St. Catherine University

SOPHIA

Masters of Arts in Education Action Research Papers

Education

5-2022

The Effects of Guided Reading in a Primary Montessori Classroom

Taylor Bates

Mary Brocklesby

Katie McGarrigle

Follow this and additional works at: https://sophia.stkate.edu/maed

Part of the Early Childhood Education Commons, and the Educational Methods Commons

The Effects of Guided Reading in a Primary Montessori Classroom

Submitted on May 23, 2022

In fulfillment of final requirements for the MAED degree

Taylor Bates, Mary Brocklesby, Katie McGarrigle

St. Catherine University

St. Paul Minnesota

Abstract

The purpose of this action research was to decide if conducting guided reading instruction three times a week in a primary Montessori classroom would make an impact on reading levels among kindergarten students. The research took place over six weeks in a public Montessori school. The school is a Title One school located in a rural area of South Carolina. The population who participated in the study were 26 kindergarten students aged five to six from three different classrooms. Our intervention included using a variety of reading strategies such as pointing to each word, using picture clues, sounding out words, and recognizing sight words. Each session lasted around 45 minutes to an hour. Some positive effects of our study were an increase in reading confidence, usage of reading strategies, and overall reading achievement. To expand on our research, we would experiment with implementing this practice at another time during the school day and use additional guided reading techniques.

Keywords: Montessori, literacy, reading, guided reading

Introduction

Reading is something we do every day, whether we notice it or not. We frequently read things around us such as text messages, emails, street signs, show titles, and much more. There is no doubt that reading is a vital skill to be learned, but that is no easy task for many. As Lipp & Helfrich (2016) stated, "Reading, to most students, can feel like a puzzle in need of careful solving" (p. 645). In any K-12 classroom, there is a diverse group of readers with varying strengths, weaknesses, and needs. There is a great amount of planning and decision making to be made when teaching children to read. Teachers plan ahead of time what book students should read to challenge themselves and what strategies to focus on while they are reading. On the other hand, there are many in-the-moment decisions to be made while a student is reading such as when to scaffold a child or cue usage of a reading strategy. Reading intervention can be most effective when implemented as early as possible. O'Connor et. al (2005) agreed that reading problems could be diminished if differences in skill level are addressed before they become more pronounced. The bigger a gap in reading skill, the harder it will be to close that gap. Our reading abilities impact us every day and it is critical to stress the importance of learning to read starting at a young age.

There are many aspects that go into the success of a reader including exposure and access. The students in this study come from a low-income area where books are not always readily available to them. Through our district's assessment, we could see that a large percentage of students were below grade level for reading ability when compared to other schools statewide. With the "No Child Left Behind" Act, there is a strong push to get students on grade level before 4th grade (2001). In an area where parent involvement is low, this responsibility is often left solely on the shoulders of educators.

As early childhood educators, we spend a large amount of instructional time focusing on reading skills through our Montessori curriculum. However, because of the low reading achievement in our district, we decided to take a look at our curriculum and see what was missing. We found that students in our classroom spend little time with an actual book in their hands, with an adult helping them make meaning from the text. Because of this, we decided to add small group guided reading to our reading instruction during the work cycle. The purpose of our research is to determine if using this instructional framework, in addition to the reading instruction we already use, will have an impact on the reading ability of our kindergarten students.

Theoretical Framework

Social Cognitive theory, also known as sociocognitive theory, was developed by Professor Albert Bandura in the 1960s. This theory supports the direct correlation between knowledge acquisition and dynamic interactions in a social context or experience. This theory stems from Vygotsky's sociocultural theory, which views human development as a result of social interactions with those more knowledgeable (Hodges et al., 2016). According to Schuck (2012), Social Cognitive theory "stresses the idea that much human learning occurs in a social environment. By observing others, people acquire knowledge, rules, skills, strategies, beliefs, and attitudes" (p. 118). Individuals observe the behavior of the model, leading to a gained knowledge of the usefulness and appropriateness, as well as the consequences of their behaviors.
The individual can then practice and apply these behaviors (Schuck, 2012).

Sociocognitive theory suggests that reading and writing are social processes and that adjustments should be made based on student needs for achievement (Hodges et al., 2016). There are many intricacies involved in student reading acquisition and instructional decision-making

for teachers. Sociocognitive theory encourages that modifications are often made regarding students' grouping, interactions with texts, student goals, and strategies used. The understanding of text should not be a static venture. The relationship between teacher, student, texts, and classroom contexts should be interchangeable and intentionally dynamic (McCormick et al., 2018). Frequent formative assessments should inform teachers of where to make changes in instruction, grouping, student goals, texts, and more.

It is evident that reading skills are a necessary building block to early childhood education but finding effective ways to approach this in the classroom is an ongoing journey. With a social aspect presented, students can express their understanding and comprehension. We will be leading small guided reading groups three times a week for our research. To make this a dynamic reading experience for students their reading groups will change as students progress, different books will be read each week, and various teaching points will be planned for during the guided reading intervention. Before we begin our research, we will explore the literature on the acquisition of foundational literacy skills and methods that have been implemented.

Review of Literature

Reading and literacy instruction is imperative in any early childhood or kindergarten classroom, including a Montessori primary classroom. As Primary Montessori teachers, our hope is to begin early literacy instruction with our students during their 3k year. In public schools, children often enter kindergarten with no previous educational experience and thus diverse reading skills. Though we spend time working on literacy skills with kindergarten students daily in our classrooms, we continue to see a lack of reading skills and often low interest in reading from our kindergarteners. These skills are an indicator of later reading abilities (McCoach et al.,

2006). According to Al Otaiba et al. (2011), "because students enter school with vastly different background knowledge, having experienced different language and literacy experiences at home, the first line of defense against reading disabilities is initial classroom literacy instruction" (p. 538). With this knowledge, it is important for educators to understand the skills all students need to learn to read.

Foundational Literacy Skills

As stated by O'Connor et al. (2005), components of reading that teachers must address include phonemic awareness, defined as "The ability to isolate and manipulate sounds in spoken words" (p.440); phonics, "the linkage of speech sounds to alphabet letters and letter combination" (p.440); fluency, "the rate of reading, running text" (p.440); vocabulary, "the meaning of words" (p.441); and comprehension, "understanding of sentences and overall meaning of passages" (p. 441). Similarly, Kamps et al., (2008) named print knowledge, letter recognition and knowledge, IQ, phonological awareness and the ability to decode words as some of the strongest predictors of later literacy and comprehension skills. Frey & Fisher (2010) also noted that phonemic awareness is a critical skill that contributes to automaticity.

As students are taught literacy skills, the hope is for them to become fluent readers. Fluency, which is believed to positively affect comprehension, is achieved through repetition (Frey & Fisher, 2010). Stites & Laszlo (2017) stated, "Fluent reading requires the rapid integration of information across multiple levels of representation" (p. 798). Less fluent readers can be taught to use compensatory reading strategies such as slowing down, pausing, and looking back to understand the text (Frey & Fisher, 2010).

Brain Development and Reading

Just as educators need to know the foundational skills children need to read, they also must understand *how* students learn to read. Brain research has shown that reading interventions may lose their effectiveness after children reach second grade (Stites & Laszlo, 2017). This means that early reading intervention is crucial during the early childhood years. According to Frey & Fisher (2010), "Being read to builds the neural pathways critical to written language comprehension and production. By connecting these reading experiences with reinforcing activities such as eating, being held and receiving attention, a pleasure pathway is formed that connects reading with enjoyment in the brain" (p. 105). Children should be read to and talked with long before they enter school. These early experiences with print and spoken language are important for their ability to hear, process, and produce language, which are necessary for reading (Frey & Fisher, 2010). Being that there is little control over the home experiences of students, it is imperative that teachers create meaningful and intentional opportunities for students to engage and explore the sights, sounds, and meanings of words in oral and written language (Frey & Fisher, 2010).

Our brains are hardwired to imitate. From infancy, we learn by imitating and mimicking. Teachers can use strategies such as intentional modeling, demonstrating, and thinking aloud to allow students to witness and partake in making meaning of text (Frey & Fisher, 2010). Additionally, audiovisual integration, defined as "the interaction between auditory and visual modalities" is associated with reading fluency (Xu et al., 2018, p.3). Frey & Fisher (2010) agreed that students should have access to informational text paired with visuals.

Three areas of the brain are involved when learning a new skill: the prefrontal cortex, the parietal cortex, and the cerebellum (Xu et al., 2018). As students learn a new skill, each area

becomes less involved, and the sensory cortex takes over, meaning the space needed reduces over time and the skill becomes more automatic (Xu et al., 2018). Xu et al. (2018) found “the development and reorganization of early readers’ language circuits for supporting automatized LSS (Letter-speech sound) integration and how such integration is related to the development of fluent reading are crucial questions from both theoretical and practical point of view” (p. 1). However, Frey & Fisher (2010), stated that as the space needed within the brain to store a particular skill reduces, neuronal pathways also begin to change and form faster networks as they are used repeatedly, leading to automaticity. As students learn to read and use these pathways repeatedly, they become more fluent; fluency is believed to positively affect comprehension, as the reader needs less time and effort to recognize symbols and decode, making it easier for the brain to process the meaning of the text (Frey & Fisher, 2010).

Montessori Reading Instructional Strategies

In the Montessori primary classroom, the language curriculum focuses on the child’s awareness of the meaning of language, and skills are built through the child’s own spoken language. The ultimate goal is the realization that reading and writing are a form of communication (Soundy, 2003). Letter sounds are introduced before the names, and many children start to compose three-letter words with the moveable alphabet. Slowly, children will begin to process blends, phonograms, and words with more than one syllable (Soundy, 2003). Soundy stated, “Strategies include naming games, visual and conceptual matching and sorting, along with continued analysis and isolation of difficulties, oral reading by the teacher, and interpretive reading exercises for the child.” (p.127). The use of songs, the library corner, and individual reading lessons including using objects to sort by sound, make rhyming words, and sentences are all aspects to be found in the primary Montessori classroom. Students can select

work for themselves during work time. Students have numerous opportunities to speak, write, and imagine fully throughout the school day, creating a foundation to develop as learners and future readers and writers (Soundy, 2003). In the 3-to 6-year-old classroom, a core set of didactic materials are used, including metal insets, sandpaper letters, the moveable alphabet, and grammar boxes (Soundy, 2003).

There is a focus on the development and association between language, literacy, and motor development, including the preparation of the hand and eye for reading and writing. According to Lillard (2012), "Montessori reading instruction begins by having children trace sandpaper letters with their index finger while reciting the phonetic sounds, and then also putting words together with a cardboard Moveable Alphabet; these materials are used before children learn to read" (p. 394). While there are few studies on this technique, findings from embodied cognition would suggest that it is helpful (Lillard, 2012).

According to Elliott (1967), "The writing that Montessori refers to in the early stages of instruction does not necessarily involve a communication of ideas but more probably, merely the reproduction of symbols. It utilizes the sensory modalities of visual and auditory, kinesthetic and tactile to facilitate learning of the symbol, whereas contemporary methods utilize the modalities of visual and auditory" (p. 165). Though the Montessori method teaches foundational literacy skills at the primary level, fewer opportunities are available for children to apply these skills to reading texts.

Defining Guided Reading

Once foundational literacy skills are in place, guided reading instruction allows for those skills to apply to early reading. Ford and Optiz's work (2008) defined guided reading as "an opportunity for teachers to support small groups of children to apply strategies they already

know to texts they do not know" (p. 310). Iaquinta (2006) regarded guided reading as "an appropriate practice for children who are moving towards fluency in the early years of literacy development" (p. 413). The goal of guided reading is to "instruct students to read leveled texts with fluency and comprehension, use problem-solving strategies when confronted with an unfamiliar word, and understand new concepts" (Iaquinta, 2006, p. 414). This is no simple goal to meet. Schwartz (2005) stated, "guided reading lessons are a powerful tool for beginning readers that requires teachers to make complex and highly skilled decisions when responding to children's needs" (p. 436). By conducting guided reading in small groups, the teacher can better listen to each student as they read and make decisions on how best to support them. These decisions may be regarding leveled print, the grouping of students, teacher prompts, scaffolding strategies, and more. The research is plentiful on successful methods and programs on guided reading that can support teacher instruction, planning, and response.

Successful Guided Reading Methods

Guided reading instruction can be enhanced by educators furthering their knowledge of methods and programs that have been proven successful through research. There are a variety of effective strategies studied for instructing students, prompting, leveling, grouping, and more. Schwartz (2005) found that monitoring and searching strategies are two of the most quickly developed for young readers. Searching strategies bring about an initial attempt to read a word by applying phonics, context clues, or decoding skills (p. 439). Monitoring strategies reflect on the first attempt of a word and decide whether further searching is necessary (Schwartz, 2005). Teachers need to allow students to make an error and give them time for monitoring and selfcorrection. According to Schwartz (2005), "self-correction during reading indicates affective

processing and requires both monitoring and searching strategies" (p. 440). When a student gets stuck and cannot self-correct, their first reaction is often to look to the teacher for support. Teachers can scaffold monitoring and searching skills by prompting them. For example, asking "What could you try?" encourages searching. Monitoring prompts can include "Does that sound right?" or "Does that make sense?" (Schwartz, R. M., 2005, p. 441). According to Lipp and Helfrich (2016) too much talking or prompting can hinder learning and suggest teachers prompt enough to keep the story flowing and eliminate any unnecessary talk (p. 643).

Another important aspect of guided reading is using a variety of leveled texts for students to read. According to Schwartz (2005) the purpose of leveled readers is to provide "a gradient of difficulty that allows students to successfully read meaningful books as they build knowledge of letters, words, and how they are combined to form simple messages and texts" (p. 437). The beginner leveled texts include simple sentences in a repetitive format with strong support from visuals. These texts are typically short enough to be read in one sitting, allowing students to practice reading strategies that they can apply to independently read texts (Fountas & Pinnell, 2013, p. 270). It is also essential to provide students with a variety of leveled texts to read. When Ford and Optiz (2008) surveyed 1,563 early childhood and elementary teachers on what kinds of texts they implement during guided reading, the results were two-thirds of texts being used were narrative stories; informational texts were found to be lacking in usage (p. 318). By providing opportunities to read a variety of texts with different structures, students are more likely to be able to comprehend a variety of texts outside of school (Ford & Opitz, 2008, p. 318). Leveled books also help teachers group students based on similar skills and needs.

Grouping/Differentiation

Grouping children by individual needs is an important component of guided reading preparation. “Ability grouping refers to the process of teaching students in groups that are stratified by achievement, skill, or ability levels” (McCoach et al., 2006, p. 339). A study conducted on grouping by ability showed that this made it possible for some groups to work on letter sounds while others were decoding words (O’Connor et al., 2005). The groups were flexible and allowed students to move to other groups based on their achievement and growth

(O’Connor et al., 2005). McCoach (2006) enumerated where some schools divide classrooms based on ability, the within-class ability grouping approach allows teachers to regroup students throughout the school year based on the needs of students (p.339). Teachers can also choose to target different skills for different groups within their classrooms (McCoach et al., 2006).

While in these small groups, teachers have the opportunity to zero in on strategies and focus on the skills each child needs to move forward, while conducting observations and assessment of student progress (Iaquinta, 2006). This is a valuable time for teachers to gain more insight into a student's strengths and areas for growth.

Measuring Data

Observation is an essential step to the guided reading process. To ensure all students receive what they need, teachers must take time to observe students' abilities. Dr. Maria Montessori (1964) stated, “the observation of the way in which the children pass from the first disordered movements to those which are spontaneous and ordered - this is the book of the teacher; this is the book which must inspire her actions” (p. 94). Teachers should be looking for more than simply the amount of words read correctly. Observation involves teachers interacting

with the child and noticing their responses to the story, language and meaning, and evidence of where they are in the reading process (Lipp & Helfrich, 2016). Observation informs the specific needs of each student, what to practice, and what strategy to work on next.

To keep track of progress and practice, teachers use running records. Schwartz (2005) noted that running records prepare teachers to respond to a student by looking for patterns in their errors from previous running records. Teachers can introduce strategies such as picture clues, sight words, decoding, and more. Comprehension questions are another critical piece to the reading puzzle because sometimes children read all the words in a book without comprehending the story. The Fountas and Pinnell (1996) program incorporates comprehension questions after every book which help the teacher see what the student understands and what they take away from the story. Running records provide proof of each child's reading journey and give teachers a road map for where to go next; without running records, any issues a child might have could go unnoticed. "To help remediate these problems, educators must have substantial sophistication with intervention design, especially in the use of assessment information for selecting effective interventions" (Bonfiglio et al., 2006, pp. 1-2). Taking the time to use data to plan for small group reading instruction makes all the difference.

Conclusions

Having a program to use for guided reading makes the process simpler. Fountas and Pinnell (1996) identified the purpose of guided reading as providing a classroom opportunity to enable children to exercise strategies with help from their teacher eventually followed by the ability to read quietly and independently. Most of the children who enter our kindergarten classes have very few reading experiences. Small group reading instruction puts the students in the driver's seat and allows them to practice reading with the support of a teacher. Clearly influenced

by the work that was being accomplished in individual and small group intervention programs, Fountas and Pinnell (1996) suggested guided reading as a classroom-based practice that would provide good first reading experiences for all children as it might reduce the number of children who would need intervention programs away from the classroom. Incorporating this program three times weekly, may boost reading fluency, comprehension, and confidence in themselves as a reader.

Methodology

This study examined the effects of small group guided reading on students' literacy achievement in a primary Montessori classroom. There was a total of 26 kindergarten students divided among three classrooms involved in this research. These five- and six-year-olds live in a rural, low socioeconomic area. The district's overall reading scores are low compared to other public-school districts state-wide, which inspired us to conduct literacy-focused research. As teachers, we understand that reading difficulty is much easier to reverse when intervention occurs at a young age. We planned to implement small-group guided reading interventions three times a week and assess the effects on reading development.

Before beginning any interventions, we collected parent surveys about their child's reading interest and experience at home (See Appendix A). Some questions included, "Does your child use reading strategies at home?" or "Does your child enjoy reading books at home?". Parents responded using a rating scale of always, sometimes, or never. We also asked the question, "How often does your child read at home?" which could be answered with 0 days a week, 1-2 days a week, 3-4 days a week, or 5-7 days a week. These questions gave us a baseline for parental opinion and insight into their thoughts on reading with their children. We also conducted in-class interviews with students about their feelings towards reading (See Appendix

B). Results can be seen in figure 4. For this, we asked more open-ended questions such as, "Do you see yourself as a reader? Why or why not?". Finally, we used the Fountas and Pinnell (2010) running records to determine each child's reading level at the beginning of our action research (see Figure 1). Each child was given a leveled book, and we used the running record to track the number of errors and self-corrections they made as they read. After the book was read, we asked questions that were used to score a child's comprehension of the text. Each child's fluency and comprehension scores were calculated using the Fountas & Pinnell (2010) running record scoring system to determine their reading level. This was used at the beginning of the study and provided us with data to shape future instruction. Reading levels start with level A and continue alphabetically. Each level gets more challenging for the reader. If a student cannot read the level A text, they were considered a level Pre-A. If a child could read a level A text independently, they were given level B to try. If level B could not be read with 95% accuracy, their independent reading level would be considered a level A. This same process was continued with books leveled B, C, and D to find each student's independent reading levels. Based on their starting reading level, we grouped students for guided reading instruction. Lipp & Helfrich (2016) mentioned that running records should be given at different intervals of the study to capture growth. Because of this, we conducted running records before, halfway through, and at the end of the study.

Over six weeks, we met with the kindergarten students in small groups three times a week for guided reading intervention. We used leveled texts that were one level above their independent level to challenge students and teach them new reading strategies. We took notes on each child weekly to track their progress and monitor mastered skills and skills to practice. We used these notes to create guided reading lessons that focused on the reading needs of the

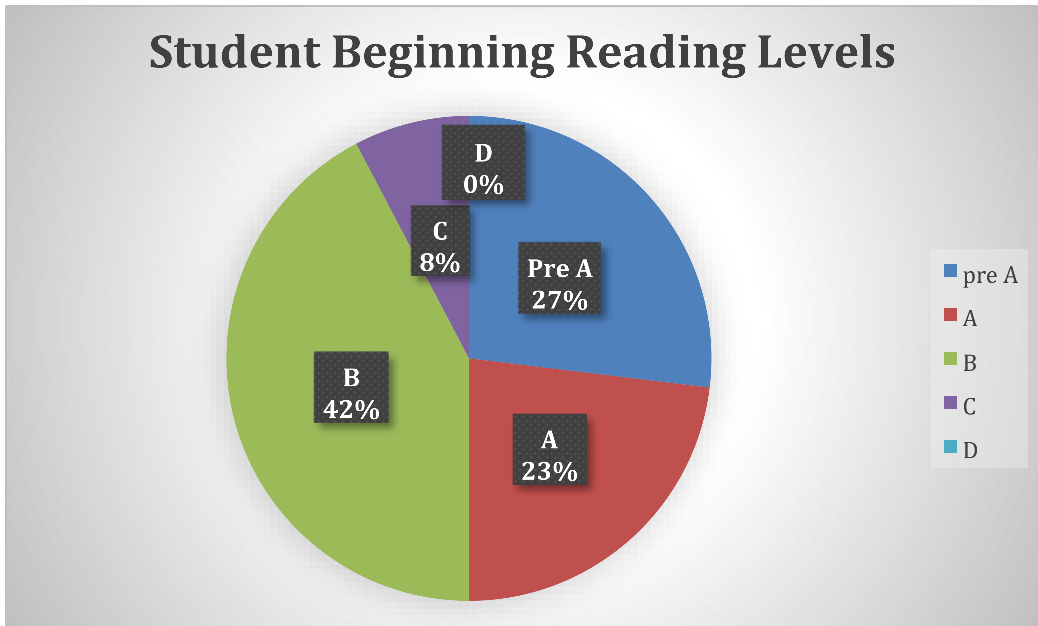
students. Many lessons focused on strategies including identifying sight words, using picture clues, sounding out words, and comprehension skills. Lessons were made based on the needs of each leveled group. We also took attendance each day of the intervention to keep track of how many times children received interventions (see Figure 3). After the third week, we assessed the students' reading levels using the Fountas and Pinnell (2010) running records and made grouping changes based on progress. This allowed each student to continue making improvements while they remained challenged.

After six weeks of guided reading interventions, we sent home the same parent survey and re-interviewed students about reading interest (see Figure 4). Using this information, we were able to assess the impact of the interventions had on at-home reading habits and students' feelings toward reading. We also assessed students a third time using the Fountas and Pinnell running records to determine their final reading levels (see Figure 2). This information told us the impact the guided reading lessons on each student's reading ability.

Data Analysis

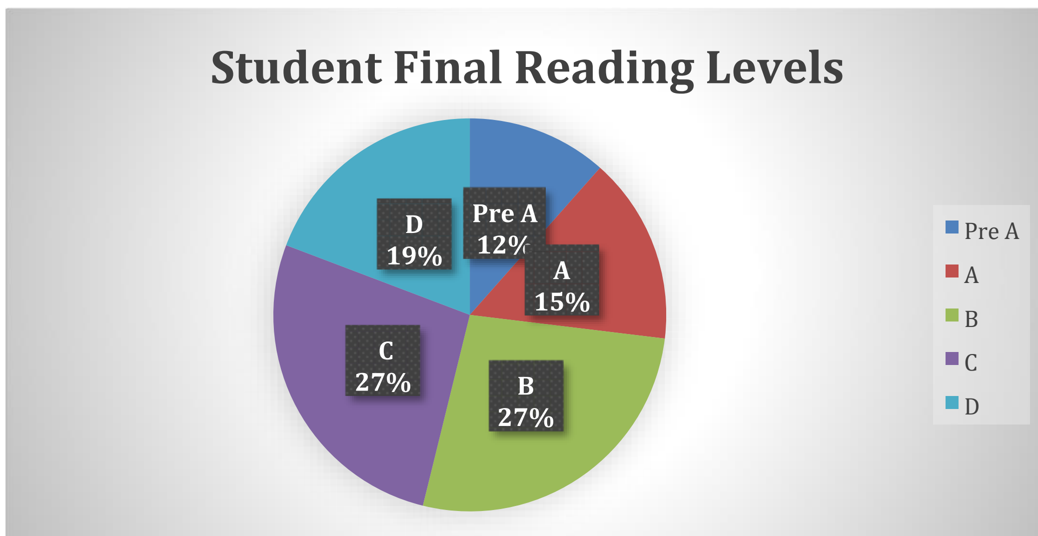
After conducting our action research, the data was analyzed and compiled into a few main points. The main source of data came from the students' beginning and ending reading level assessments. Other data was also collected, including student attendance (Figure 3), observational notes, parent surveys, and student surveys (Figure 4). Together, this data shows the strengths and weaknesses of our guided reading intervention.

Figure 1.
Student Reading Levels



Note: Student Reading level percentages before any guided reading intervention

Figure 2



Note: Student Reading level percentages after six weeks of guided reading intervention.

When comparing the percentage of reading levels shown in Figure 1 and Figure 2, the success of using guided reading is evident. Before the start of the intervention, no students were reading on a level D and only 8% were reading on a level C (see Figure 1). In contrast, after six weeks of intervention, 19% of students were able to read on a level D, and 27% on a level C. Before receiving the guided reading intervention, 50% of students were reading either on a Pre-A or A level. However, at the end of the six weeks, more than 50% of students were reading on either a level B or C. The number of students reading on a level of Pre-A was reduced from 7 to 3, and the number of students reading at a level A was reduced from 6 to 4.

Observational Notes

When looking at observational notes taken during the interventions, there were some trends and commonalities when it came to our students' reading struggles. The most common struggles were with one-to-one correspondence while pointing to words, decoding and using picture clues. These are reading strategies that were taught and practiced prior to study and throughout. While one-to-one correspondence improved as the study went on, students were still often in need of reminders to sound out words or use their pictures when presented with a word that they did not recognize. These observations were useful when planning for the following week's guided reading and making any necessary changes to reading groups, books, or skills presented. For example, if a few kids are struggling with using picture clues, then they may be grouped together for guided reading the following week to work on developing that specific skill.

Figure 3.
Attendance

Student	Number of absences	Beg. Reading Level	Final Reading Level
A	1	Pre-A	A
B	2	Pre-A	A
C	0	Pre-A	Pre-A
D	2	Pre-A	A
E	2	A	B
F	0	A	B
G	0	B	D
H	0	B	C
I	2	B	B
J	0	A	B
K	1	A	C
L	2	B	D
M	5	Pre-A	Pre-A
N	2	Pre-A	Pre-A
O	2	A	B
P	1	B	D
Q	1	Pre-A	B
R	2	A	B

S	3	B	C
T	3	B	C
U	1	C	D
V	2	B	D
W	2	B	C
X	5	Pre-A	A
Y	0	B	C
Z	3	B	C

Note: Student absences and reading pre and post reading levels compared.

Student absences were collected throughout the six-week intervention to see if there was a correlation between the number of interventions received and student reading achievement. The information in Figure 3 shows students who had more absences tended to have lower reading levels at the end of the intervention. This is particularly true for students M and X. Student M had a total of five absences throughout the study. This student started on a level PreA, and did not make any growth by the end. Student X also had a total of five absences. This student did make some growth, but was reading at a level A after the study concluded.

Of the 26 students who participated in this study, 22 moved up at least one reading level, and six moved up two reading levels. The four students who did not make any growth were students C, I, M, and N. Three of these four students missed two or more guided reading sessions. The lack of growth could be attributed to attending fewer sessions. However, there was one outlier, Student C, who was not absent for any sessions, but still did not make any growth.

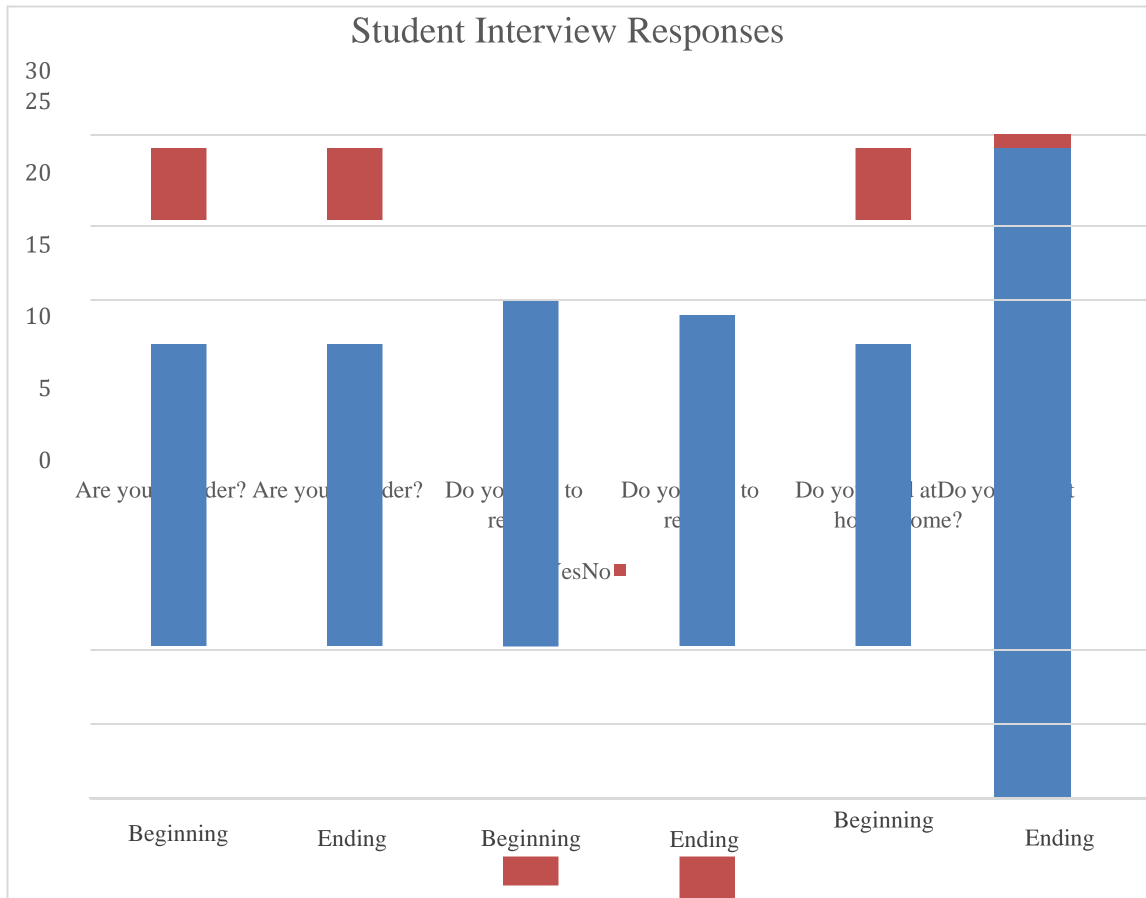
Pre and Post Surveys

Surveys about reading at home were sent home with students for their parents to complete at the beginning of the guided reading intervention. In this survey, questions were asked such as "Does your child enjoy reading books by themselves?", "Do you feel your child is a motivated reader?", and "How many times a week does your child read at home?". At the end of the six-week intervention, the same survey was sent home in an effort to compare students at home reading before and after receiving guided reading instruction. However, there was, unfortunately, little parent participation. This led to this data collection tool to be unsuccessful in gaining any insight to reading at home.

Interviews were also conducted with students about their interest in reading at school and home. The same interview was administered before our study began and again after it was completed (see Figure 4).

Figure 4

Student Interview Responses



Note: Student interview responses compared from before and after intervention.

Originally, the hope was to see students gain confidence in their reading abilities as well as an increase of reading at home. However, after comparing responses from the pre and post interviews, the data showed little difference between answers. It is worth noting though, that there was a slight increase in students who reported that they do read at home, after the conclusion of the intervention. Because self-awareness skills are not fully developed in kindergarten, it is possible that their answers were not as reliable as hoped. For any future research, another source of data collection would be more beneficial.

Obstacles

Throughout this study, the main obstacle was the amount of time it took to conduct the intervention. The time allotted for the guided reading intervention was a total of thirty minutes. However, the time spent implementing the intervention took between forty-five minutes to an hour for each session. Though the intervention was proven successful, it prevented the teachers from teaching as many Montessori lessons during the work cycle.

Though there were a few obstacles, the positives of this study outweighed the negatives. Guided reading could be used effectively within Primary Montessori classrooms with some alterations. In the future, it could be helpful to modify the schedule and the techniques used.

Action Plan

Before this study, we saw that overall, our district-wide assessments displayed low reading abilities among kindergarten students and the following grades. Students in our classrooms showed low reading skills in line with the district's assessments. We knew developing literacy skills would be the basis of our action research. Early reading intervention is key as these skills solidify quickly. O'Connor et al. (2005) explained the reasoning behind early intervention is "to encourage at-risk children to learn the earlier understandings about sounds in words and features of print within the windows in time that these understandings develop" (p. 440). Typically, our students learn to read using concrete Montessori materials such as the moveable alphabet and sandpaper letters. Although we highly value these materials and know how well they work for our students, we asked if there was a missing piece. Our Montessori training did not include reading instruction involving books read individually or in small groups with the teacher. This led us to choose guided reading as a supplemental form of reading instruction for our students, while we study its proficiency in reading achievement.

Overall, we found our research to be effective in that many students made progress in their reading abilities. Our main source of evidence was whether their reading level increased from the beginning of the study to the end. The data showed that 85% of students went up at least one reading level over the course of the intervention. Our observations revealed that student confidence had risen, and the usage of reading strategies had increased. During week 1, our observations included many notes about strategies each child needed to practice. Some of these strategies include pointing to each word, sounding out unknown words, and using picture clues. As weeks wore on there was a decrease in observations that reflected the need for review of specific strategies and an increase of reading strategies used without teacher prompts. Each of these strategies can only be practiced by using a physical book.

One roadblock we encountered was time management. We implemented guided reading in small groups during the work cycle. Our goal was for each session to take about thirty minutes, three times a week. However, it ended up taking closer to 45 minutes or an hour. This greatly lowered the number of Montessori lessons being taught during the work cycle. Because we were only working with kindergarten-aged students, time spent with three and four-year-old students greatly decreased. Although it was great to see reading improvement among kindergarten students, it came with the consequence of less potential for academic progress among the younger students in our classes. Not only were our younger students getting less one on one time, our 5K students were also learning fewer Montessori lessons due to the amount of time we focused on reading intervention. Attendance was an outside factor which impacted our results. The students who had the most absences during this study made the smallest amount of progress indicating the need for continuous and consistent practice.

After analyzing the results of our study, we see that guided reading as an effective intervention when incorporated within the Montessori curriculum. Our data showed an increase in reading levels, student confidence in reading ability, and the use of reading strategies. Due to our struggles with time management, we plan to continue guided reading practices but with some changes to the intervention. This could include finding a better time during the school day for small group reading instruction. Perhaps students who are on grade level or higher in reading ability may only receive two days of guided reading, while students who perform lower than average could receive three days of intervention per week. This would decrease our overall intervention time and make room for more one on one time during the work cycle.

Conducting this action research has inspired us to dive deeper into guided reading instruction for our kindergarten students. Our action research focused mostly on reading fluency. We would like to find a way to better assess comprehension after reading. For example, students could write a sentence and draw a picture to answer comprehension questions such as, “What was your favorite part of the book?” or “Who were the characters in this book?”. We also want to track if implementing guided reading instruction twice weekly, instead of three times per week, will show less progress over time or if progress will be about the same. We plan to research more guided reading instruction techniques we could test out. We also believe finding a way to better assess at home reading could be beneficial to any future studies. Guided reading is a tool our action research has proven effective and will continue to be incorporated and improved on in the future.

References

Al Otaiba, S., Connor, C. M., Folsom, J. S., Greulich, L., Meadows, J., & Li, Z. (2011). Assessment data–informed guidance to individualize kindergarten reading instruction: findings from a cluster-randomized control field trial. *The Elementary School Journal*, *111*(4), 535–560. https://doi.org/10.1086/659031

Bonfiglio, C. M., Daly III, E. J., Persampieri, M., & Andersen, M. (2006). An experimental analysis of the effects of reading interventions in a small group reading instruction context. *Journal of Behavioral Education*, *15*(2), 93–109. https://doi.org/10.1007/s10864-006-9009-7

Elliott, L. (1967). Montessori's reading principles involving sensitive period method compared to reading principles of contemporary reading specialists. *The Reading Teacher*, *21*(2), 163–168.

Ford, M. P., & Opitz, M. F. (2008). A national survey of guided reading practices: What we can learn from primary teachers. *Literacy Research and Instruction, 47*(4), 309-331. doi: 10.1080/19388070802332895

Fountas, I., & Pinnell, G. (1996). Guided reading: Good first teaching for all children. Portsmouth, NH: Heinemann.

Fountas, I., & Pinnell G. (2010) Fountas & Pinnell benchmark assessment system 1. Grades K-2, levels A-N. Portsmouth, NH: Heinemann.

Fountas, C. I., Pinnell, G. S. (2013). Guided reading: The romance and the reality. *The Reading Teacher, 66*(4), 268-284. https://www.jstor.org/stable/23321307

Frey, N., & Fisher, D. (2010). Reading and the brain: What early childhood educators need to know. *Early Childhood Education Journal, 38*(2), 103-110. doi:http://dx.doi.org/10.1007/s10643-010-0387-z

Iaquinta, A. (2006). Guided reading: A research-based response to the challenges of early reading instruction. *Early Childhood Education Journal, 33*(6), 413-418. doi:http://dx.doi.org.pearl.stkate.edu/10.1007/s10643-006-0074-2

Hodges, T. S., Feng, L., Li-Jen, K., & McTigue, E. (2016). Discovering the literacy gap: A systematic review of reading and writing theories in research. *Cogent Education, 3*(1)http://dx.doi.org/10.1080/2331186X.2016.1228284

Kamps, D., Abbott, M., Greenwood, C., Wills, H., Veerkamp, M., & Kaufman, J. (2008). Effects of small-group reading instruction and curriculum differences for students most at risk in kindergarten: Two-year results for secondary- and tertiary-level interventions. *Journal of Learning Disabilitie*s, *41*(2), 101–114. https://doi.org/10.1177/0022219407313412

Lillard, A. S. (2012). Preschool children's development in classic Montessori, supplemented Montessori, and conventional programs. *Journal of School Psychology*, *34*(4), 379-401. doi:10.1016/j.jsp.2012.01.001

Lipp, J. R., & Helfrich, S. R. (2016). Key reading recovery strategies to support classroom guided reading instruction. *The Reading Teacher*, *69*(6), 639–646. http://www.jstor.org/stable/44001390

McCoach, D. B., O'Connell, A.,A., & Levitt, H. (2006). Ability grouping across kindergarten using an early childhood longitudinal study. *The Journal of Educational Research, 99*(6), 339-346,384.

McCormick, S., Ruddell, R. B., Unrau, N. J. (2018). A sociocognitive model of meaningconstruction: The reader, the teacher, the text, and the classroom context. *Theoretical Models and Processes of Literacy*. (7th ed., pp. 204-232). Routledge.

Montessori, M. (1964). *The Montessori method.*. New York: Schocken Books.

No Child Left Behind. Public Law PL 107-110. (2001). https://www2.ed.gov/nclb/landing.jhtml

O'Connor,R., E., Fulmer, D., Harty, K. R., & Bell, K. M. (2005). Layers of reading intervention in kindergarten through third grade: Changes in teaching and student outcomes. *Journal of Learning Disabilities, 38*(5), 440-55. doi:http://dx.doi.org.pearl.stkate.edu/10.1177/00222194050380050701

Schunk, D.H. (2012). Learning theories: An educational perspective (6th ed.). Pearson Education, Inc.

Schwartz, R. M. (2005). Decisions, decisions: responding to primary, students during guided reading. *The Reading Teacher*, *58*(5), 436-443. https://link.gale.com/apps/doc/A128973572/GPS?u=clic_stkate&sid=bookmark-GPS&xid=9fd0edbd

Soundy, C. S. (2003). Portraits of exemplary Montessori practice for all literacy teachers. Early Childhood Education Journal, 31(2), 127–131. https://doi.org/10.1023/B:ECEJ.0000005312.48974.0a

Stites, M. C., & Laszlo, S. (2017). Time will tell: A longitudinal investigation of brain-behavior relationships during reading development. *Psychophysiology*, *54*(6), 798–808. https://doi.org/10.1111/psyp.12844

Xu, W., Kolozsvari, O. B., Monto, S. P., & Hämäläinen, J. A. (2018). Brain responses to letters and speech sounds and their correlations with cognitive skills related to reading in children. *Frontiers in human neuroscience*, *12*(304), 1-17. https://doi.org/10.3389/fnhum.2018.00304

Appendix A

Parent Pre/Post Reading Interest Survey

Hi families! I will be conducting action research on the effects of a guided reading program, Fountas & Pinnell, on reading growth. Guided reading is small-group learning in which a teacher supports students' individual reading skills. Before the research begins, I would like to collect some data on your child's reading interest and experiences outside of the classroom. Please answer honestly to provide accurate data.

Does your child enjoy reading books by themselves?
Sometimes
Always
Never

Does your child enjoy reading books to/with others (younger siblings, parents, etc)? Sometimes
Always
Never

Does your child talk about books they are reading/have read?
Sometimes
Always
Never

Do you feel your child is a motivated reader?
Sometimes
Always
Never

Does your child use reading strategies while reading at home? (sounding out words, identifying sight words, etc.)
Sometimes
Always
Never

How many times a week does your child read at home?
0-2 days
3-4 days
5-7 days

Does your child have books at home?
Yes

No

Appendix B

Student Pre/Post Reading Interest Survey

Teachers will conduct reading interest surveys one-on-one with each student. One survey will be given before the Fountas and Pinnell intervention begins and another will be given when the intervention is complete. The goal is to document changes in students' attitudes toward reading. The following questions will be asked by the teacher (the same questions will be asked in the pre and post survey):

Q: Are you a reader? Why/why not?
A:
Q: Do you like to read? Why/ why not?
A:
Q: Do you read at home? Who reads with you at home?
A: