluency (Torgesen, Wagner, Rashotte, Rose, Lindamood, Conway et al., 1999). We mention this because the "efficiency" (Perfetti, 1985, p. 102) with which the reader engages the multiple sub-skills constituting phonics is manifested in the extent to which the student is a fluent reader. Consequently, deficiencies in phonological knowledge can hinder fluent reading and many middle and secondary teachers will have students where this remains an underlying problem.

The importance of learning to read is to access the knowledge found in texts. Many studies have found significant relationships linking reading fluency to comprehension (Fuchs, Fuchs, Hosp, & Jenkins, 2001; Jenkins, Fuchs, Espin, van den Broek, & Deno, 2003; Kuhn & Stahl, 2003; Paige, 2011a; Stecker, Roser, & Martinez, 1998; Young, Bowers, & MacKinnon, 1996). Two large-scale studies investigating the connection between oral reading fluency and reading achievement as measured by the National Assessment of Educational Progress (NAEP) concluded that poor reading fluency is a hindrance to comprehension and affects up to 40% of fourth-grade students (Pinnell, Pikulski, Wixon, Campbell, Gough, et al., 1995; Daane, Campbell, Grigg, Goodman, & Oranje, 2005.) Research evidence has shown that challenges with fluent reading extend into the middle and secondary grades. For example, Schatschneider, Buck, Torgesen, Wagner, Hassler, et al. (2004) found that in third-, seventh-, and tenth-grade students reading fluency was a significant factor in explaining differences in achievement scores on the Florida end-of-year achievement test. Paige (2011a) found that in a study of 227 sixth- and seventh-grade students, oral reading fluency explained between 50% and 62% of the difference in reading comprehension. Results from a study of urban ninth-grade students found that oral reading fluency achievement was equivalent to the 25th percentile for eighth-graders and explained 28% of the difference on the state achievement test (Rasinski & Padak, 2005; Rasinski, Padak, McKeon, Wilfong, Friedhauer, et al., 2005). In another study that assessed 108 ninth-grade students attending an urban high school, Paige and Magpuri-Lavell (2011) found that students were two years behind on grade-level norms of reading automaticity (reading with accuracy at an appropriate pace). Additionally, students exhibited only partially developed prosody (expression) when reading. In a recent study, 250 first-, second-, and third-grade students attending ten elementary schools in a high-SES school district were assessed on measures of automaticity and prosody. Using the Multi-Dimensional Fluency Scale (Zutell & Rasinski, 1991), students were found to exhibit fully developed prosody by the end of third grade (Paige, Magpuri-Lavell, Dinkins, & Rasinski, in preparation). Together, prosody and automaticity accounted for 57% to 63% of the variance on a standardized test of reading comprehension. These studies conducted in various states across the U.S., suggest that clearly, many students are not acquiring the reading fluency skills important to the facilitation of reading comprehension.

Fluency in English Language Learners

What is the potentiality for students who are learning English as a second language to become fluent English readers? What role does reading fluency play in their reading comprehension? Paige, Spagnoli, and Wood (2013) assessed 193, third-, fifth-, seventh-, and ninth-grade students attending a Catholic, English medium school in the state of Kerala in southern India. The students attending the study school came from a variety of non-English speaking homes where Malayalam is the indigenous language. While many students come from lower socio-economic households, about half would best be described in India as

middle class. Education is taken quite seriously by the parents and they tend to hold their children accountable for their learning.

Students were assessed on standardized measures of phonological awareness, sightword reading, vocabulary, and comprehension, as well as on a grade-level narrative passage to assess reading automaticity (correct-words-per-minute). Results comparing student performance to U.S. norms found that decoding ability across all four grade levels averaged at the 80th percentile. Sightword reading while lower, still averaged at the 58th percentile while automaticity (correct-words-per-minute) was at the 70th percentile on U.S. reading norms (Hasbrouck & Tindal, 2006). However, assessments of vocabulary and comprehension hovered around the 20th percentile, suggesting the challenges of understanding a new language. Regression analysis revealed that across all four grades, automaticity and vocabulary accounted for 57% of the variance in reading comprehension, very similar to that found in many U.S. populations.

The findings strongly suggest that English language learners can attain reading fluency with English texts to a high level. At the same time, the vocabulary and comprehension results speak loudly to the difficulties encountered by English language learners who have little exposure to English outside of the school setting (Aarts & Verhoeven; Low & Siegel, 2005).

Strategies to Encourage Fluent Reading

A fundamental principle in becoming a competent reader is the notion that, like so many other human endeavors, students must practice reading (Adams, 1990; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011). There are several strategies that fit well in the middle and secondary curriculum to encourage and develop fluent reading in students. It's important to note that the development of effective fluency must extend beyond the domain of the English Language Arts teacher, particularly for those students who are learning English. With this in mind, our discussion will focus on strategies that can be used by teachers across all content areas. The tie that binds disciplinary teachers is that while most middle and secondary teachers are not "reading teachers," we all expect our students to be able to read and comprehend the curriculum. As such, reading provides a critical pathway to learning across all classrooms and as such, should be supported by all teachers. We once knew a social studies teacher who remarked that his content had its own particular discourse that through years of schooling he had learned to read and interpret. He saw it as his job as a teacher to use his content expertise about literacy to provide students with the instruction that would allow them to read the texts he used in his class. It is with this notion of providing students access to the content we teach that we introduce the following strategies to encourage fluent reading.

Whole-Class Choral Reading

In whole-class choral reading (WCCR) all students read aloud from the same text, at the same time, in unison with the teacher. This makes choral reading a highly efficient instructional strategy because all students practice reading at the same time. Research has shown that both poor and good readers benefit from WCCR because they are engaged in deliberative practice with what is most often grade-level text, or text that may be above the reading level of some students (Paige, 2008, 2011b). Once students are trained in the procedure, WCCR provides teachers with a research-based strategy that is simple to implement across multiple subject areas.

First, WCCR is an assisted-reading instructional strategy. Hearing the teacher read the text aloud provides students with a model of how to pronounce the words, what is an

appropriate reading pace, and what kind of expression to apply when reading. The texts which students practice with in WCCR are taken from the curriculum. One idea is to use texts that will be taught within the next week or two. There are advantages to using a text that is slightly ahead of the curriculum. First, students become familiar with the important words and how to read them correctly. Students also gain background knowledge on the topic which means the teacher can spend less time on introductory material and more time going deeper into the subject matter. Finally, students improve their reading skills within the anonymity of whole-class reading where no student is asked to read aloud in front of the class.

Paige (2011b) describes implementation procedures for WCCR that begins with choosing a text from the curriculum. Texts should take about 2 minutes or so to read so at a typical conversational rate of 150 words-per-minute, this translates into a length of about 300 words. Distribute the text to students or otherwise make it available so everyone can read it simultaneously, whether through a paper copy, on an overhead projector, or through some digital means. Very briefly preview the text in a sentence or two and review no more than several vocabulary words that you believe will be challenging for students. Next, read the text aloud to the students while they follow along silently with their copy. This provides them a model of what the reading should sound like. Now it's time for students to read so inform them that help them begin and read together, you'll countdown from "3-2-1," after which, they'll start reading. Expect several false starts as students learn to start together. Remember, the teachers leads the students in reading but while doing so, it's important to walk about the room listening to how students are pronouncing words and reading the phrases. Also, keep the students reading "with one voice," like a choir. This means that during the first few readings you may have stop the class reading and have them begin again to get them reading in unison. Students must read softly enough to hear the teacher. Once the reading is finished, provide students with positive, corrective feedback. Always praise and encourage the class as a group and never single out a particular student for either good or poor reading. Whole-class choral reading must remain "safe" for all readers.

Implementing WCCR can be done on either a repeated-reader basis where the text is practiced several times over 3-4 days, or, in a wide-reading format where a different, but very similar text is read each day. When implementing WCCR in either format, the teacher should provide a reading of the text on the first day while students follow along. In the repeated-reading format the text is then read twice (on the first day) so that students can quickly gain some competence with the reading. Practice with the same text is then distributed over the next several days where students read the passage once per day. In a wide-reading format, students would choral read the text a couple of times each day with a new passage being used each day. Oftentimes the passages are taken from the same or similar book with topics changing every week or two. To add variety to WCCR, rotate the repeated- and wide-reading implementation. Also, use what is called antiphonal reading by splitting the class in half and then having each side read a sentence followed by the other side reading the next sentence. This is continued until the passage is completed.

Paired or Buddy Reading

Paired- or buddy-reading is a peer-assisted learning (PALS) strategy where students are put into groups or dyads of two. PALS has been extensively researched over many years, yielding much evidence demonstrating its effectiveness (Topping, 2005, 2006). While PALS is frequently used in the elementary grades, it is useful in middle school also. In paired reading, students take turns reading the text to each other. The first question becomes how to pair students? It is helpful if less fluent readers are paired with a more fluent reader, however, the

difference should not be dramatic as we don't want the better reader becoming frustrated with the less fluent one. Like whole-class choral reading, choose texts which serve the curricular needs of the class. Texts should also be at the independent reading level of the better reader, but not so difficult that the partner is frustrated.

The first issue to address in paired reading is how to group students. One way is to make a list of students and their reading ability. Divide the list of students into good and not-so-good groups. Then pair the best reader from the good list with the best reader from the not-so-good list. Another way is to pair readers based upon similar reading ability. When pairing students it is also important to consider the particular interpersonal factors between students that can either encourage or impede successful implementation. It is also important to be sensitive to students who particularly struggle or may have reading disabilities.

In order to make paired reading successful, it's also important that a routine be decided in advance by the teacher. For example, what signal or direction will students use to signal that it's now time to switch turns reading? Will they swap at the end of paragraphs or some other way? When and how will the better reader step in to assist their reading partner when it becomes clear the student does not know how to pronounce a word? What is an appropriate method for the reading pair to check for their understanding? Should they stop at the end of each page and build a common understanding of what happened, or perhaps they can take turns summarizing the reading? How this is done will depend on the extent to which the text is challenging to the reader. Finally, how long should a paired reading session last? To assist students with these issues, it's important they be decided in advance by the teacher.

Once the procedure for paired reading has been thought out, they should be modeled by the teacher in front of the class. One way to do this is to select a student to work with you. Practice in advance with the student so they understand the procedures and are comfortable participating in front of the class. Before modeling, introduce the strategy to the class and the specific procedures to use during implementation. After the introduction, model the strategy in front of the class as was rehearsed with your student partner. Pay particular attention to demonstrate the specific procedures that were decided upon for correcting reading mistakes, turn-taking, and creating understanding of the text.

Word Study Strategies to Build Fluency. Possession of a large inventory of words which the reader knows instantly by sight is critical to being a fluent reader (Torgesen, Wagner, Rashotte, Burgess, & Hecht, 1997). Middle and high school students struggling with word pronunciation can benefit from word level interventions (Lovett & Steinbach, 1997; Scammacca et al, 2007) which can improve word identification accuracy, and thus automaticity. Fluent readers often read the whole-word and check for recognizable morphemes in the word (Raynor et al., 2012). If necessary, they will divide words into syllables. If these two strategies do not work, they will then attempt to sound out individual letters using their knowledge of letter-sound correspondence. Armed with this knowledge, we can assist struggling middle and high school readers through two word study strategies - *syllabic analysis* and *morphemic analysis*.

Syllabic Analysis. Syllabic analysis is a strategy that allows students to decode an unknown word by identifying the syllables – the units of spoken language consisting of an isolated vowel sound or a vowel sound with one or more consonants. Breaking words into smaller units, known also as *chunking*, helps a reader determine a word's pronunciation by matching it to a word in their listening vocabulary. By *chunking* words into smaller parts, readers are often able to identify the part and then blend it into a familiar word. This strategy for pronouncing unfamiliar multisyllabic words is more efficient than decoding a word sound by sound. Multiple exposures to the word helps move it into the reader's long term memory for

automatic retrieval, thus adding to their sight word inventory. This process makes reading words more efficient and facilitates the comprehension process by allowing the reader to focus their attention on making meaning of the text.

Syllabic analysis is most effective when students are directly and explicitly taught the six major syllable types and the patterns for syllable division which are listed in Tables 1 and 2. These common rules for syllable division make multisyllabic words both easier to read and spell. Practice of this strategy should entail words read as single words, in phrases, and in sentences. Direct instruction of syllabication should be connected to content specific texts. Once students apply this knowledge they often demonstrate improvements in their word identification accuracy and automaticity, the two indicators which combine to form *accumaticity* – a crucial factor in becoming a fluent reader.

Morphemic Analysis. A morpheme is the smallest linguistic unit which has meaning in a language. For example, the suffix *ness* is a morpheme which indicates a state of being. When *ness* is added to the root word empty to become emptiness, the meaning of the word is changed. Many of the words encountered in middle and high school texts are multisyllabic and often contain Latin and Greek word parts. In addition to learning syllable patterns through syllabic analysis, readers can benefit from learning *morphemic analysis*. Teaching middle and high school students morphemic analysis helps to encourage automatic word recognition which improves their reading fluency.

When using morphemic analysis, the reader considers word parts such as prefixes, suffixes, and root words, to help determine a word's meaning. Students are taught affixes (i.e., both prefixes and suffixes), root words, and compound words which are examples of morphemes. These morphemes are most helpful because they are used in many words – hundreds of thousands of words. Knowing common morphemes not only enhances decoding and spelling skills but also vocabulary skills. For example, knowing that the root *struct* means "to build" provides a clue to the meaning of words with this same part – *construct*, *destruct*, *structure*, and *obstruct*. Table 3 offers a proposed Scope and Sequence for the teaching of morphemes. This word analysis strategy supports reading fluency by helping students identify and pronounce chunks in words that have meaning and how to pronounce and understand content specific words (i.e., coming from science, social studies, and math) that are of Latin and Greek origin.

We suggest that instruction on morphemes begin with what students already know about morpheme patterns. One simple way is to begin with a Latin root such as "*port*" and ask students to generate as many words as they can with the root. Morphemes can be taught directly and explicitly in all content areas. Remember that readers need numerous opportunities to read words in general, so it is important to follow-up direct instruction of morphemes with content specific text. Morphemic analysis helps support *accumaticity* which will encourage fluent reading with understanding of grade-level content texts.

Conclusion

As students progress through the middle and secondary grades they encounter a wide variety of text genres and topics across content areas. While many students transition from the elementary grades as fluent readers, many others do not. For even fluent readers, some of the texts they will encounter require the learning of new syntax, vocabulary, morphemes, and ideas written with multiple meanings. For those students entering middle school who are less than fluent readers, the challenge to read such texts is immense. As teachers, we can help all students gain access to the texts we teach and expect them to be able to absorb, by implementing the fluency strategies that we have described above into our teaching. The current trend across classrooms in the U.S., as well as other many countries, is to lead

students in higher order and strategic thinking about the content we teach. Unfortunately, it is very difficult for a reader to critically consider a text which they struggle to read. Because too much of the student's attention is devoted to just reading the words, little is left over to consider what the text means. Thus, fluent reading is critical because it allows the reader to pivot their attention from decoding processes to understanding. Incorporating the strategies suggested above in the middle and secondary grades will help students better learn the content which we work so hard to teach.



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APPENDIX

Table 1. Six Major Types of Syllables

Syllable Type	Example	Definition
Closed	<u>com</u> -mon <u>dap</u> -ple <u>hos</u> -tel	When the vowel of a syllable is short, the syllable will be closed off by one or more consonants.
Open	<u>to</u> -tal <u>ri</u> -val <u>mo</u> -tor	If a syllable is open, it will end with a long vowel sound spelled with one vowel letter; there will be no consonant to close it and protect the vowel.
Consonant –le	<u>ca</u> -ble <u>bu</u> -gle <u>ti</u> -tle	Also known as the <i>stable final syllable</i> , this is unaccented final syllable containing a consonant plus / and silent e.
Vowel-Consonant-e (VCe)	<u>com</u> - <u>pete</u> <u>des</u> - <u>pite</u> <u>con</u> - <u>flate</u>	Also known as "magic e" syllable patterns, VCe syllables contain long vowels spelled with a single letter, followed by a single consonant, and a silent e.
Vowel Team	con- <u>geal</u> <u>train</u> -er <u>spoil</u> -age	A vowel team may be two, three, or four letters; thus, the term vowel digraph is not used. A vowel team can represent a long, short, or diphthong vowel sound.
Vowel –r	<u>per</u> -fect <u>spur</u> -ious con- <u>sort</u>	This type of syllable is a vowel followed by r (<i>er, ir, ur, ar, or</i>).

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Table 2. Patterns for Syllable Division

Major Patterns	Syllable Division	Examples
VCCV	VC/CV	man/ner dis/play
VCV	V/CV	vo/cal lo/cate
VCCC	VC/CCV o VCC/CV	ex/treme part/ner
VV	V/V	du/et cha/os

Table 3. Propose Scope and Sequence for the Teaching of Morphemes

Language Layer	Element of Language	Examples
Anglo-Saxon	Compounds	<i>doghouse, ballgame, blackbird</i>
	Inflected and derivational endings with no spelling change	<i>feeding, teacher, puppy, sadly, hits, wanted</i>
Anglo-Saxon	Inflected and common derivational morphemes with spelling changes:	
	<ul style="list-style-type: none"> • Final consonant doubling • Drop final e • Change y to i • Double final consonant of accented syllable 	<i>shipping, robber</i> <i>hoping, likable, mover</i> <i>cried, happier, sillier</i> <i>occurrence, beginner</i> <i>under-, over-; -hood</i>
Latin (Romance)	Prefixes and suffixes	
	Roots	<i>port, rupt, script, tract, cept, spect, ject, struct, dict, mit, flex, cred, duc, pend</i>
	Prefixes	<i>un-, re-, non-, dis-, in-, pre-, ex-, mis-, en-, con-, per-, inter</i>
	Suffixes	<i>-ly, -ful, -ness, -less, -ment, -ible/able, -ent/ant, -ous, -ic, -al</i>
Latin (Romance)	Assimilated prefixes that change form to match the root	<i>in- (immigrate, illegal, irregular)</i> <i>ad- (address, approach, aggressive)</i> <i>ob- (obstruct, opportunity)</i> <i>sub- (subtract, suppose, surround)</i> <i>com- (commit, collide, corrode)</i> <i>dis- (dissuade, difference)</i> <i>ex- (extinguish, emit, eccentric, efficient)</i>
Greek	Combining Forms	<i>micro, scope, photo, graph, tele, phon, geo, -meter, -ology, -it is</i>

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Reading Fluency beyond English: Investigations into Reading Fluency in Turkish Elementary Students

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Abstract

Reading fluency is one of the underlying factors of successful language curricula and it is also one of the defining characteristics of good readers. A lack of fluency is a common characteristic of struggling readers. There is a growing body of research that demonstrates proficiency in reading fluency is important for success in learning to read English. While the role of reading fluency is increasingly recognized as important for literacy acquisition in English, less is known about the role that fluency plays in literacy acquisition in other languages. The present manuscript aims to shed light on the impact of reading fluency in the Turkish language context, and also to provide some practical implications for Turkish stakeholders in education system to improve Turkish children's reading fluency and thereby also improve Turkish children's overall reading proficiency.

Keywords: Reading fluency, Reading comprehension, Reading instruction, International literacy

Introduction

Today, more than ever, the ability to read and comprehend what is read is crucial to becoming successful in global and information-driven society (Connor et al., 2011), reading programs must lead students to acquire essential reading skills that enable them to learn and enjoy from printed materials (Torgesen, 2002). There are certain English reading proficiencies that include phonemic awareness, phonics, reading fluency, vocabulary, and reading comprehension that have been confirmed through research to be needed in order to become a proficient reader. Lack of one of these skills may lead to difficulties in acquiring

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proficiency in reading English (Chafouleas, Martens, Dobson, Weinstein, & Gardner, 2004; Therrien, 2004).

A growing body of evidence points particularly to reading fluency in English as an important factor in student reading success. Reading fluency is primarily defined as how fast and accurately with appropriate prosody or expression a person reads a passage (Hudson, Lane, & Pullen, 2005). In school settings, judgments about reading ability are often made on the basis of students' oral reading fluency. Thus, teachers, researchers, parents, and children alike generally are keenly aware of reading fluency and its importance for proficient reading (Rasinski, 1989; Rasinski, 2003; Rasinski, 2004a; Rasinski & Hoffman, 2003).

Oral reading fluency reflects overall reading competence and the ability to read connected text fluently is one of the essential requirements for successful reading comprehension (Fuchs, Fuchs, Hosp, & Jenkins, 2001; National Institute of Child Health and Human Development [NICHD], 2000). Fluent readers are effortless or automatic in their recognition of words in print, thus freeing cognitive capacity for the more important task in reading – comprehension. Oral reading fluency has also been widely used to monitor students' progress in reading, particularly in elementary grades because of this its relations with reading comprehension (Kim, Wagner, & Foster, 2011). Oral reading fluency has been shown to be highly correlated with silent reading comprehension; thus it may be assumed that reading fluency is a reading competency that exists beyond oral reading and into silent reading.

Fluent reading occurs at different levels, including sublexical, lexical, and connected text (context oral reading fluency) (Hudson, Lane, Pullen, & Torgesen, 2009). Isolated word reading fluency (word-level fluency or list reading fluency) has been measured by having students read list words as quickly and accurately as possible, but, by contrast context reading fluency is assessed by having students read words in a connected text as quickly and accurately as possible.

There is a growing body research showing that connected text reading fluency in English makes more contribution to reading comprehension than isolated word reading fluency (list reading fluency) (Fuchs et al., 2001; Kim et al., 2011; Klauda & Guthrie, 2008). Connected text reading fluency is affected by a variety of oral language skills beyond word decoding.

While there is a growing recognition of the importance of fluency in English, the research on fluency of connected text reading and reading comprehension in different language contexts is limited. Most of the recent research into reading fluency has been conducted with students who are learning to read English. Little is known about the extent to which reading fluency is a significant competency in learning to read languages other than English. In this paper we report on our work in fluency with elementary students who are learning to read Turkish.

Understanding that reading fluency is an important reading competency in Turkey may lead to a better understanding that reading fluency may be a more universal variable across many written languages.

Studies of Reading Fluency among Turkish Elementary Students

Both the Turkish and English languages have alphabetic writing systems. Turkish, however, has a more transparent orthography. The sounds and symbols of Turkish language have a stronger correspondence to one another than in English. Because of this level of orthographic transparency, Turkish words can be more easily identified by sounding out the letters across the word; there is a one-to-one correspondence between phonemes and graphemes. Thus, it normally takes a relatively short time period to learn how to read

(decode words) and write (encode words) in Turkish (Lems, Miller, & Soro, 2010). English language is made up of 26 graphemes and 44 phonemes. Turkish, however, has 29 graphemes and 29 corresponding phonemes. In terms of vocabulary, however, English and Turkish languages are similar. Both languages have large lexicons that students must learn in order to understand written texts. Successful reading requires readers to not only decode (sound) the words in print; they must also access the meaning of the words they decode. Although word decoding is easier in Turkish than English, if readers are not automatic in their word recognition, Turkish readers, like readers of English, must employ their cognitive resources for word recognition that could otherwise be used for higher level comprehension tasks. However, given the greater transparency of the Turkish orthographic system, it may be the case that most Turkish students achieve fluency in reading relatively easily and thus it may not be an important instructional variable in learning to read Turkish. A growing body of studies conducted in Turkey have begun to examine the nature of Turkish reading fluency and its impact on overall reading performance.

In the spring 2012, 399 fifth-grade students from three public elementary schools in Turkey's Kirsehir province participated in a study of reading fluency in Turkish. The students were generally of middle socio-economic status and ranged in age from 11 through 12 years. Each student was administered a series of tests that measured various reading competencies. These included a test of reading comprehension of texts taken from fifth-grade Turkish reading language arts textbooks; a test of word recognition that involved having students read a list of words in isolation as quickly and as accurately as possible in one minute; and three measures of reading fluency were taken from students reading a fifth-grade text orally in their "best" or most expressive voice. From the oral reading measures word recognition accuracy (percentage of words decoded correctly), word recognition automaticity (number of words read correctly during the initial 60 seconds of reading, and prosody or oral expression were taken. Prosody was measured by the evaluator listening to a student read the grade-level passage and then rating the prosodic quality of the oral reading using a rubric that describes levels of competency on various elements of prosody, including expression and volume, phrasing, smoothness, and pace (Rasinski, 2004b).

All testing was done in individual read aloud sessions in quiet settings provided by the administrators of the participating schools where students would not be distracted and would feel comfortable and safe. During reading, the researchers video recorded each student's reading to provide a permanent and verifiable record of each student's reading that could be referred back to insure reliability and validity of the measurements. The students had not previously seen or read either text prior to reading it in the test situation. After the oral reading, the comprehension tests were administered to the students.

The goal of this research was to determine the relationships that may exist between the various measures of reading fluency and the ultimate goal of reading – comprehension. We found that all measures of word recognition and fluency correlated individually, significantly, and substantially with reading comprehension. Moreover, when the variables were combined into an integrated model of reading, the various fluency and word recognition measures accounted for nearly half of the variance in reading comprehension (Yildirim, Ates, Can, & Turkyilmaz, 2012).

In another study of over 100 fifth grade Turkish students, Yildiz, Yildirim, Ates, Rasinski, Fitzgerald, and Zimmerman (2014) found significant and substantial independent correlations between measure of both word recognition automaticity and prosody and reading comprehension. Both word recognition automaticity and prosody independently predicted students reading comprehension. Students who demonstrated greater

automaticity in their reading and whose oral reading was judged to be prosodic or expressive tended to also exhibit better reading comprehension over students who exhibited lower levels of automaticity and prosody.

Similarly, Yildirim (2013) examined the relationship between oral reading fluency, silent reading fluency, retell fluency, and isolated word reading fluency with reading comprehension. Word recognition automaticity (reading speed) was used to assess the students' oral reading fluency. To assess silent reading fluency, a passage was printed in uppercase and whose spaces and punctuations between words were omitted. The students were asked to draw lines between boundaries of words in 3 minutes as they read the passage silently. Scoring silent reading fluency consisted of counting the words the students identified correctly in 3 minutes. Retell fluency was assessed by having the students recall as much as she/he could remember in one minute after having read a text aloud. The number of words which referred to the text that was read constituted the retell fluency score. To measure the students' reading comprehension, a sentence verification technique (SVT) was employed.

The research results revealed strong relationships between measures of Turkish reading fluency and reading comprehension. The correlations among fluency-based skills were significant and, more importantly, the fluency-based reading measures together explained or accounted for 24 % of the variance in reading comprehension. Interestingly, silent reading fluency made more significant contribution to prediction of reading comprehension.

Research conducted by Yildirim and Ates (2012) also examined the relationship between silent and oral reading with reading comprehension in Turkish elementary students. A total of 100 fifth-grade students were asked to read grade appropriate texts silently and orally. The findings of the study showed that silent and oral reading fluency were moderately related to one another and both maintained significant correlations with reading comprehension. Together they explained together 23% of the variance in reading comprehension and silent reading fluency had a greater contribution to the prediction of reading comprehension than oral reading fluency.

Bastug and Akyol (2012) examined the relationship between measures of reading fluency and reading comprehension in Turkish elementary school students from second grade to fifth grade. Correlational and multiple regression analyses were used to determine the relationship. The results revealed that there were substantial and significant correlations between measures of reading fluency and reading comprehension at all grade levels. In addition, prosody, one of the reading fluency components, was the strongest predictor of reading comprehension.

These studies appear to suggest that reading fluency, the ability to read texts accurately, automatically, and with appropriate expression that reflects meaning when reading orally, is an important instructional variable in languages other than English such as Turkish. Interestingly, the several of these studies involved students in the upper elementary grades. In most models of reading development (e.g. Chall, 1996) reading fluency is viewed as an important variable primarily in the lower elementary grades. The fact that fluency-related variables accounted for nearly half of students' performance on the comprehension suggest that the impact and import of fluency goes well beyond the initial stages of reading.

Although prosody or the use of meaningful expression during oral reading is recognized as an important element of reading fluency (Schreiber, 1980). Appropriate and meaningful phrasing and expression reflects and enhances the meaning of the text being read. Although studies of students learning to read English have found significant and substantial correlations between prosody and silent reading comprehension (e.g. Daane, Campbell,

Grigg, Goodman, & Oranje, 2005), instruction in prosody has not been a priority in English reading classrooms (Rasinski, 2012). As a result, research into prosody among English reading students has found that many students, even beyond the elementary grades, have not achieved sufficient levels of prosody in their reading (Rasinski, Rikli, & Johnston, 2009). Yıldız, Yıldırım, Ates, and Çetinkaya (2009) examined the prosodic quality of the oral reading of grade level texts for 70 4th grade Turkish students' from a public school in Ankara. They found that nearly half (40%) of the fourth grade students exhibited concerns in their prosodic reading. Given the correlations between prosody and reading comprehension, such difficulties in prosody are likely to impair students' comprehension of Turkish reading material.

Yıldırım, Yıldız, Ates, and Cetinkaya (2009) investigated the effects of prosodic reading on listening comprehension of Turkish texts. A total of 72 fifth grade students were enrolled in the study in which the students in the intervention group were asked to listen and attend to the prosodic qualities of a text that was read by an independent proficient adult reader. The researchers found that students who experienced prosodic reading of Turkish text exhibited higher levels of listening comprehension than students who listened to texts that were less prosodic.

In a study of fluency's relationship with other reading variables, Yıldırım, Rasinski, Ates, Fitzgerald, Zimmerman, and Yıldız (2014) explored the relationship between reading fluency and vocabulary in fifth grade Turkish students. The findings of the study confirmed that measures of reading fluency were associated with different levels of vocabulary in the fifth grade students. Automaticity in word recognition ($r = .51$) had the highest relationship with vocabulary; prosody ($r = .50$) and word recognition accuracy ($r = .38$) were also significantly correlated with vocabulary. The authors hypothesized that proficiency in reading fluency of Turkish texts allows students to engage in more reading than less fluent students. Greater exposure to written texts will lead to greater exposure to new words in a meaningful context and this, in turn, will lead to increased vocabulary, another reading variable associated with proficiency in comprehension.

Reading fluency may be a reading competency that extends beyond reading comprehension. Yıldız (2013) examined the effects of reading motivation, reading fluency, and reading comprehension fifth grade Turkish students' school success. School success was determined by combining students' course grades in mathematics, science, Turkish language arts, and social studies. The research findings confirmed that reading motivation, reading fluency, and reading comprehension explained 63 % of variance in students' overall school success.

These studies demonstrate that reading fluency has captured the attention of literacy scholars in Turkey. The studies of Turkish reading fluency have focused primarily on elementary grades and have investigated the relationship between reading various fluency-based competencies and reading comprehension. This body of research does indeed suggest that fluency is a reading competency that is important for success in reading Turkish texts.

Although the research we cite in this paper is a strong beginning, there is still research that is needed. For example, although current research suggests a strong impact of fluency on comprehension in the elementary grades, little is known of the relationship of reading fluency to reading comprehension in the middle and secondary grades, as well as at the college level and even adults who struggle in achieving full literacy. Given the apparent importance of fluency, norms for fluency at various grade levels need to be established so that teachers can monitor Turkish students' progress in reading fluency. Moreover, research

is needed to examine the effects of instructional practices in fluency on students learning to read Turkish.

Teaching Reading Fluency in Turkey

Although studies of reading fluency among Turkish students are in their infancy, it seems clear that the elements of reading fluency, word recognition automaticity and prosody, are associated with overall reading achievement and that a significant number of students have not achieved fluency in their reading through the upper elementary grades. The obvious implication from this research into Turkish language reading fluency is that fluency does indeed matter and that students in Turkey should receive fluency instruction. The fact of the matter, however, is that fluency instruction, like in much of the English speaking world, is not viewed as important (Cassidy & Grote-Garcia, 2014).

Reading is one of the learning strands in the national language arts curriculum for the elementary grades in Turkey. Reading instruction for elementary students includes teaching foundational reading competencies first. Attention is given to having students acquire certain competencies such as readiness for reading, word recognition, and vocabulary. Then, after some degree of proficiency is achieved in these foundational competencies, objectives related to reading comprehension skills are taught. Moreover, a variety of reading purposes such as reading for recreation, independent reading, critical reading, informative reading, and so forth are also presented to students in instructional settings (Republic of Turkey Ministry of National Education [RoTMoNE], 2005).

Reading fluency, however, has only recently received some degree of attention in the Turkish language arts course of study. Given this recent recognition of fluency in the Turkish educational system, a solid body of research that explores this competency among Turkish children does not exist. Moreover, existing elementary school curriculum programs in reading and language arts in Turkey have not made reading fluency an instructional priority (RoTMoNE, 2005), although reviews of research from studies on reading acquisition in English show that reading fluency is a critical reading competency for children's reading success and that teaching students to become fluent readers improves their overall reading outcomes (Rasinski et al., 2011). Given the growing recognition of the importance of fluency in reading and its lack of instructional emphasis among students in Turkey, it is clear that a need for research focusing on fluency, its various components, and its relationship to reading comprehension in Turkish students exists. Such work would help to validate fluency as an important competency for Turkish readers. It would also contribute to the recognition that fluency is a universal literacy competency beyond English.

Effective instructional strategies, programs, and practices to improve reading fluency skills of students, which have been proven their effectiveness with empirical-based studies of readers of English, should be put into the Turkish language arts curriculum. Given the literature on reading fluency, there are several effective practices used to improve students reading fluency skills that could easily be implemented in Turkish classroom. Among these are repeated reading, assisted reading, phrased reading, modelling reading, guided reading, echo reading, paired reading, shared book reading, fluency development lesson, fast start, and readers' theatre (Chomsky, 1976; Dee Nichols, Rupley, & Rasinski, 2009; Padak, & Rasinski, 2005; Rasinski, Homan, & Biggs, 2009; Rasinski, Padak, & Sturtevant, 1994; Rasinski, Padak, & Fawcett, 2010; Samuel, 1979; Topping, 1989; Young, & Rasinski, 2009).

Indeed, some initial studies have examined the impact of fluency instruction on the reading outcomes of Turkish students. Yildirim, Turan, and Bebek (2013) examined the effect of fluency development lesson (Rasinski, 2010) on third grade Turkish students' reading fluency, reading comprehension and listening comprehension. The intervention consisted of

students engaging in daily opportunities for listening to fluent readings of Turkish texts, repeated readings of grade appropriate Turkish texts, and assisted reading activities where students read a text while simultaneously hearing it read to them. The intervention included daily lessons, each lesson lasted 15 minutes, for four consecutive weeks. Nursery rhymes and poems appropriate for the grade level were used in the intervention. A control group of students continued its regular routine classroom activities. Students engaged in the fluency instruction intervention demonstrated significant greater gains in reading fluency, reading comprehension, and listening comprehension over students in the control group that continued regular classroom reading instruction.

In another study, Ates (2013) explored the effects of a repeated reading fluency intervention with performance based feedback on a student with reading difficulty. The results demonstrated that there was a significant improvement in the students' fluency skills. Duran and Sezgin (2012a, 2012b) examined the effects of guided reading and echo reading on the students' reading fluency and reading comprehension. In the guided reading intervention, the teacher matched the students with texts appropriate for their reading levels. In the small groups, the teacher introduced the text to the students. Then, the students in the groups listened to and supported each other's reading and rereading of the text. The teacher then engaged the students in conversations about the text they had just read. In the echo reading procedure, the teacher read the text aloud while visually tracking the print for students. After the text has been read aloud, the students imitated or echoed the teacher. Both studies showed that guided and echo reading increased both the reading fluency and reading comprehension of the students. The instruction also resulted in a decrease of word recognition miscues during oral reading. Both strategies allowed the students to practice proper phrasing and expression to develop their prosodic reading skills.

Fluency beyond English and Turkish Reading

We chose to examine the role of fluency in reading Turkish even though the nature of the Turkish orthography suggests that reading fluency may not be a major concern for developing Turkish readers, Turkish scholars have increasingly recognized the potential importance of reading fluency as a necessary reading competency and that fluency instruction, as in the United States (Allington, 1983), has been and continues to be a relatively neglected goal of the Turkish reading curriculum. The research we have reviewed on Turkish reading fluency suggests that it is indeed an important variable that must be considered in developing reading curriculum and instruction as well for assessing reading progress and diagnosing reading difficulties.

Given the strong relationships that have been found between reading fluency and comprehension in English and Turkish, it seems that reading fluency is likely to be an important reading variable in languages other than English and Turkish. We hope that this article may inspire literacy scholars of other languages to begin investigations of reading fluency in the reading of their own languages.



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