

1-1-2019

## Small Group Skills Based Instruction and Reading Fluency: A Fourth Grade Classroom Study

Stephanie Felts  
*Morningside College*

Follow this and additional works at: <https://scholars.fhsu.edu/jaer>



Part of the [Education Commons](#)

---

### Recommended Citation

Felts, Stephanie (2019) "Small Group Skills Based Instruction and Reading Fluency: A Fourth Grade Classroom Study," *Journal of Applied and Educational Research*: Vol. 2 : Iss. 1 , Article 6.  
Available at: <https://scholars.fhsu.edu/jaer/vol2/iss1/6>

This Article is brought to you for free and open access by FHSU Scholars Repository. It has been accepted for inclusion in Journal of Applied and Educational Research by an authorized editor of FHSU Scholars Repository.

## Small Group Skills Based Instruction and Reading Fluency: A Fourth Grade Classroom Study

**Stephanie Felts**  
Morningside College

### Abstract

Reading fluency instruction takes place in schools across the nation. Fluency assesses how many correct words a student can read per minute, while also using speed, accuracy, and expression. Many schools across the nation report low reading fluency scores. Students who struggle with reading fluency can lead to essential problems as a child grows causing behavior and social issues, along with unemployment. Students may lack confidence or improvement when they are reading stories out of their level because of poor instruction. Reading fluency issues increase from inconsistent practice, inappropriate reading passages for their levels, and lack of differentiated instruction. Educators may lack proper training in fluency causing them to teach ineffectively or neglect fluency altogether. The purpose of this study is to determine the effect of small group reading instruction and reading fluency scores compared to whole group instruction. Twenty-three fourth grade students from an urban school district will be part of a research group to test whether small group instruction using learning styles benefits their fluency scores. The independent variables are small group and whole group instruction, while the dependent variable is the FAST reading fluency score. The hypothesis is that small group instruction focused on learning styles will improve fourth grade reading fluency more than whole group instruction. The results showed both whole group and small group instruction improved reading fluency scores, but small group instruction had more improvement. The hypothesis proved to be true that small group instruction using learning styles would improve reading fluency scores more than whole group instruction.

*Keywords:* fluency, small group instruction, reading fluency, FAST fluency scores

Reading fluency is a reported issue among schools across the U.S. showing more readers that are nonfluent. A nonfluent reader is one that struggles with reading passages using appropriate rate, speed, and accuracy (Begeny, Krouse, Ross, & Mitchell, 2009). It is becoming common for a student to struggle with the concepts of rate, speed, and accuracy that are important skills to become a successful reader. About 36% of fourth-grade students were reported to read below grade level in schools across the United States according to the National Assessment of Educational Progress (NAEP) in 2015 (Otaiba, Gillespie, & Baker, 2018). Additionally, the minority children (e.g. African-American, Hispanic), reported reading rates are lower than grade levels (18%-21%) (Otaiba, Gillespie, & Baker, 2018). The NAEP also showed that of the students living in poverty, 21% were below level as well as 67% of students with disabilities read below their grade level (Otaiba, Gillespie, & Baker, 2018). Therefore, reading issues may be appearing more in the U.S.

In addition, students in Florida showed reports of low reading fluency scores in 2004 (Begeny et al., 2009). Begeny et al., (2009) noted that 22% of third graders scored a level 1, which is

the lowest reading score on the Florida Comprehensive Assessment Test (FCAT). That is approximately 45,000 students who were struggling with reading fluency by the completion of their third-grade year (Begeny et al., 2009) .

Furthermore, Begeny et al. (2009) found that 40% of U.S. students are “nonfluent” readers. Their findings suggested low scores might be due to ineffective strategies teaching reading fluency such as incorrectly leveled texts and non-engaging activities (Begeny et al., 2009). To compare, the National Assessment of Educational Progress showed that 31% of fourth grade students are reading at a level below proficient in 2015 (Wu and Gadke, 2017).

Another study showed issues caused by reading fluency. Fenty, Mulcahy, & Washburn (2015) reported that over 70% of the students who drop out of school was due to low reading abilities. Some of those students received special education services. They also reported that the areas of reading for students to improve fluency include vocabulary and comprehension (Fenty, Mulcahy, & Washburn, 2015). Therefore, proper instruction may benefit the fluency scores.

On another note, reading fluency is an essential building block for a student to become successful throughout childhood and adulthood (Smart et al., 2017). Students with strong reading fluency skills can obtain carry careers that involve reading and speaking. Smart et al. (2017) also found that students who struggle with fluency can exhibit behavior issues of acting out during instruction or reading practice. Next, these researchers noted how low reading fluency skills could lead to social issues of embarrassment or becoming antisocial. Smart et al. (2017) suggested students might develop fear of speaking in classrooms or public. Thus, students may continue to struggle through later years of life and run into unemployment issues (Smart et al., 2017).

Nevertheless, teachers have a responsibility to provide instruction that leads to positive gains for students (Fenty, Mulcahy, & Washburn, 2015). Students who receive poor instruction will likely lead to poor reading fluency scores (Abadazi (2011). Abadazi (2011) also noted that students who come from low-income families might struggle more without appropriate reading fluency instruction and practice. As a result, students who come from low-income families should get more learning from teacher instruction because many students lack practice at outside from school (Abadazi, 2011).

Next, many teachers lack a clear picture of what successful reading instruction should resemble (Fien et al., 2011). Fien et al. (2011) noted it is uncommon for teachers to use whole group reading as a time for students to read aloud in front of their peers or with a partner. They also noted that many students practice fluency with the same passages at levels that are not appropriate for each student (Fien et al., 2011). Whole group instruction may cause students to be less engaged because it is difficult to keep their attention of students at various levels (DiCarlo et al., 2012). A student needs to have attention, as it is an important component of learning and performance (DiCarlo et al., 2012). As a result, fluency may be beneficial when there are engaging methods used causing students to participate.

Unfortunately, Goering and Baker determined that explicit fluency instruction was neglected in classrooms (Goering & Baker, 2010). Therefore, teachers were not giving students separate fluency instruction. Many times teacher gave repeated readings and menial tasks instead of

direct instruction (Clark, Morrison, & Wilcox, 2009 and Fenty, Mulcahy, & Washburn, 2015)). This type of instruction can hinder achievement due to lack of direct instruction (Fenty, Mulcahy, & Washburn, 2015). They determined that readers who take turns with one another are more at risk for reading deficits due to a lack of direct practice and knowledge of the looks and sound of proper fluency (Fenty, Mulcahy, & Washburn, 2015).

Additionally, Abadazi (2011) noted that many schools around the world devote less than 12% of the day to reading fluency instruction. They also noted that appropriate reading fluency instruction plays a key role in whether students feel encouraged. Schumm, Moody, & Vaught (2000) found that many teachers use whole group instruction for reading and the same materials for all students despite the (3-5) reading differences. The students with problems in reading showed little to no growth on their reading assessments and their motivation levels decreased (Schumm, Moody, & Vaught, 2000). In conclusion, proper instruction and engagement using appropriate fluency techniques could benefit fluency.

### **Reading Fluency**

Primarily, reading fluency is a skill taught to students that focuses on reading at a pace that includes accuracy and automaticity, along with expression (Arens, Gove, & Abate, 2018). Fluency is the building blocks for readers to build their skills early on so they can become fluent with decoding words, vocabulary, and comprehension that are vital skills to be successful in the upper grades and life (Taguchi, Melhem, & Kawaguchi, 2016). Taguchi, Melhem, & Kawaguchi (2016) also noted that reading skills are strategic and multipurposeful in cognitive strategies of reading because the skills affect each other from as early as learning phonemic awareness (letter names and sounds)). They also shared that if a student struggles in an area of building fluency, it can cause other reading skills to suffer as they get older (Taguchi, Melhem, & Kawaguchi, 2016).

In addition, it creates a challenge when students have to stop many times in a minute to sound out a word (Wilson, Nabors, Simpson, & Timme, 2012). Wilson et al., (2012) state many times the students do not have a strong background knowledge or lack phonics skills. They also note that students who lack exposure to text at an early age have minimal chance of being fluent readers.

Wilson et al, (2012) also share students who have small interactions and exposure struggle in early years and form reading problems that may last throughout their lifetime. In essence, fluency struggles can start early if not taught properly (Wilson et al., 2012).

On another note, for some readers, poor oral reading fluency becomes a barrier to the development of other reading skills (Goering & Baker, 2010). According to Goering & Baker (2010), letter sound relationships, words, and phrases will become difficult for students. Due to this fact, these researchers described students' sentences become choppy and robotic readers. They also shared that students who put extra stamina into decoding a word lose energy to continue reading skills. For these reasons, students could develop bad habits that will affect other issues in the future (Goering & Baker, 2010).

Subsequently, students who score low on early fluency tests can cause low vocabulary recognition after second grade (Wilson et al., 2012). Wilson et al., (2012) and Fien et al. (2012) describe that a student's vocabulary, word recognition, and phonics skills are important parts in students recognizing words and reading aloud. Because of poor vocabulary, students are not recognizing words and using correct pronunciation on assessments (Fien, et al., 2011). Students that show issues of word recognition or vocabulary can show up in first grade and some kindergarten students (Fien et al., 2011).

Lastly, throughout development, students will test reading fluency many times a school year (Fien et al., 2011). Reading fluency correlates to how many words students read correctly in a minute, along with voice expression (Fien et al., 2011). Fien et al. (2011), note that students may think they have to read fast, which can develop habits of misreading words, skipping punctuation marks, and lack of expression.

### **Whole Group Instruction**

First off, research suggests whole group reading instruction targets certain levels of reading, but might not accommodate all reading levels (Wilson et al., 2012). Wilson et al. (2012) state that many students do not receiving appropriate instruction to increase their reading fluency scores. They also described appropriate instruction as being lessons that are engaging and appropriate for all students. In addition, teachers

cannot expect students to read the same passages to improve fluency if it is not at their level (Wilson et al., 2012). Therefore, reading passages that are too easy or hard might not cause improvement and lead to student frustration (Wilson et al., 2012).

Next, many teachers use whole group instruction in classrooms. Whole group instruction also consists of all students reading the same passage as a together, with a partner, or independently while the teacher leads. (Wilson et al., 2012). Wilson et al. (2012) believe whole group instruction builds a community for students, but is often taught in every content area throughout a day. According to Wilson et al. (2012) students are receiving less instruction for their level if a subject is taught to everyone at the same level with whole group. They shared that many times teachers use one class story for all students to practice. Wilson et al. (2012) also found that the problem could be not all students are at the level of the textbook story. The students are not gaining the appropriate skills by practicing with it. It causes the low-level students to fall behind (Wilson et al., 2012).

In addition, in whole group instruction, the teacher does not always get the opportunity to observe and give feedback to every student each day (Wilson et al., 2012). Wilson et al (2012) found that the students do not always get the communication or peer time through whole group instruction. Thus, when a teacher does let students practice with partners, it may not be someone who is challenging them because they are at another reading level. Wilson et al. (2012) also state students can fall behind because the teachers are not aware of any difficulties. Many students do not receive extra assistance (Wilson et. al, 2012).

Furthermore, children in preschool who receive whole group instruction may find that instruction should always be full group, leading to problems in the future (DiCarlo, Pierce, Baumgartner, Harris, & Ota, 2012). Dicarlo et al. (2012) note that students adapt to whole group when they are young, so teachers tend to continue the trend and teach all subjects in whole group. They explained that whole group instruction is usually not a recommendation according to research and professional literature because of the different levels and the need to accommodate all students (DiCarlo et al., 2012).

Finally, some teachers test fluency by using running records or oral reading assessments, but with inappropriate passages for levels of each student (Fien et al., 2011). If a student is reading a passage that is too easy or hard for them, they are not getting the reading instruction to affect growth on assessments (Goering & Baker, 2010). By not reading passages at their level, students' reading fluency can fall behind on improving accuracy, rate, and speed while they lose motivation to want to read in the future (Goering & Baker, 2010).

### **Small Group Instruction**

First, small group instruction is used to split students into groups so the teacher can teach a small group of students at a time (Fien et al., 2011). Fien et al. (2011) suggest while the teacher is giving instruction, the rest of the students do other small group activities or independent practice that the teacher assigns. They conducted a study on first grade students in 18 different classrooms. In their study, the students tested on vocabulary knowledge. One hundred and two first grade students scored did not score above the 50<sup>th</sup> percentile on vocabulary. Fien et al. (2011) found a reason for low scores was due to the type of teacher instruction and background knowledge. With the reading fluency becoming more of a focus for schools, Fien et al. suggest the ways of instruction in the past might not be as beneficial. In their study, many common ways of teaching reading fluency included whole group choral reads out of the textbook, partner reads, and reading to the teacher. Teachers rarely mixed up passages, but instead have students read the same text (Fien et al., 2011).

Next, Wilson et al. (2012) noted that young students will achieve greater success when taught explicit instruction. They focused on differentiated reading and explicit instruction. These researchers also found that small groups let a teacher target skills that are appropriate to the group's levels. Small group instruction matched the needs of the learners to promote the necessary skills (Wilson et al., 2012).

In addition, Pollock, Hamann, & Wilson (2011) used a survey in their research to test the feelings of students receiving whole group versus small group and looked at their academic levels. Of the students surveyed, 47% of the lower academic students reported they would participate more in small group (Pollock, Hamann, & Wilson,

2011). Therefore, not all groups have to be on the same topic as in whole group instruction (Wilson et al., 2012).

Likewise, another statistic revealed that 12% of higher achieving students felt comfortable participating in whole group instruction (Pollock, Hamann, & Wilson, 2011). The average number that a student from Pollock, Hamann, & Wilson's (2011) study participated in whole group was two times, while the average number a student participated in small group was four times. Overall, students reported preferring small group instruction to receive academics at their level opposed to instruction that was too easy or hard for them (Pollock, Hamann, & Wilson, 2011). The teacher can use different materials for each small group (Wilson et al., 2012). Students are able to do more hands on approaches and receive feedback from teachers during small group instruction (Wilson et al., 2012).

Next, Wilson et al., (2012) found that whole group instruction does not always allow for engaging instruction. Both Wilson et al. (2012) and Wyatt and Chapman-DeSousa (2017) note that students who do not receive one-to-one attention or receive feedback, might start falling behind. Teachers cannot get around observing all students, depending on the class size. Wilson et al., (2012) also explained in small group instruction, the teacher can have small groups, preferably six to seven students each (Wilson et al., 2012).

In addition, small group instruction gives the teacher time to model skills and offer guided practice (Wilson et al., 2012). Wilson et al. (2012) found that students also have opportunities to ask more questions. They determined when behaviors issues occur, the teacher can have an environment to handle situations because not all students are affected. Students also receive more time to socialize with students and share knowledge in their small group (Wilson et al., 2012).

Furthermore, teachers get the opportunity to use learning skills as a means for communication (Peterson, 2016). Peterson (2016) explained when a teacher leads small groups, they can assist in making meaning of the learning. He also found that students are open to more situations that are social because they can give feedback to their peers. In addition, students are more apt to ask questions when they feel comfortable of their surroundings (Peterson, 2016). They may refrain

from asking questions in whole group because of the embarrassment if they do not understand a skill (Peterson, 2016).

Finally, researchers discuss the opportunities for special needs students to have more interaction as an opportunity in small group settings (Urlacher, Wolery, & Ledford, 2016). Urlacher, Wolery, & Ledford found that students are more likely to learn from peers in a group at a similar reading level. They determined that students with special needs often fall behind in whole group instruction because of the lack of communication and peer learning. Students are less likely to ask questions and participate in whole group activities (Urlacher, Wolery, & Ledford, 2016). When a special needs child feels comfortable, they are more likely to do collaborative work and give feedback to teachers (Urlacher, Wolery, & Ledford, 2016). As a result, research suggests that small groups might be a comfortable atmosphere to provide useful instruction (Urlacher, Wolery, & Ledford, 2016).

### **Learning Styles**

To begin, not all students benefit from the same instruction as their peers. Shah, et al., (2013) suggests students have their own learning styles and certain types of instruction to meet their needs for success. Some of the learning styles include auditory, visual, physical, and social learning (Shah et al., 2013). Auditory learning refers to “hearing,” visual learning refers to “seeing,” physical learning refers to “exercises involved in learning, and social refers to “communicating” the learning (Shah et al., 2013). Differentiated instruction is a type of instruction for teachers to mix up how they teach to accommodate the students and the learning styles (kinesthetic, read and write, visual, and auditory) that are prominent to each student (Ankrum & Bean, 2008). Ankrum and Bean (2008) also found at the time children begin school, there are a range of reading levels and abilities. Their research described many teachers who teach to the average reading level in the class and how it is detrimental to students. They suggest often it is not about what content the teacher focuses on in a lesson, but *how* the instruction is given (Ankrum & Bean, 2008).

Next, Ankrum & Bean (2008) also found grouping students by levels gives the teacher a chance to make the instruction differentiated. They also found the lower level could focus on word

recognition and decoding skills, while the on level and advanced readers can do more vocabulary and higher-level thinking activities. Ankrum & Bean (2008) also suggest if a student does well on reading assessments, they must not stop practicing or they could lose fluency.

Additionally, one type of differentiated instruction that research has shown to be effective is video self-modeling (VSM), according to Wu & Gadke (2017). VSM refers to students recording a video of themselves reading a passage or doing a repeated reading (Wu & Gadke, 2017). The teacher and other students can give feedback on the videos to analyze areas of reading fluency (Wu & Gadke, 2017). There was a clear rise in levels for students using VSM as an intervention with a 90% effect (Wu & Gadke, 2017). VSM is an intervention that is used and effective for students with low reading levels and special needs students (Wu & Gadke, 2017).

Next, another type of differentiated instruction is partner readings (Mims & Lockley, 2017). According to Mims & Lockley (2017), in the past, reading partners read to each other with the same text. They suggest for instruction or an intervention to be effective, the students must be practicing at a passage within their own reading level. In their study, a teacher set a timer and one partner reads at a time, while the other partner and teacher watch and follow along as the student reads. These researchers suggest after minute, students, teachers can give feedback to the student reading, and they record on their personal graph how many words read correctly. Therefore, a student can take ownership for their reading by seeing their growth on a graph (Mims & Lockley, 2017).

Finally, fluency may not always be about getting a child to read quickly, but to empower an understanding. According to Manuel (2016), some strategies to help include read aloud, partner reads, choral reading, and readers’ theatres, while there are a variety of lessons a teacher can use to promote instruction, researchers believe it must be appropriate and engaging for each group’s level (Connor et al., 2011). Connor et al. (2011) suggest strategies and instruction will vary with each child, but providing balanced instruction between basic skills or code-based instruction will be meaningful. They also noted teachers could use student interests to create engaging reading lessons (Connor et al., 2011)

## Theoretical Framework

Students like others, differ from each other in a classroom (Kanchi, Junaid, & Srikant, 2013). In Kanchi, Junaid, & Srikant (2013) study, students created their own personal learning styles as they develop. The study showed some of the differences students have include gathering, organizing, along with how they process information. Therefore, researchers considered learning styles the characteristics of cognitive, affective, and psychological factors that indicate how a learner identifies, interrelates, and answers to their learning environment (Kanchi, Junaid, & Srikant, 2013).

Next, Kanchi, Junaid, & Srikant (2013) found that learning is a VARK. Their study notes the acronym VARK consists of four area models of learning styles including visual, auditory, read-write, and kinesthetic modalities. These researchers shared Flemming's 1987 notion that visual learners preferred learning using graphs, diagrams, flow charts, and models that represent information they can *visually*. They suggest the auditory learners wanted to *hear* the learning through lectures, tutorials, and talking. Next, the *read-write learners* preferred reading materials in notes or textbooks. Then, a *kinesthetic learner* preferred a mixture of living or feeling the learning and participating in real life experiences (Kanchi, Junaid, & Srikant, 2013). Finally, these researchers suggest teachers may not be able to use all of these learning styles in every lesson to meet the needs of every student, thus resulting in not all students receiving appropriate instruction to benefit them (Kanchi, Junaid, & Srikant, 2013).

In addition, Rezaee, Abdullah, & Singh (2011), shared that students' strengths could be determined through their learning styles. They also shared that studies have indicated low and average students earn higher scores on tests when they received instruction related to their dominant learning style(s). Lastly, students having different learning styles could affect the way they observe, communicate, and respond to their learning environment (Rezaee, Abdullah, & Singh, 2011).

Rezaee, Abdullah, & Singh (2011) also shared the results of their study testing whether students will be more effective at assessments when they receive instruction with learning styles including visual, kinesthetic, read and write, and auditory that are appropriate to their level prior. A

one-way ANOVA study done in their study on 317 sixteen year olds who were split based upon learning (visual, kinesthetic, read and write, and auditory) styles and others receiving the same instruction styles at the same level. Their results revealed students have dominant learning styles Cohen's  $d = 0.13$ ,  $p < 0.05$  (Rezaee, Abdullah, & Singh, 2011). By teachers giving instruction geared toward the students' strong learning style, they will be less anxious and more engaged (Rezaee, Abdullah, & Singh, 2011). Thus, students will be more successful with assessments (Rezaee, Abdullah, & Singh, 2011). There was clear indication that learning styles will make a difference on students' overall success opposed to all students receiving the same instruction (Rezaee, Abdullah, & Singh, 2011).

On another note, Komarraju, Karau, Schmeck, and Avdic (2011) conducted research on 308 undergraduate students who the instructor split in groups of kinesthetic, visual, read and write, and auditory learners. In their study, the students received instruction linked toward their learning style. For example, the kinesthetic learners were together completing real-life problem-solving techniques, while the visual learners used more poster and illustration type learning. The researchers share that the auditory learners listened to speeches and lectures geared towards the weekly topics in class, while the read, write learner read information, and took notes. Their assignments and tests compared in areas each class. Results showed there was a 3% growth in grade point averages and grades using learning style instruction (Komarraju, Karau, Schmeck, and Avdic, 2011).

## Purpose Statement

Reading fluency is becoming more of a problem in schools (Begeny et al., (2009). Many students who drop out of school or tested for special education services are struggling with reading (Begeny et al., (2009). Thus, researchers believe reading fluency might be declining because of ineffective instruction (Fenty, Mulcahy, & Washburn, 2015). Research is minimal on small group instruction and learning styles, and reading fluency. Many times, it is difficult to accommodate all students' reading levels and interaction in whole group instruction (Wilson et. al, 2012).

Therefore, with reading fluency levels being a struggle for students across the country, an

effective intervention or instructional method might be appropriate. Small group instruction allows teachers to use instruction to meet more learning styles than whole group (Wilson et al., 2017). Kanchi, Junaid, & Srikant (2013) results noted that students prefer to receive instruction based upon their learning style preference.

The purpose of this study is to evaluate the effects of small group reading instruction using learning styles on reading fluency scores among fourth grade students compared to whole group instruction. The research question is, “*What effect will small group instruction using learning styles have on FAST CBMreading fluency scores on fourth grades students?*” Small group instruction allows teachers to use differentiated instruction. The study will show how this instruction effects fluency scores. The hypothesis is that small group instruction will improve students’ reading fluency scores in fourth grade using FAST CBMreading scores more than whole group instruction.

### Methods

#### Participants

Twenty-three fourth grade participants participated in this study. Their elementary school is an urban school located in Midwest Iowa. The elementary school is in a high poverty district. Participants’ ages ranged from nine to 10 years old. All the names were pseudonyms in this study. No incentive was given to the students for participation.

Of the 23 students, 15 were males ( $n = 15$ ) and 8 females ( $n = 10$ ). One student was on an Individual Evaluation Plan (IEP) for behavior while four students identified as talented and gifted (TAG). The race of students were 40% white, 32% African-American, 12% Indian, 8% Hispanic, and 8% Asian. The school district is a Title I school and provided 100% free and reduced lunches.

There were five sections of fourth grade at this elementary school. The participants were placed in fourth-grade classes based upon their academic levels in reading and math. The participants’ reading levels will range from below level to above level.

#### Materials

**Fastbridge.** The FastBridge Learning website was used to determine participants’ scores on the Fast CBM (Curriculum-Based Measurement

for Reading). FastBridge includes reading passages along with built in timers for assessments. The CBMreading fluency assessment is offered up to five times in a school year for teachers to test reading fluency levels. Typically, schools give the universal screening during the fall, winter, and spring assessments. During the main assessments, participants read three passages for one minute each in a small group setting (See Appendix A). The passages told a short story about a character(s) using words at a fourth grade level. The same three passages are used on each FAST assessment for fourth grade.

**Testing Fastbridge.** When the student began reading the first word of the story, the teacher started the timer on the website. Then, the teacher listened while the participants read aloud and the teacher clicked on the words that participants skipped or read incorrectly. After the timer went off, the teacher clicked on the last word read. Then, the teacher clicked submit and Fastbridge automatically scored the participants’ median score on the universal screening test (FastBridge Learning, n.d.).

**Fastbridge benchmarks.** According to the Early Literacy Implementation (2018) article, fourth grade students should be reading 116 words per minute in the fall, 136 words per minute in the winter, and 150 words per minute in the spring of that year (Early Literacy Implementation, 2018). These benchmarks were the goal that guided the teacher and students.

**Fastridge reliability and validity.** Brown (2017) reports that fundamentals behind the FastBridge Learning assessments go through a process to guarantee reliability and validity. This process includes a multi-step research process, which includes controlled studies, the Lab process, and an endorser (Brown, 2017).

FastBridge Learning (n.d.) shows the importance of validity in efforts to make sure the test is measuring what it says it will measure. Fastbridge Learning displays that a benchmark is set for students to meet that research has reported valid amongst the majority of other 4<sup>th</sup> grade students (Fastbridge Learning, n.d.).

Many states use FastBridge because it is a reliable assessment for schools (Aranas, 2015). According to Center on Response to Intervention (n.d.), the validity the reliability test/retest coefficient range for fourth grade is 0.86 and the

median is 0.79. Cronbach's alpha for reliability is 0.95. The validity test/retest coefficient range for fourth grade is 0.97. (Center on Response to Intervention, n.d.).

**Journeys textbook.** The Journey 2018 textbook were used to read stories with the whole group, partners, or independently. The textbook consisted of fourth grade level stories with a mixture of fiction and non-fiction. The textbook also contains vocabulary words that are at a fourth grade level. The textbook were used during whole group instruction.

**Reading A-Z passages.** Participants used A-Z reading passages (See Appendix B) as well as leveled reader books. The participants read paragraphs together or as a group focusing on a fluency skill. These passages were at various levels from second-grade to fifth-grade.

**Reader's theatres.** Participants also used Reader's Theatres within small group at the participants' reading levels. Each participant had a part in the story and practiced reading fluency skills that make their part sound positive.

**Journey's leveled readers.** Students used Journey's leveled readers as a small text at lower, on level and above leveled readers. Students read these with small groups, partners, and independently. Often, student read a page while they recorded on Seesaw to assess fluency strategies.

**Seesaw.** The Seesaw computer program allows teachers to assign tasks for participants to practice fluency recording themselves (Ray, 2017). Each participant in this study received a login QAR code to login to the assignments from the teacher on Seesaw. The teacher made weekly videos to introduce fluency skills each week and the participants saw firsthand on Seesaw. Participants recorded themselves reading, and listened to stories from other participants. After a participant finished reading their passage aloud, their peers in their small group would watch videos and give effective feedback under their video on the Seesaw app. The teacher monitored all the videos and feedback before they were posted for others to see. Parents of the participants were able to create a family account to see the fluency progress.

## Procedures

**FastBridge testing.** Each of the 23 fourth-grade students tested on the fall (baseline) reading fluency assessment the last week in September 2018, the winter FAST assessment for winter in December (2018), and the FAST assessment for spring in May (2019). Participants read the same three one-minute passages each time as the teacher scored them on the FastBridge website. If participants pronounced words incorrectly or skip a word, the teacher would click on it. After one-minute, the system scored the total words read correctly. The best score of the three passages was reported to the state.

**Whole group instruction.** From fall to winter, the 23 participants were given whole group reading instruction for 30 minutes daily. On Monday, students practiced reading the ten vocabulary words for the week aloud as a group. Tuesdays, instruction consisted of the teacher reading the weekly story from the Journeys textbook while the students followed along in their textbook. On Wednesday, students read the weekly story from the Journeys textbook with a partner that sat near them. On Thursdays, students would read the story independently and pick a paragraph to share with a different partner from Wednesday. On Fridays, students would read the supplemental "Comparing Text" story from the Journeys textbook in groups with the whole class. The whole group instruction contained all students reading fourth grade level stories and words and a few students modeled in front of the class each day. There were no weekly progress scores to record.

**Small group instruction.** During small group instruction, the teacher used a variety of materials and activities for engagement and participation relating to the students' learning styles. Students worked mainly on areas of accuracy, rate, and expression.

The reading block had four small groups. Students did two small groups for 15 minutes that focused on fluency combined with fourth grade standards and learning styles. One small group was teacher instruction aligning with their learning style (visual, auditory, kinesthetic, and read-write) while the other was practice. Teacher instruction varied by the day with the learning style and benchmarks. The teacher followed an explicit lesson plan each day with "I Do," "We Do," and "You Do" method. Whatever the topic was for the week in reading and fluency, the teacher would

model, then students would practice as a group, and lastly independent practice with the teacher monitoring and giving feedback when needed.

**Kinesthetic small group.** The kinesthetic group completed reader's theatres and plays to incorporate movement to improve while practicing reading fluency. The group also used finger taps to practice stressing words throughout their reading and recognizing punctuation. A football referee activity was used for students in fluency to give hand signals for each strategy of fluency including expression, stressing words, and punctuation. The teacher taught these techniques in teacher time and the students received assignments in lesson extension to practice as a group and video tape using Seesaw for the teacher to review.

**Read and write small group.** In this group, the students did a variety of independent and paired reading using stories at their reading level. The teacher modeled how to read a text, and then turn assignments into writing summaries or reflective paragraphs. Students rehearsed reading their assignments and recorded on Seesaw during their lesson extension. The students focused on expression, stressing, rate, accuracy, and punctuation.

**Auditory small group.** The auditory learners are strong at hearing instruction along with examples to model what fluency should sound like. These students listened to stories that the teacher read on Seesaw and during teacher instruction. In their lesson extension time, they would listen to the fluency passages that used expression, stress, accuracy, and rate. Afterwards, they would practice with a partner and record on Seesaw daily for the teacher to observe.

**Visual small group.** The visual small group watched the teacher model many times what instruction should look like. They also watched short video clips of other students who were stronger at fluency, to observe their expression, stress, accuracy, and rate on Seesaw. Then, students would practice with a same-level partner and record on Seesaw during lesson extension time.

**Data analysis.** The dependent variable is reading fluency measured by scores on the FAST assessment. The study used two paired dependent sample t-test, in which the FAST scores were compared from fall to winter and winter to spring. From fall to winter, the teacher used whole group

instruction. After the winter FAST assessment, the teacher placed participants in one of four small groups as a reflection of their scores in January. The teacher used small group instruction from February 2019 through April 2019 to test the effect of FAST assessment scores in the spring. The teacher focused on students' FAST fluency scores mean.

## Results

The purpose of this study was to measure the effectiveness of whole group instruction and small group instruction on the FAST reading fluency scores. In the fall of 2018, students completed the FAST CBMreading assessment testing their reading fluency scores. From the fall to winter (2018), the teacher taught whole group instruction. After the winter FAST assessment, the teacher assigned students to a small group. The teacher looked at the effect of small groups with differentiated instruction along with whole group instruction which all students did the same activities. The students were assessed using the same three passages on the fall, winter and, spring FAST assessments. Dependent sample *t*-tests were used to compare the fluency results from fall to winter and winter to spring FAST results. Whole group instruction took place in the fall to winter while small group instruction followed winter to spring. An alpha level of .05 was used for all statistical tests. Findings supported the hypothesis that using small group instruction improved FAST reading fluency scores.

Findings confirmed that whole group instruction had an impact on FAST reading fluency scores. The fall to winter FAST assessment,  $t(23) = -3.580, p = 0.002$ . The *Cohen's d* result was  $-0.747$ . The students showed a 13% improvement on their words per minute within the fall FAST assessment ( $M = 112.24, SD = 30.42$ ) and the winter FAST assessment ( $M = 135.40, SD = 23.98$ ).

Small group instruction findings confirmed more impact on FAST assessment scores than whole group instruction. The winter to spring FAST assessment,  $t(23) = -6.652, p < .001$ . The *Cohen's d* result was  $-1.387$ . The students showed a 22% improvement on their words per minute within the winter to spring FAST assessment ( $M = 135.40, SD = 23.98$ ) and the spring FAST assessment ( $M = 157.56, SD = 11.00$ ).

Table 1

*FAST Paired Sample T-Test Results*

FAST Test	<i>t</i>	<i>Df</i>	<i>p</i>	Cohen's <i>d</i>
Fall – Winter	- 3.580	24.00	0.002	-0.747
Winter – Spring	-6.652	24.00	< .001	-1.387

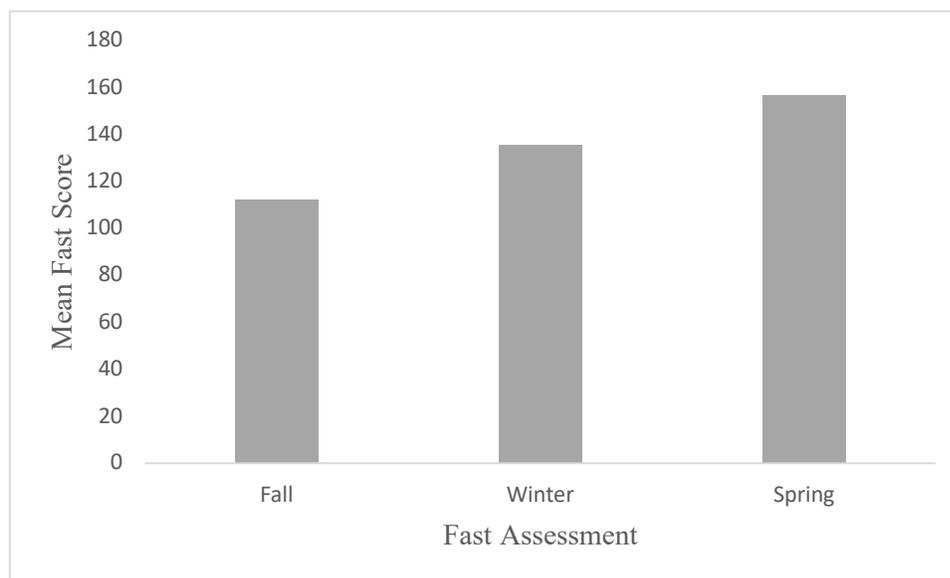


Figure 1. Means of FAST Assessments

Overall, findings confirmed small group instruction increased fluency scores more than whole group instruction. The *Cohen's d* shows larger scores in the winter to spring Fast fluency assessment while *p-value* shows smaller scores in the same test. Although, findings did suggest that whole group instruction provided benefits to fluency scores. Findings also suggested that differentiated instruction in small groups could affect students reading fluency achievement. Students could practice within their reading levels and receive one-to-one instruction and feedback

from partners, peers, and the students. Therefore, the findings confirmed the hypothesis that small group reading instruction can improve students' reading fluency scores.

### Discussion

First, reading fluency is a skill that students focus on reading at a pace that includes accuracy, automaticity, and expression (Arens, Gove, & Abate, 2018). Students who have the ability to read fluently can progress in other areas of reading and communication (Taguchi, Melhem,

& Kawaguchi, 2016). Reading fluency is important for students also to build skills in decoding words, vocabulary, and comprehension (Taguchi, Melhem, & Kawaguchi, 2016). Fluency practice will continue throughout high school and college. Fluency is a skill that links many career paths that students choose (Taguchi, Melhem, & Kawaguchi, 2016). Therefore, it is significant for students to have strong skills in reading fluency in order to be a successful (Taguchi, Melhem, & Kawaguchi, 2016).

In addition, students who fail to develop fluency skills often struggle in other areas of reading including comprehension (Smart et al., 2017). Fluency is not only important in the reading core, but is important for students interested in extra-curricular activities including speech, public communications, and clubs. Students who struggle may have a fear of reading and communicating in front of others (Smart et al., 2017). During reading instruction, students who are low at fluency tend to create behavior issues that are due to embarrassment of their skills. The students may act out or be antisocial (Smart et al., 2017).

Next, instruction that does not meet the needs of students to promote success in fluency can harm student abilities (DiCarlo et al., 2012). Many teachers use whole group instruction where instruction is common among all the students. Therefore, all students do the same practice with the same levels of passages. Much of the instruction requires students reading together as a class, group, or to a partner. When a teacher uses whole group, it is difficult for them to monitor all students and give appropriate feedback (Goering & Baker, 2010). Students who are not at a reading level similar to their peers show more signs of struggle and embarrassment (DiCarlo et al., 2012). When students do not receive instruction that will enhance their abilities, their reading level may drop and other issues of behavior occur (Fien et al., 2011). In small group instruction, teachers can divide students up among their reading levels and have smaller groups to instruct at a time (Wilson et al., 2012). It also allows other students to be practicing reading fluency using other methods while the teacher is instructing (Wilson et al., 2012). The present study examined reading fluency scores because of small group instruction using learning styles (kinesthetic, read and write, visual, and auditory). The hypothesis was if fourth grade students received small group instruction

guided with learning styles, their reading fluency scores would improve more than whole group instruction.

Ensuing, the overarching results from this study indicated an effect for the variable of small group instruction and learning styles. Students' scores on the FAST assessment were higher after small group instruction was given than when the students received whole group instruction. The results however do show a rise in reading fluency scores using whole group instruction, but the increase was more after students were given small group instruction. This leads to the conclusion that reading fluency instruction is important to benefit scores along with using instruction targeting students' strong learning styles.

Finally, small group instruction allowed students to practice fluency in various ways with smaller groups. The teacher monitored fluency in different ways such as one-to-one, recorded videos, feedback from a partner, and progress monitoring each week. Students received instruction that was inclusive to their strong learning styles. First, the kinesthetic students used more exercise and reader's theatre to improve. Next, the read and write learners read about how to become stronger at fluency with expression, accuracy, and rate, along with writing their own paragraphs that they used practiced fluency. In addition, the visual learners watched examples of fluent readers in focused areas. Lastly, the auditory learners listened to what fluent readers sound like using expression, accuracy, and rate. After teacher's instruction, the students practiced the various strategies with fluency partners and recorded their practice on Seesaw. The results suggested that students need more instruction and different opportunities to accommodate their learning styles; however, evidence does not suggest that whole group instruction is poor for students. Based on these conclusions, it is evident that the study's hypothesis supports small group instruction influencing reading fluency growth more than whole group instruction.

**Instruction and Learning Styles.** Much of the body of research focused on the effect between small and whole group instruction and reading fluency scores. Across this body of research, it is evident that instruction is important to enhance fluency scores. The present study operated under the premise that small group instruction would be able to provide more learning

styles through differentiated instruction and small groups. It was theorized that small group instruction would support students in making larger gains on their FAST fluency assessment than whole group instruction because it accommodates areas the groups need instruction. This aligns with the research that Pollock, Hamann, & Wilson (2011), Wilson et al., (2012), Peterson (2016), and Urlacher, Wolery, & Ledford (2016) who research indicated a positive correlation between small group instruction and tests. Small group instruction supported participants increasing student fluency scores, so too did whole group instruction. The present study builds upon the findings that small group instruction does provide more opportunities for increased scores, while whole group instruction may not provide enough effective practice.

Whole group instruction may not be as beneficial to student achievement because of the different learning levels and meeting the needs of all students (Dicarlo et al., 2012). Whole group instruction does not always provide consistent gains for every student. A teacher can model in front of students, but not always know it is effective for each student. It is hard to watch and listen to each student and give feedback when everyone is working at the same time (Dicarlo et al., 2012). This research study supported that students may not receive adequate instruction when they are doing the same activities at similar level as their peers. Whole group instruction did provide gains as 10% of the fluency scores increased. The research does not support that every student made gains. The results could suggest the students who received practice at their level and dominant learning style consistently had more increase in scores. This research also suggested that keeping a weekly data sheet might be more effective to determine which students are benefiting from the instruction.

Small group instruction allowed the researcher to provide instruction in various ways each day. The students were able to complete an activity meeting each of the learning styles (kinesthetic, visual, auditory, and read-and-write). Each day the teacher lessons consisted of explicit instruction following each groups' learning style. Research provides evidence that students who develop their own learning styles are stronger for themselves and increase scores (Wilson et al., 2012). Pollock, Hamann, & Wilson (2011)

supported participation making a difference in learning.

In this study, the teacher allowed for "we do" time for students to work aloud and the teacher to give feedback when appropriate. This time allowed teachers to observe firsthand any skills that needed more attention or see the increase in abilities. In Pollock, Hamann, & Wilson's (2011) study, students reported being less nervous to participate in small groups than whole group instruction.

Results reveal that it is important for teachers to be aware of learning styles that are strong among students. Abidin et al., (2011) study found that students' learning styles influenced their academic outcomes. Students with special needs have learning styles that are appropriate for them. In this study, the teacher broke students upon their reading level and their strong learning style through observation. Even though a student is not considered "special needs" does not mean they can benefit from instruction that is not comfortable with them. Neil Flemming suggests in Kanchi, Junaid, & Srikant (2013) study that students create their own learning styles as they develop. Students who struggle to sit still might not show as much fluency growth doing audio fluency. They might be a student who should be doing more reader's theatre and moving around activities. This study suggests that one lesson using a learning style might not be effective for the whole class. Rezaee, Abdullah, & Singh (2011) provide evidence that students should practice with more than one learning style along with their dominant style. Additionally, this study allowed students to meet with the teacher and during lesson extension. The students used their dominant learning style to practice the type of instruction the teacher modeled whether it was kinesthetic, read and write, visual or auditory. Teacher instruction and lesson extension time met the reading levels and learning styles appropriate for each student. Students required more activities that were interesting and engaging for them.

### **Limitations & Suggestions for Future Research**

**Increasing amount of time in daily instruction.** When evaluating the conclusions discussed above, it is important to take into considerations the limitations of this study. Students in the study received fifteen minutes of direct instruction daily along with another fifteen

minutes of extension practice with partners and independently. The 15-minute period was a district requirement for grade levels to use as part of the 90-minute reading block. The teacher used four 15-minute small groups and a 30-minute whole group as part of the requirement. 15 minutes was a short period to accomplish many tasks and spend time focusing on instruction. Many times the teacher would finish modeling new exercises and there were a few minutes for students to practiced together as the “you do” part of explicit instruction. There were also issues in the lesson extension time for the computers to log on or need to restart that students were cut short on recording and giving feedback.

Therefore, in further research, 20-30 minutes might be more applicable for instruction and practice time. This gives the teacher time to do more modeling and the groups to have time to practice. The teacher would receive more time to give feedback on the group work as well as look at some of the independent practice before students go to the lesson extension. Teachers need to know whether the students are able to complete the lesson extensions after instruction. Therefore, it is necessary to get the opportunity to observe and interact that time will allow.

### **Whole Year Study**

Another limitation factor was the timeline of the study. The teacher observed students in small group instruction for six months. The teacher used one to two months after winter to allow for modeling how to do different activities and how to use Seesaw. Once the students were proficient and familiar with the independent activities, the teacher observed scores for three to four months. This amount of time may not have shown as much difference in the scores as a whole year of observation would. Many students’ fluency scores dropped over the summer due to lack of practice. Therefore, the fall test was a baseline and the winter test showed a big jump of growth many times because students get back into the fluency routine. The whole group instruction may have shown a rise in scores because students are closing their words per minute gap from summer. It would be beneficial to see how a whole year of small group instruction effects the growth than a year of whole group instruction.

Therefore, in further research, the teacher could observe a whole year of growth using small

group to see the effects of the scores from fall to winter and winter to spring. More time would also allow students to learn a variety of new techniques and exercises for fluency. There are varieties of activities that happen at different times of the year, which can cause higher or lower school in areas. The first semester frequently consists of students catching up from taking time off during the summer, so there may be an increase in scores. Second semester in a school year shows scores after students have been in a routine. Changing the instruction time could show differences in results due to the types of weather, activities at school, and more. It would be consist to observe results with instruction consistent.

### **Participants Socioeconomic Status.**

Another limitation of the study would consider more middle and high-class students in the study. In this research, the students in school have 100% free and reduced lunches with most students coming from poverty lives. Many of the students’ parents did not graduate, so academics are not a major priority in these students’ homes. Students come to school with few skills and resources that they have obtained due to lack of money and poverty. Many of the fluency scores in the school are lower, compared to other economic level schools in the area due to lack of resources and prior education. Students have more room to show growth in a poverty area. Students in a higher economic area may not show the same results with small group because their scores might be stronger due to more resources and family contributions. In an area with more opportunities, students may receive a different amount of experiences to assist with their fluency growth and help them become comfortable with other learning styles.

A future study would include testing students’ fluency scores who are in a school system with less diversity and poverty. An example would be a school system with many students of the same race/ethnic backgrounds. Therefore, testing students in a school with middle and higher-class status may show different results. Many students with a middle or higher-class background could have access to more resources and support from family. Therefore, this type of test would analyze whether small group instruction had as much impact students of all races and ethnicities.

**Limited Outside Instruction.** The next limitation includes students receiving “What I

Need Time” (WIN) time each day. Every student was split into a WIN group based upon what areas of reading they need assistance. Some of the WIN groups included comprehension, decoding, vocabulary, enrichment, and fluency. The school’s intervention department placed struggling students a WIN fluency group that received an extra 30 minutes of assistance in addition to the instruction from the regular classroom instruction. This may have affected the fluency scores due to other teachers giving fluency instruction. The type of instruction and focus was different from the classroom teacher. Students could be making gains or falling behind due to another type of instruction. Consequently, students’ scores who increased could have been a reflection of their WIN time as well as whole or small group instruction.

The WIN groups were small with approximately six to eight students. Students’ gains could have been due to the extra instruction and not primarily an example of small group learning. Therefore, another study could test students with only fluency instruction during the researcher’s small group instruction. There would not be outside instruction. This would show if the true results were effective from the small group instruction and the activities related to students’ learning styles. Other teachers provide various types of instruction and small group practice that could hinder the increase in fluency scores.

### **Planning Time**

The last limitation considered for this study is the time involved in planning small group instruction. Many teachers use whole group instruction so the planning is consistent and it involves one lesson for all students (Wilson et al., 2012). Small group instruction was beneficial in this study because there was a 90-minute reading block consistent for teachers to rotate small groups. When teachers are given reading time at different times during their day, the instruction may not allow for the rotations, thus teachers may use more whole group instruction. The teacher in this study found it difficult to plan four separate lessons and extensions each day without given proper training. A future study would require teachers to receive professional development in reading fluency instruction along with one to two months of preparation for learning different techniques of learning styles. The researcher would have time to put together weekly or monthly lessons prior to beginning instruction.

### **Implications**

A balanced reading instruction approach is important for reading scores to benefit (Fien et al., 2011). Many teachers lack a clear picture of what successful reading instruction looks like (Wilson et al., 2012). It is important for teachers to have professional training in the teaching of fluency to be able to provide accurate instruction that is useful for fluency (Dicarlo et al., 2012). Fluency instruction is important for students to improve rate, accuracy, and expression in writing. These skills guide students to increase FAST fluency scores, social skills, and pursuing careers in communication. Many teachers neglect fluency because there is not enough time in the day or because they do not have adequate knowledge to give fluency instruction (Fien et al., 2011). Thus, small group instruction may not be the sole reason for improvement. Not every teacher is going to provide the same activities in differentiated instruction to improve scores. Certain activities might work for some classrooms and students, but we cannot assume that all classes would be influenced. There are many activities used in fluency instruction. Individual activities would be tested separately to determine which ones cause improvements or struggle.

Teachers should receive training in instruction with lessons that have been determined as effective. Trainings should include activities using all learning styles to focus on improving accuracy, rate, and expression. States are looking at fluency scores as individual assessments so it is vital that teachers provide instruction to students. Teachers cannot assume that fluency will improve by reading out of textbooks in various subjects. Professional development will create more consistency through a school (Fien et al., 2011). This study exhibited a small amount of activities that can be utilized during small group instruction. These activities involved students using their dominant learning styles that were visual, auditory, kinesthetic, and read and write while practicing fluency. It does not claim that small group instruction is the only way to improve fluency scores, yet it does have a positive effect.

Success is not only a means of instruction, but it is the “type” of instruction used (DiCarlo et al., 2012). Teachers need to look at how effective instruction is beneficial to the students and their learning styles. Instruction should be engaging for students enough to make a difference. Thus, the

experience of the teachers may be a factor in determining the type of instruction. There are different types of teachers to consider in research. There are teachers who have taught many years, but received training years ago. There are teachers right out of college that are not sure yet what type of instruction is more successful in their classroom because they have little experience. There are also teachers who have a few years' experience and have taken fluency trainings. All of these factors could have been implicated in the research. Instruction is a crucial part to promote fluency success.

### **Conclusion**

Reading fluency is essential for future success. With current conditions, many students are failing to meet the benchmarks of their grade levels (Fenty, Mulcahy, & Washburn, 2015). Fluency is important for student success in school and future careers. Students with low fluency scores can struggle in school, which can lead to behavior and social issues. One part of the decrease in scores can be factored with the neglected instruction in the classroom. Some classrooms provide less than 12% of their day to fluency practice (Abadazo, 2011). With the focus of fluency in schools being important, it is vital that teachers provide adequate instruction for student success. Students develop dominant learning styles as they develop (Shah et al., 2013). Certain styles of instruction can connect with learning styles to provide engagement and motivation for students at their level. Teachers should recognize the importance of each students' preferred learning style to make instruction connected. Learning styles may not always be what the students "like," but styles that the teacher has observed as dominant. Small group instruction provided results that lead to successful fluency scores in addition to whole group instruction. Through a balanced approach, teachers have a large probability to meet the diverse needs of students.

## References

- Abadazi, H. (2011). Reading fluency measurements in EFA FTI partner countries: Outcomes and improvement prospects, *Education for All Fast Track Initiative*, 1(1), 1-70.
- Aranas, Y. (2015). FastBridge research foundations. *FastBridge Learning*. Retrieved from <http://www.fastbridge.org/>
- Arens, K., Gove, M.K. & Abate, R. (2018) Oral reading fluency with iPods. *Reading Improvement*, 55(2), 54-62.
- Ankrum, J.W. & Bean, R.M. Differentiated reading instruction: What and how. *Reading Horizons*, 48(2), 133-146.
- Begeny, J.C., Krouse, H.E., Ross, S.G., & Mitchell, C.R. (2009). Increasing elementary-aged students' reading fluency with small-group interventions: A comparison of repeated reading, listening passage preview, and listening only strategies. *Journal of Behavior Education*, 18, 211-228.
- Brown, R. (2013). FastBridge research foundations. *FastBridge Learning*. Retrieved from <http://www.fastbridge.org/>
- CBMreading. (2018). *FastBridge Learning*. Retrieved from <http://www.fastbridge.org/assessments/reading/cbmreading/>
- Center on Response to Intervention. (n.d.). Retrieved from <https://rti4success.org/fast-adaptive-reading-reading>
- Clark, R. Morrison, T.G. & Wilcox, B. (2009). Reader's theater: A process of developing fourth graders' reading fluency. *Reading Psychology*, 30, 359-385.
- Connor, C.M., Morrison, F.J., Schatschneider, C., Toste, J.R., Lundblom, E., Crowe, E.C. & Fishman, B. (2011). Effective classroom instruction: Implications of child characteristics by reading instruction interactions on first graders' word reading achievement. *Journal of Research on Educational Effectiveness*, 4, 173-207.
- DiCarlo, C.F., Pierce, S.H., Baumgartner, J., Harris, M.E., Ota, C. (2012). Whole-instruction practices and children's attention: A preliminary report. *Journal of Research in Childhood Education*, 26, 154-168.
- Early literacy implementation. (2018). *Iowa Department of Education*. Retrieved from <https://www.educateiowa.gov/sites/files/ed/documents/ELI%20Technical%20Assistance%20Companion%20Document%203-30-18.pdf>FastBridge Learning. (25, October 2018). Retrieved from <http://www.fastbridge.org/assessments/reading/cbmreading/>
- FastBridge Learning. (n.d.). aReading. Retrieved November 2, 2018, from <http://www.fastbridge.org/assessments/reading/cbmr/>
- Fenty, N., Mulcahy, C., & Washburn, E. (2015). Effects of computer-assisted and teacher-led fluency instruction on students at risk for reading failure. *Learning Disabilities: A Contemporary Journal*, 13(2), 141-156.
- Fien, H., Santoro, L., Baker, S.K., Park, Y., Chard, D.J., Williams, S., & Haria, P. (2011). Enhancing teacher read alouds with small-group vocabulary instruction for students with low vocabulary in first-grade classrooms. *School Psychology Review*, 40(2), 307-318.

- Goering, C.Z. & Baker, K.F. (2010). "Like the whole class has reading problems: A study of oral reading fluency activities in a high school intervention setting. *American Secondary Education*, 39(1), 61-77.
- Komaraju, S., Karau, R.J., Schmeck, R., and Avdic, A. (2011). The big five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, 51(4), p. 472-477.
- Manuel, S. (2016). Slow reading speed: A reading problem, not a braille problem. *Future Reflections*, 35(3), 7-9.
- Mims, W.M. & Lockley, J. (2017). Action research and differentiated reading instruction in Mississippi: Fourth-grade students' reading success. Retrieved from <https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED571755>
- Otaiba, S.A., Gillespie, A., and Baker, K. (2018). Elementary grade intervention approaches to treat specific learning disabilities, including dyslexia. *Language, Speech & Hearing Services in Schools*, 49(4), p. 829-842.
- Peterson, K. (2016). Making meaning with friends: Exploring the function, direction and tone of small group discussions of literature in elementary school classrooms. *Reading Horizons*, 55(3), 27-61.
- Pollock, P.H., Hamann, K., & Wilson, B.M. (2011). Learning through discussions: Comparing the benefits of small-group and large-class settings. *Journal of Political Science Education*, 7, 48-64.
- Ray, A. (2017). Seesaw between school and home. *The Asha Leader*, 22(5). 1-2.
- Rezaee, A.A., Singh, K.B., Abdullah, H.N., Singh, K.K.B. (2011). Learning styles and overall academic achievement in a specific education system. *International Journal of Humanities and Social Science*, 1(10)143-152.
- Schumm, J.S., Moody, S.W., & Vaught, S. (2000) Grouping for reading instruction: Does one size fit all? *Journal of Learning Disabilities*, 33(5), 477-488.
- Smart, D., Youssef, G.J., Sanson, A., Prior, M., Toumbourou, J.W., & Olsson, C.A. (2017). Consequences of childhood reading difficulties and behavior problems for educational achievement and employment in early adulthood. *British Journal of Educational Psychology*, 87, 288-308.
- Taguchi, E., Melhem, L., Kawaguchi, T. (2016) Assisted reading: A flexible approach to L2 reading fluency building. *Reading Matrix: An International Online Journal*, 16(1), 106- 118.
- Urlacher, S., Wolery, M. & Ledford, J.F. (2016). Peer modeling of commenting during small group direct instruction for academic behaviors. *Journal of Early Intervention*, 38(1), 2440.
- Wilson, T., Nabors, D., Berg, H., Simpson, C., & Timme, K. (2012) Small-group reading instruction: Lessons from the field. *Dimensions of Early Childhood*, 40(3), 30-39.
- Wu, S. & Gadkey, D.L. (2017). Improving oral reading fluency in elementary school children: Comparing the effectiveness of repeated readings and video self-modeling. *School Psychology Forum: Research in Practice*, 11(3), 91-104.
- Wyatt, T. & Chapman-DeSousa, B. (2017). Teaching as interaction: Challenges in transitioning teachers' instruction to small groups. *Early Childhood Education*, 45, 61-70.