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THE EFFECTS OF RETROSPECTIVE MISCUE ANALYSIS ON OVERALL READING GROWTH AND MOTIVATION OF THIRD GRADE STUDENTS

A Chapter Style Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Education-Reading Teacher/Reading Specialist

Amy Suralski

Institute for Professional Studies in Education
Master of Science in Education-Reading Teacher/Reading Specialist

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THE EFFECTS OF RETROSPECTIVE MISCUE ANALYSIS ON OVERALL READING GROWTH AND MOTIVATION OF THIRD GRADE STUDENTS

By Amy Suralski

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The candidate has completed the oral defense of the thesis.

Pat Markos, Ph. D.  
Thesis Committee Chairperson  

Date

Alyssa Harlan, M.S.Ed.  
Thesis Committee Member  

Date

William Gillespie, Ph.D.  
Thesis Committee Member  

Date

Thesis accepted
ABSTRACT


Students in third grade are generally in the transitional stage as a reader. This is a crucial time for the teacher to facilitate the development of independent reading habits. Some students have difficulty sustaining independent reading and may not be motivated to read. Retrospective miscue analysis is a procedure aimed to develop self-awareness and positive reading behaviors in students. The purpose of this study was to observe how using retrospective miscue analysis would affect third grade students’ overall reading growth and motivation. The influence of student choice in texts on motivation to read was also observed. The study was conducted over a period of six weeks in a public elementary school in Eau Claire, Wisconsin. Three students were chosen to participate in this quasi-experimental study of mixed-method design. Data collection included the revised Motivations of Reading Questionnaire, STAR Reading Assessment, and RMA Session Organizer/Retelling Guide. Results from this data indicate that retrospective miscue analysis may be an effective strategy for increasing self-monitoring while reading. Further research would be necessary to determine if the strategy has a true impact on motivation to read and reading growth.
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CHAPTER 1

INTRODUCTION

Statement of the Problem

Third grade is a pivotal year as a young reader. Most students have gained independence with decoding and have now made the switch from learning how to read to constructing knowledge from what they have read. Content-area reading also begins to be more important. As my fifth year as a teacher came to a close last spring, I began to mentally make a list of goals to improve my practice as well as goals for my incoming class of third-graders. At the heart of that list were the topics of independence and motivation. Fostering independent, motivated readers and learners continues to be a goal for my classroom. In my 2018-2019 third-grade classroom, students made remarkable growth in reading overall. However, I felt that only a handful of students truly took ownership in their own reading and were motivated to read independently, without it being an “assignment” from me. How could I do things differently in the fall to fix the problem of motivation and independence in my classroom? After all, not all students are naturally motivated to read and learn on their own. How could I foster this independence in an engaging way, while still holding myself accountable to teach our district’s reading curriculum plan?

As a school goal, we decided to revamp our reading plans for the 2019-2020 school year to reflect the most recent research in educational frameworks. At the time, our school was also concerned with developing independent and motivated readers who
view reading as an enjoyable and necessary part of life, rather than “work my teacher gives me”. My third-grade team and I began to dive into reader’s workshop and conferring. I began to read *A Teacher’s Guide to Reading Conferences* by Jennifer Serravallo (2019) and planned how I would make the conferring framework effective in my classroom. As Serravallo suggests, within a conferring framework students should begin to self-reflect, seek support, and explain what they have learned from reading. However, I believe this independence cannot be fully developed until teachers have modeled it through their own reading and think-alouds. I started to picture a typical day of reading instruction, consisting of whole group strategy instruction and conferring with individuals and small groups. I then started to question what I could do differently with the struggling readers in my classroom in order to foster more independence and motivation in them specifically.

Envisioning a conferring framework in my classroom then led me to the idea of using retrospective miscue analysis (RMA), which I had experimented with last year through my previous coursework. In retrospective miscue analysis, teachers engage in conversations about miscues students have made in a previously recorded reading. These conversations give teachers insight into the thought processes that students engage in while reading. Miscue analysis was developed in the 1960s by Ken Goodman. He confirmed that miscues had always been a part of reading but defined them in a way that differs from mistakes or errors. He defined miscues as unexpected responses that were related to expected responses because they resulted from similar thought processes. This means that students were most likely engaged in correct thinking while reading, even though they made an error. Using the RMA strategy, teachers and students analyze the
thinking students were engaged in when a miscue occurred in order to gain insight into their thought processes. If we are able to understand how students make sense of written language, we can then identify their strengths related to reading and build upon these (Goodman, 2015). After researching RMA, I decided it would be a great strategy to use in working towards my goal of building independent readers in my classroom.

New students coming into my classroom each fall often have a negative view of reading assessments and reading aloud to the teacher. By the time they reach third grade, they are familiar with running records and fluency assessments. They begin to see the teacher taking notes in a negative way and may feel embarrassed about making errors. I believe the first step to developing independent, motivated readers is to change the attitude of mistakes being seen negatively. We can have conversations about mistakes in a positive way. In my classroom, I approach all mistakes as opportunities for learning. My goal is for students to begin to view their reading mistakes in a positive light, as opportunities to reflect and learn with the teacher or small group. Explicitly modeling and teaching students to analyze their miscues could be one step towards developing independent readers and metacognitive thinkers.

When we think of miscues, we may initially consider the accuracy and fluency of the reader. However, analyzing miscues through RMA is a strategy that blends both accuracy and comprehension. It is important for students to understand how accuracy relates to comprehension. Making many low-quality miscues when you read negatively affects your comprehension. Third-grade students learn that the purpose of reading is to develop understanding, so if you are not understanding what you have read, then you must slow down and analyze what you have read.
Purpose of the Study

I planned to carry out the RMA process during students’ regular reading conferences since I would already be using the reading workshop model in my independent reading block. To incorporate the issue of student motivation, I pondered the idea of allowing students to choose some of the books they read aloud and analyzed, which is different than the typical assessments or guided reading books that are often leveled and chosen by the teacher. When I experimented with RMA last year, students did not choose their own texts. With the addition of allowing students to choose their own texts to read aloud, my procedure for using RMA in this action research differs slightly from Goodman’s original procedure. Therefore, I will refer to this procedure as modified RMA.

I identified students who came into third grade below benchmark in reading as my target population because these are likely the students who have not yet developed solid decoding strategies and may even be reluctant readers because of this. As struggling readers see others in their classroom take off and explore new genres, a negative impact on their own motivation to read may occur. If reading is difficult and mistakes are not valued, struggling readers may continue to fall behind their peers.

Another book that was influential in developing my research question was Debbie Miller’s book *What’s the Best That Could Happen?* Miller challenges teachers to be vulnerable themselves and ask specific questions in order to understand the thinking of students. She describes the importance of developing metacognition in students as well as being a metacognitive teacher (2019).
Through my early research and reflection, I identified the problem I wanted to improve upon in my classroom. I wanted all students to see themselves as motivated, successful readers who could encounter new books and new challenges independently without fear of making mistakes. I wanted mistakes in reading to be viewed as opportunities to learn and grow. I wanted to foster independent readers and thinkers. The purpose of this study was to determine if a modified version of RMA using a balance of teacher and student-chosen texts impacted the overall reading growth and motivation of third-grade readers.

**Research Questions**

To determine the effectiveness of a modified RMA on reading growth and motivation of third-grade students, I chose a study that combines all the issues mentioned above. In essence, my research questions include a number of my current goals as an educator combined into one connected procedure: *What is the effect of using retrospective miscue analysis on the overall reading growth and motivation of third-grade students who are reading below benchmark? What will be the impact of using a balance of teacher-selected and student-selected texts?*
CHAPTER 2
LITERATURE REVIEW

Literacy is vitally important in our ever-changing society. However, many adults today struggle with basic literacy skills. This could be due to struggles with developing literacy in the early years. Literacy skills are important throughout life, especially for job-related tasks (Merga & Roni, 2018). Not only is reading a necessary part of life, but it can also be a source of entertainment. Reading for pleasure should be developed in the early years. Third grade is a pivotal year for readers. Students are expected to be able to read independently and read with the purpose of learning new information. This is a difficult task if students are still in the process of learning how to read. Furthermore, students in most states begin standardized testing in third grade. Without a foundation for reading established, students with reading difficulties may continue to struggle as they progress through their school years. Teachers in elementary school have the important task of teaching students literacy skills as well as facilitating the development of independent reading behaviors. The ultimate goal is to foster a love for reading that continues through adulthood. This chapter will review literature around the topics of reading motivation, independence, goal setting, and the use of RMA as a strategy to foster independence and growth in reading.

Profile of a Third-Grade Reader

Most second- and third-grade students begin to read more chapter books and books with increasingly difficult plotlines. Books at the third-grade level also include
characters with internal and external traits and more complex motivations (Serravallo, 2018). Most students in second and third grade fit into the diverse category of transitional reader, as described by Richardson (2010) in her book *The Next Step Forward in Guided Reading*. The transitional stage includes a wide range of readers and varying needs. Readers in this stage need instruction and practice in fluency, word study, decoding, vocabulary, and comprehension strategies for retelling. Some third-grade readers may be in the fluent reader stage, which is characterized by automatic word recognition and word-solving strategies. Fluent readers rarely make errors and often self-correct if they do (2010). This action research will focus on readers in the transitional stage who are entering third grade.

**Running Records and Reading Levels**

Students in elementary school are often assessed in reading through the use of a running record, which was first introduced by Clay in her 1993 publication. In a running record, teachers listen to a student read a selection of text aloud while they track the words on a copy of the text. The teacher writes down or makes a mark for any errors that the student makes, including substituting for a similar word, inserting words that are not written, and reversing the order of words. In addition, teachers mark down any errors that the student self-corrects (rereads and fixes). Self-correction shows evidence of monitoring for meaning (1993).

In his study on the effects of running records as an assessment in reading, Ross found a correlation between the use of running records to plan instruction and student achievement in early elementary. Reading achievement in the treatment group that used running records was higher than that of the group that did not. His findings suggest that
the use of a systematic assessment routine such as a running record may improve teacher practice and student achievement (2004). Teachers may use information gathered on a running record to determine which reading skills students have mastered and those that will require additional instruction to master. This is the process of using running records to inform instruction.

From a running record, teachers establish an independent level for each student. This is the level that a student can read fluently (without the interference of errors) and maintain accurate comprehension. In other words, a student reading at their independent level is able to read smoothly and retell what they have read accurately. An instructional level should also be found, which is the level where a student can read with 90-95% accuracy and either satisfactory or excellent comprehension. When reading at their instructional level, students can decode most words but are not fully independent. They have enough background knowledge to support some comprehension but need assistance to fully understand and decode the text. A reader’s frustrational level can also be found. This level is generally 90% accuracy and below, with minimal comprehension. At a frustrational level, students are not able to fluently read the text or comprehend (Fountas & Pinnell, 2011).

Comprehension is also scored through a running record. Fountas and Pinnell use a three-part system for scoring comprehension: within the text, about the text, and beyond the text. The within the text section assess a student’s ability to answer literal questions about meaning. About the text questions assess the ability to recognize the author’s craft and manner of writing, and beyond the text questions assess the student’s ability to make predictions, connections, inferences, and synthesize information. The teacher listens to
student responses after reading and gives them a numbered score for each section. The scoring guide for total score of the three sections is as follows: 9-10 equals excellent comprehension, 7-8 equals satisfactory, 5-6 equals limited, and 0-4 equals unsatisfactory (2011).

Other curriculum materials have their own system for leveling books and readers. Scholastic’s guided reading follows a similar system of using letters A-J. Using an instructional level text, teachers may begin planning instruction that matches the needs of the students at that level. For example, typical students at a Level M require instruction in decoding multisyllabic words and words with irregular vowel teams such as \textit{au, aw, and ew} (Richardson, 2016).

Due to increases in state-mandated assessments within the last fifteen years, today’s elementary students are familiar with being assessed often in reading. Assessments vary across states and districts. Starting in kindergarten, many districts use assessments to determine the independent and instructional reading levels of all students. Typical assessments used for collecting student data may be subjective. For example, what one teacher describes as a comprehension score of “satisfactory” may be scored differently by another teacher listening to the same student responses.

The emphasis on reading levels and assessments in classrooms today may cause some students to experience pressure. If students struggle, scores on assessments may even cause students to feel negatively towards themselves as a reader. RMA may be a way to shift attention to what students are doing \textit{well} instead (Haling & Spears, 2015).
Miscues and Errors

Whether you use the term *miscue* or *error*, both terms generally refer to any word a student reads that does not match the written text. For example, if the printed text reads *the girl was right* and the student reads *the girl was ready*, this would be counted as one error. Although the two terms are often used synonymously, some leading authors in miscue analysis believe miscues and errors are not entirely the same. Ken Goodman, a leader in miscue analysis research since the 1960s, has defined a miscue as an error that has some degree of meaning behind it that can be explored (1973). Teachers analyze miscues by deciding if the miscue was caused by thinking about meaning, structure, or visual similarities (Fountas & Pinnell, 2011). For example, substituting *dance* for *ballet* is a miscue that was caused by the reader actively thinking about the meaning of the text. The reader may know the text is about dancing but may not be familiar with the word *ballet*, which lead them to substitute a known word with a similar meaning. If the printed text reads *We could actually go* and the student reads *We could always go*, this is considered a miscue related to structure (syntax). The reader has some knowledge of the structure of a sentence and maintains correct syntax even though there was a miscue. Substituting *could* for *cold* would be a visual miscue. This particular miscue does not show evidence of the reader creating meaning. The reader simply substituted a known word that contains some of the same letters.

Goodman, Martens, and Flurkey (2014) have also been influential in the miscue analysis research. They published *The Essential RMA: A Window into Reader’s Thinking*, which serves as a foundational resource for teachers using RMA in their classrooms. Two types of miscues have been identified and summarized in their book and in prior research:
high-quality and low-quality miscues. Low-quality miscues are those that significantly change the meaning of the text (e.g., substituting *horse* for *house*) and do not show evidence of thoughtfulness by the reader. High-quality miscues do not change the meaning, such as substituting *house* for *home*. These miscues show the reader is actively thinking while reading.

**Overview of RMA**

Ken Goodman began researching miscue analysis in the 1960s and has published numerous books and articles on the topic. Since then, his wife Yetta has also become involved in the research. Miscue analysis is the process of analyzing miscues with students in order to make sense of their thought processes and develop teaching points to help them grow in both reading and writing (Goodman, 2015).

RMA began as a research tool and has since evolved into a teaching tool to be used in classrooms by teachers. Once a teaching tool, RMA began as a strategy for adolescent readers. However, it may also be used successfully with elementary students (Goodman et al., 2014). Goodman, Martens, and Flurkey also published another study titled *Revaluing Readers: Learning from Zachary*, which suggests that using RMA may positively impact the identity students have of themselves as readers. Teachers should analyze and discuss miscues students make because they may give us insight into the thought processes of the reader and the strategies used as they were making sense of the text (2016). This will also allow us to build upon the strengths they currently have, specifically when self-correcting.

Retrospective miscue analysis may take place during a reading intervention with a student or during a typical reading workshop in a general education classroom. Using this
strategy, teachers first listen to a student reading aloud and record their reading. Teachers will take a brief running record while the student is reading. Then, miscues are chosen (generally high-quality miscues) that show some evidence of student thinking. These are written down to be discussed with the student in the next session. For example, if the text read *spied* and the student read *spotted*, this is considered a high-quality miscue that would be important to discuss. Because the student substituted a word that had a similar meaning and was visually similar, this miscue shows evidence of the student actively thinking about the meaning of the sentence and text as a whole. Low-quality miscues may also be discussed in a way that helps the student understand how their miscue disrupted meaning of the text. For example, if the text read *teeth chattering* and the student read *teeth chasing*, this is considered a low-quality miscue because the meaning is disrupted. This would be an opportunity to teach the new vocabulary word *chattering* and remind the student to stop and think about if the word makes sense. The teacher should also make note of any miscues that show evidence of predictions and inferences as well as identify any self-corrections.

In the next session, students listen to their recording and are prompted to follow along with the printed book or passage and think about the miscues they made. Students are encouraged to identify miscues on their own, and the teacher also shares the miscues they had prepared to discuss (Goodman et. al., 2016). The teacher then asks questions to gauge student thinking, such as “What were you thinking as you read this part?”, “Did the meaning change?”, “What made you use *fought* instead of *fright*?”, and “What made you go back and reread that part and self-correct?” After discussing the miscues made, the teacher and student are then able to select teaching points for further instruction. For
example, if a student consistently miscues on words with the *au* vowel pattern, this indicates that they need further instruction in this area. If the miscues interrupt meaning in some way because of lack of vocabulary knowledge, this may mean instruction in certain vocabulary words is necessary. This process of reading, recording, and analyzing should be repeated. RMA may help students develop a positive outlook about reading, helping them to see that all readers miscue. Analyzing the thinking behind those miscues can help readers identify strengths, teaching points, and become more self-aware as they read.

Teachers may also instruct student partners to work together to analyze miscues in what has been called collaborative miscue analysis (CRMA), as evidenced in the research of Gilles, Osborn, and Johnson (2017). Their article suggests that this procedure may be more effective with students above elementary school. When students were focused on reading along and marking miscues with a peer, results from the classroom showed more partnerships of students who were engaged fully in the process of reading.

**Importance of Viewing Reading as Meaning-making**

Many researchers have stressed the importance of students viewing reading as a process of making meaning, rather than a process of simply decoding and correcting errors. Students who do not see reading as meaning-making are often disengaged during independent reading (Gilles, et al., 2017). This suggests that students who believe reading is an active process of constructing meaning may stay more engaged while reading independently. RMA is a teaching tool that teaches students to view reading as a process of creating meaning and reminds them that errors made while reading do not need to be
seen negatively. Instead, we can use these errors to build upon the positive thinking strategies students are already using and may not be aware of (Goodman et. al., 2016).

**Reading Workshop and Conferences**

Although the majority of previous research has used RMA during intervention settings, the strategy may be used in the general education literacy framework of reading workshop. Reading workshop includes individual and small group conferencing with students, which provide an opportunity to use the RMA strategy. In an individual reading conference, the teacher meets with one student to listen to the student read, provide feedback, give compliments, and facilitate the development of reading goals. Once goals are developed, the teacher uses the conference time to check in with the student to determine if they are making progress towards the goal. Small group conferences may also be used with a group of students with similar needs who are working towards similar goals.

The Teachers College Reading and Writing Project (TCRWP) and author Lucy Calkins have been leaders in the development of the popular framework of reading workshop, which includes the components of mini lessons, independent reading along with teacher conferencing and small-group work, mid-workshop teaching points, and sharing sessions. This framework developed out of a need for a more tailored approach to teaching reading that aims to address the needs of all learners (Calkins et. al., 2015). Many elementary and middle school classrooms use a workshop framework similar to what Calkins and TCRWP developed.

In classrooms such as teacher researcher Alida Hudson’s, reading workshop provides a framework for two important and significantly different tasks: teaching the
content of the Common Core Standards, while still allowing students choice and ample time to independently read. In their article *Reading Every Single Day: A Journey to Authentic Reading* (Hudson & Williams, 2015), the authors state that the time we give students to apply their knowledge of the strategies we have taught to their own choice reading is a crucial aspect of becoming a motivated, independent reader. The authors believe that reader’s workshop makes reading authentic by including choice of books to read, without being asked to answer written questions about the book each time. A successful workshop framework also includes plenty of opportunities to discuss reading with peers. Hudson and Williams also discuss the importance of creating an open dialogue about book choices and helping students choose books, when necessary, during reading conferences. Students should also be taught to respond to what they have read through journals, discussions, and in conferences with the teacher. Hudson and Williams suggest heavily scaffolding well-written responses to your read aloud books in order to teach students how to write a thoughtful response to their reading (2015).

**Reading Conferences in a Workshop Model**

Serravallo (2019), an author of several books on literacy and teaching reading, published *A Teacher’s Guide to Reading Conferences*, a book describing the different kinds of reading conferences that may take place within the workshop model. In a reading conference, teachers generally listen to students read, have a conversation with a student or group about their reading, give feedback and support, and offer guidance through targeted teaching points. Serravallo stresses that the purpose of this time, called conferring, is not for teachers to spend time talking at students, reteaching, or doing extensive modeling. Similarly, in her book *What’s the Best That Could Happen?*, Miller
(2018) describes reading conferences as some of the most important work that teachers may do with students. She maintains that conferences should be as individualized as the students in our classrooms. She also believes that students should be involved in the process of selecting teaching points, rather than these being chosen by the teacher.

In her study on conferences in reading workshop, Suzanne Porath observed a teacher who had success with changing the overall tone of her reading conferences, which started as teacher-initiated and moved to being more student-centered. As a result of her research, Porath stresses the importance of asking students simple but important questions, such as why they chose a particular book. She believes it is important to create a conferring dialogue where students feel comfortable sharing their reasoning and motivation for reading. The author also suggests selecting teaching points that incorporate student choice and interest, rather than solely teacher-driven topics. Asking students specific questions about what they struggle with may help teachers pinpoint difficulties and narrow down the teaching point. Most importantly, teachers must be careful not to let their own experiences and opinions dominate conferences, assuming what they believe students need or want. Instead, they should be active listeners that ask probing questions in order to determine students’ struggles and true beliefs about reading (2014).

Other researchers believe in more of a teacher-directed model for establishing teaching points. As a result of their study on reading conferences in two first-grade classrooms, Pletcher and Christensen (2017) suggest that teachers give students a clear focus only after listening to them read during a conference. Students will be more successful with a clear focus and goal in mind, since they tend to place their emphasis on
the same area that teachers have identified. The authors also suggest keeping careful records to ensure you are staying focused on only one teaching point at a time.

**Goal-setting Conferences**

One type of conference which relates to the components of RMA is what Serravallo calls the goal-setting conference. Once you have assessed and spent time reflecting on the needs of students, goal-setting conferences may begin. Teachers should not select goals for students but instead should work together with students to decide upon goals. Students need guidance with selecting meaningful and achievable goals, especially those who are transitional readers or below. First, teachers should lead students into reflection by using a questionnaire or work sample. Next, the goal should be named together in student-friendly language. Then, the teacher should suggest a strategy that would support the student in that goal, along with coaching. The last step is for the teacher to repeat the goal and strategy to remind students and prepare them for their independent work towards the goal (2019). Goal-setting conferences are similar to RMA sessions and may be used in conjunction with one another.

**Providing Feedback and Setting Goals**

**Active Listening**

Several researchers highlight the importance of listening to students authentically reading rather than correcting. Interrupting and correcting may be especially harmful for struggling readers. For example, if a teacher interrupts a child who miscues while reading aloud and attempts to correct that miscue, this may be detrimental to the child’s reading development. Furthermore, it made hinder their development of reading independence and make them more reliant on correction from someone else rather than using internal
self-monitoring. Allington suggests that interrupting and correcting oral reading may cause readers to fail to learn how to be reflective and continue to read word-by-word (2014). In her book Mindsets & Moves: Strategies that Help Readers Take Charge, Gravity Goldberg encourages teachers to focus on what students are doing well rather than focusing on their errors or deficits. She always has a purpose when approaching a conference with a student. This purpose can only be established by being an active listener. “Listening is an art in and of itself and an essential step in uncovering readers’ processes” (2016, p. 97). When teachers narrow their questions and spend their time correcting, they often miss important clues towards what students need next to grow as a reader.

**Strategies for Specific and Productive Feedback**

Current professional literature for teachers offer various suggestions for providing students with feedback. Authors such as Goldberg, Richardson, and Serravallo all mention the importance of feedback being specific and related to a reading goal. One goal of teaching reading is fostering independent readers who will notice miscues and self-correct on their own. Richardson notes that this monitoring for meaning should begin with emerging readers. Even if students do not successfully self-correct an error, stopping on an error does show some evidence of monitoring for meaning.

Similar to Goodman and Gilles et. al., Richardson (2016) believes teachers should analyze errors and notice any patterns. For example, if students often miscue on words with suffixes, this may reveal their need for instruction on affixes and roots. Specifically for struggling transitional readers, Richardson recommends avoiding immediate correction if readers are ignoring errors that affect meaning. Instead, ask students to
decide if what they read made sense, offering praise when students use self-monitoring skills.

Andersen and Kaye (2016) have a similar opinion on teaching students to self-monitor and find errors independently. The authors stress the importance of reinforcing self-monitoring skills with praise, even if students did not fix the error correctly. Similar to others in the review, the authors believe teachers should first look for patterns in attempts or errors, then notice and name positive reading behaviors such as noticing an error and checking a picture clue to monitor for meaning. Teachers can model self-monitoring behaviors by phrases such as “I will check to see if that looks right and sounds right” or “I need to check to see if the first sound matches the picture”. The last step in Andersen and Kaye’s teaching for self-monitoring plan is for teachers to determine where the child needs more support with self-monitoring and developing agency.

Similarly, Allington (2014) recommends a technique called Pause-Prompt-Praise when listening to students read aloud, particularly those who are struggling with fluency. The Pause-Prompt-Praise technique of responding to reading may be used during RMA sessions. In this strategy, the teacher waits until the student reaches the end of a sentence where they have miscued, rather than interrupting during reading. Then, the teacher prompts with questions such as “Did that sentence sound right to you? Try reading it again” to facilitate the use of self-monitoring. Then, the teacher should praise either making sense or the effort to make sense of the text. Similar to RMA, the goal of this strategy is to enhance self-monitoring for meaning.

**Productive Feedback Leads to Goal Setting**
When teachers take time to listen and give specific feedback rather than correct, this keeps the ownership with the reader (Goldberg, 2016). Teachers may use goal-setting conferences to assist students in creating goals. Goldberg believes no goal is wrong and that students should lead the discussion in creating them. Goals may focus on reading behaviors or thinking processes. Her beliefs on goal-setting conferences are similar to Serravallo’s. For example, they both believe feedback needs to be targeted and lead to the creation of a goal. Both authors agree that students should be involved in the goal-setting process.

Hattie (1999) reported on over 196 studies in his meta-analyses on the influences of different kinds of feedback. From this collection, he analyzed 74 meta-analyses in greater detail. Results of these showed that the most effective forms of feedback are audio-, video-, or computer-assisted feedback and feedback that relates to an instructional goal. These types of feedback provide reinforcement and cues to learners. Of twelve different meta-analyses that included specific information about feedback in classrooms, those showing the highest effect sizes involved students receiving feedback about a completed task and how to perform it more effectively. Praise, punishment, and rewards showed lower effect sizes than that of feedback on tasks (1999). RMA fits into this category of effective feedback because of the audio component. During RMA, the teacher gives feedback on a completed reading and offers suggestions on how to improve in the future. It may also be combined with feedback that leads to creation of goals.

**Setting Appropriate Reading Goals**

Using the RMA strategy and providing students with specific feedback leads to the next step of setting reading goals. Students and teachers should work together using
evidence from miscue analysis to identify teaching points and next steps. Then, reading
goals may be established. For example, a reading goal for a student who tends to guess on
unknown words may be “I will use the picture clue to check if the words I read match the
picture.”

In his study on the effects of goal setting on academic performance, Dotson
(2016) established two populations of the same students—fourth-grade students who did
not participate in goal setting in 2014 and the same population as fifth-grade students
who did participate in goal setting in 2015. Students worked together with teachers to
develop various SMART goals (specific, measurable, attainable, relevant, timely) in
reading and other subject areas. The results of their achievement on state assessments
showed a nine percent increase in the number of students making adequate growth after
the implementation of goal setting.

Metacognition

Mistakes as Learning Opportunities

When using the RMA strategy, teachers foster the belief that everyone miscues
while reading and that mistakes are valuable learning opportunities. Finding and
discussing miscues helps readers become more aware of their reading processes and
provides audio evidence that aids in goal creation. Teachers may also pair two students
together to use the strategy on their own. Gilles et al. (2017) studied miscue analysis of
partners (collaborative) in middle school. They found it was important to teach students
that miscues are a normal and vital part of the reading process. Everyone miscues when
reading, even teachers and adults who read aloud in their daily jobs. Similarly, Goldberg
(2016) recommends teacher modeling before and after mistakes in order to set intentions for students to develop new skills.

Students should be given appropriate challenges and feel open to taking risks without fear of mistakes. However, too many miscues in a book or passage may signal that students simply need help choosing appropriately challenging books. Serravallo recommends using levels only as a guide for helping students choose books. Instead of telling students that a certain level is too difficult, consider directing them towards another high-interest book that will be a better match for working on their reading goals (2019).

**Self-concept and Metacognition**

Although students may struggle with decoding and fluency and may read below benchmark, many teachers and researchers believe we should be careful about labeling students as “struggling readers.” Labeling readers may interfere with the development of their self-concept (Marinak, Malloy, Gambrell, & Mazzoni, 2015). Instead, teachers should value strengths in students and avoid labeling by level or ability.

Metacognitive thinkers are aware of how they think and use this awareness to make decisions. Metacognition involves being able to explain your own thinking. This is a desired outcome of goal-setting conferences and RMA. In her chapter describing goal-setting conferences, Serravallo gives this suggestion in a dialogue example: “If you allow it, students will let you do all the talking in the conference. I try to offer children opportunities to elaborate whenever I can, to learn how they think about what they think—their metacognition” (2019, p. 221). As Gilles et al. (2017) suggest, students may gain insight into themselves as readers and become more metacognitive about their
reading as a result of engaging in RMA in their classrooms. Students may begin to understand that high-quality miscues are acceptable because they do not prevent you from understanding what you have read, which is the ultimate purpose of reading.

Allington (2009) warns readers of a common characteristic of struggling readers called learned helplessness. This refers to readers who wait for someone else to do the thinking for them, which can include decoding words or answering comprehension questions. Allington believes teachers actually create this condition by interrupting readers and failing to support them in developing metacognition. He stresses that we must be aware of minimizing interruptions and giving students enough time to process in order for them to develop metacognition in reading. Teaching metacognition should be shown through teacher modeling and demonstration. Then, students should be expected to try the strategy independently while the teacher gives feedback.

**Student Agency**

Miller (2018) describes agency as believing you are able to accomplish something that is within reach and acting on this belief. Teachers cannot give students agency, but modeling these behaviors and helping students decide on a clear vision to work towards goals can assist them in developing agency. Andersen and Kaye (2017) believe the teacher practice of notice and naming can contribute to students developing agency and becoming strategic readers.

Williams (2017) describes the connection between teacher roles, student agency, and metacognition in his article titled *Student Agency for Powerful Learning*. He describes agency as a working relationship between students and educators, which helps students develop skills that will be useful in their future lives. In elementary students,
teachers must first model behaviors that show agency, including the willingness to try new challenges.

**Motivation**

**Reading at an Appropriately Difficult Level**

Some of the studies and books in this review have pointed out a connection between reading appropriately difficult texts and motivation to read. Allington (2009) concludes that struggling readers need to have access to plenty of interesting books that are an appropriate challenge for them. Having these available for students will aid in increasing the amount of time they spend on voluntary reading. Choosing appropriate books can be difficult for students because there are many variables that are important to consider. Serravallo (2018) includes a chart of reader, text, and task variables that makes an argument for why students do not have one reading level. For example, if a student is highly motivated and has adequate background knowledge related to a book, a student is likely to comprehend it, even if the text is at a higher level than what they typically read. Highly motivated readers may have increased comprehension, which can also be strengthened by conversations with peers (2018).

However, reluctant readers can have difficulty expressing their interests and knowing whether a book is a challenge for them personally (Boatright & Allman, 2018). This is where teachers need to explicitly instruct book selection and frequently check in with students during the conferring sessions. Rasinski (2017) suggests using poetry with struggling readers to work on fluency, since poetry often includes repeated phrases and word families. Being able to master a poem could lead to increased self-confidence in readers. Using poetry could be an option when using RMA with struggling
readers. When students are able to listen to themselves read fluently, this may also increase their confidence. Once students are able to read fluently and automatically, they are then able to focus their reading on making meaning.

In the study on CRMA from Gilles et. al. (2017), effects on student motivation were also reported on. Prior to the CRMA unit, many students pretended to read during their independent reading time. When the teacher intentionally found relevant and interesting articles for students to read and engage in CRMA with a partner, results showed that authentic independent reading increased. Partners appeared to be more fully engaged in the reading process after being taught CRMA. The authors believe that enthusiasm was developed because of the addition of CRMA, coupled with an effective reading workshop framework created by the teachers.

**Impact of Choice on Motivation**

Researchers and authors have both studied the effects of choice on motivation to read. There are many ways to incorporate choice into literacy, including allowing students to choose their independent reading materials, choice of seating while reading, and choice in response to reading (written, audio, oral, collaborative, etc.). Goldberg (2016) believes engagement and motivation are end-products of classrooms where students take ownership in their own reading. Providing choice may lead to ownership. She describes self-directed readers as those that make their own decisions that lead to growth.

Many teachers rely heavily on text levels when allowing students to choose books. However, Serravallo (2016) believes teachers should use levels only as a guide and instead encourage them to choose books based on their interest and background.
knowledge. She believes that choice is the most important factor in book selection and that levels should not become a label for a student.

Allington (2009) points out that the availability of appropriate books can become problematic, particularly for struggling readers as they enter the upper elementary grades. For example, if a student is reading at a second-grade level in fourth grade, many classrooms may not have enough interesting titles available for that student. He suggests gathering a few appropriate books that are of interest to a student and asking them to choose a few books to start with from that selected group.

Hudson and Williams (2015) claim that asking students to read books chosen by you, when they are not interested in the books, may even cause students to dislike reading altogether. The authors claim that in their experience, students were able to read for longer periods of time and were more engaged and motivated when they were able to choose their own books. Students in her classroom also became motivated to share their book choices with other students in the room through book talks.

**Opposing Arguments**

Boatwright and Allman (2018) present ideas that oppose the view of allowing students to choose their own texts. High-interest texts do not necessarily provide an avenue to teach students the standards and prepare them for the material covered on district and state assessments. Hudson and Williams (2015) also mention their biggest roadblock to student choice is that emerging readers often have difficulty selecting well-matched books. The teacher must support students in the difficult task of selecting books that match both interest and ability level. With these challenges in mind, teachers must plan proactively to provide students with books of high interest as well as those that are
rigorous enough to prepare them for the kinds of text they may see on standardized assessments.

**Summary**

Reviewing relevant literature has made it clear that the above subtopics, particularly student agency, choice, metacognition, and a meaning-making view of reading have an important connection to the process of RMA. Reading workshop may be a framework to use for a successful RMA session with students. Likewise, in a RMA session, teachers should observe, notice, and name reading behaviors in students, rather than simply pointing out their mistakes. The literature reviewed has shown support for these teacher practices during reading workshop and conferences. Giving positive feedback may lead to developing students who can explain their reasoning and believe they can master new challenges. As teachers, one of our roles should be to promote agency in students, which relates to metacognitive awareness. RMA is a strategy that involves being metacognitive about reading.
CHAPTER 3

METHODOLOGY

Purpose of Study

The purpose of this study was to observe how using retrospective miscue analysis would affect third grade students’ overall reading growth and motivation. The impact of student choice in text selection on reading growth and motivation to read was also examined.

Context and Timeline of Study

I implemented this study during the fall of the 2019-2020 school year at Manz Elementary School in Eau Claire, Wisconsin, where I was teaching third grade. At that time, Manz had a population of 38.9% who were economically disadvantaged. According to the 2017-2018 Wisconsin School Report Card, the general demographics of the school population was 74.2% White, 8.8% Asian, 2.2% African American, and 9.9% Hispanic/Latino. Additionally, 6.5% of students were English Learners. I collected data during the approximate time period of six weeks, from September 1st through November 30th of the 2019 school year. Students had forty-five minutes of independent reading per day as a part of the school’s reading workshop framework. The RMA sessions took place during this time and lasted approximately fifteen minutes per student.

Role of the Researcher

At the time of the study, I was both the teacher and researcher involved with the students participating in the study. I was in my sixth year as an educator, as well as
working towards my licensure as a Reading Teacher/Specialist through the University of Wisconsin-La Crosse. The research questions related to my own personal goals as an educator. Throughout my years as an educator, I have been interested in the topic of student choice and agency in learning. I want to facilitate the development of agency for the readers in my classroom. I also set the goal of improving my conversations with students during conferring. I believed using RMA during reading conferences would be an effective way to work towards those goals.

Participants

The participants involved in the research included three third grade students, two girls and one boy. All of the students were eight years old and attended Manz Elementary in Eau Claire, Wisconsin. The students were selected because they were members of my classroom. All of the students were below district benchmark in reading according to their spring 2019 DRA2 (Developmental Reading Assessment) data from second grade. Scores for the students are as follows: Student 1: 28, Student 2: 18, Student 3: 24. An average third-grade student starts the year at a DRA2 score of 30. An informed consent form was sent home to the participants’ parents/guardians in September 2019. The form provided parents/guardians with the information describing the research project. Through this form, the parents/guardians of all three students gave their consent to use data collected from their child for the study.

Research Methods and Rationale

This mixed-methods research follows a quasi-experimental design because the participants were not randomly assigned. The action research took place in my own classroom of twenty-one students. I believe the RMA procedure fits well with
independent reading conferences. Therefore, I chose to engage in RMA during the time of regular reading conferences to ensure that the routine of students would be as close to a typical day as possible.

**Procedures**

I met with one of the two students daily during independent reading conferences. This means that each student met with me at least twice weekly in either individual conferences or small groups. Student 3 did not engage in the RMA procedure. This student was used as the control. She was given the questionnaire and assessments at the beginning and end of the data collection period but did not engage in the RMA procedure. Her data was used to compare to the other two students who did engage in the RMA procedure.

The issue of student choice in texts was also incorporated into the study in order to measure levels of student motivation to read. For the first three weeks of the study, I chose the books to be read by the student. During the last three weeks, the students were asked to choose a book to bring to their reading conference to read aloud and record for analyzing. The first session with each student consisted of the interview using the *Motivations of Reading Questionnaire* which has been adapted to fit the population of students and time constraints. The questionnaire was read aloud to students and given in the group of three. After the completion of the questionnaires, the RMA conferences then followed a typical two-day schedule for each student. This procedure has been adapted from the recommended steps from Goodman et. al (2016). The procedure followed the same two-day schedule for RMA sessions during the last six weeks of data collection when students read their own chosen books. I strived to adhere to this schedule, while
being flexible with student absences, schedule changes, and any other environmental changes that may have occurred.

**Procedure for day 1.** Students met with me one-on-one to read a passage from a book while I recorded their reading on an iPad. As they read, I recorded any miscues on a copy of the *RMA Session Organizer*. After reading, students were asked to give a retelling of the passage without assistance. I kept track of student retelling answers using the *Retelling Guide*. In preparation for Day 2, I listened to the reading and analyzed student miscues using the *RMA Session Organizer*. I decided whether the miscues were high-quality or low-quality and then selected miscues to discuss with students that showed evidence of their strengths or areas for improvement. For example, I generally chose three to four high-quality miscues that showed evidence of positive reading behaviors. I chose no more than three low-quality miscues to use as discussion points for areas of improvement with behaviors of reading. I also chose some self-corrections to discuss with students. Additionally, I used the bottom of the *RMA Session Organizer* to record any other observations regarding reading behaviors, self-corrections, metacognitive awareness, and progress.

**Procedure for day 2.** On Day 2, I played the previously recorded reading for each student during their independent conference with me. Students had a copy of the passage or book to follow along with as they listened to the reading. They were prompted to notice if their reading matched the written words. During listening, we paused when the miscues previously selected by me came up and engaged in a conversation about the miscues, as well as any other reading behaviors noted. Students also pointed out some miscues on their own while listening. After the conversation about high-quality and low-quality...
quality miscues occurred, I helped the students understand their strengths and future goals related to the miscues.

**Teaching practices included.** As Goldberg (2016) suggests, teachers should be models. They should model a specific reading or thinking process so that students can learn it and attempt it independently. In the first few sessions with each student, I led the conversation around miscues. After that, I expected to see students take ownership in identifying their miscues and how these miscues or self-corrections relate to their thinking during reading. The students were also introduced to various reading strategies as needs arose, such as backing up to reread when the text doesn’t sound right and checking if the text matches the picture clues. To teach skills related to developing metacognition of reading, I modeled these skills during whole-group interactive read aloud. For example, I modeled how to check for comprehension, using skills such as backing up to reread if something does not make sense. I also modeled how to cross-check the words with the pictures to be sure that they match. I also used think-alouds with students to demonstrate how to solve unknown words. The teaching of these skills also occurred during reading individual reading conferences, along with the RMA sessions.

In an effort to model positive reading behaviors that motivated readers possess (and to address the aspect of increasing motivation to read), I shared with students some of the books I read in my free time, shared personal reading goals, and shared strategies that adult readers use to monitor comprehension, such as taking notes on sticky notes while reading. I also reinforced the ideas that miscues while reading happen to all readers
and that we can analyze our own miscues to learn about ourselves as readers and work towards our goals.

**Methods for Data Collection**

I used a combination of quantitative and qualitative methods in this study. This allowed me to address both parts of my research question: *What effect does the use of RMA have on student motivation to read, as well as overall reading growth?* Data collection tools included the revised *Motivations for Reading Questionnaire*, student reading recorded on iPad, *RMA Session Organizer and Retelling Guide*, anecdotal conferring notes recorded on the *RMA Session Organizer*, and district assessment data (*STAR Reading Assessment*). *Motivations of Reading Questionnaire* was given on the first session with each student and on the last session with each student to collect pre and post study data. This method was chosen as a way to provide me with an understanding of the level of motivation of students related to reading. Each of the eleven sections correspond with the eleven constructs of reading motivation. It is used to measure the extent of which a student is motivated to read. Analyzing the data from the eleven constructs gives an idea of which construct each student either excels in or is lacking motivation in (Wigfield, Guthrie, & McGough, 1996). This measure was also chosen as a way to provide insight into which areas students require support in building their skills and attitudes. Due to time constraints and to make the questionnaire more applicable to the population of students, the original *MRQ* was modified to include 32 questions instead of 52.

The *RMA Session Organizer and Retelling Guide* were chosen for collecting anecdotal observations as an efficient way to keep track of evidence of student growth.
and thinking that was observed during the conversations with students. The method for collecting data on reading growth (*STAR Reading Assessment*) was chosen because it is the same measure students are familiar with that measures their academic growth for district benchmarks. This assessment can be given at multiple intervals to measure progress. Therefore, I was able to use it to analyze reading growth from the start of the study to the end.

**Timeline for Action Steps**

The two-day cycle outlined above was repeated for each student for the duration of the data collection period. Another MRQ was given at the completion of the data collection period. A *STAR Reading Assessment* was also given to each student to measure their academic growth from the start of the study to the end of the study. Collecting data using the other measures (*RMA Session Organizer and Retelling Guide*) continued throughout the six weeks.

**Reliability and Validity of Data**

To measure the validity of this action research, the trustworthiness and understanding needed to be considered. One criteria of trustworthiness is the degree of transferability (Mills, 2018). I collected detailed descriptive data using the above measures as much as possible, in an effort to explain the results in a way that could transfer to other classrooms and schools. More than two methods of data collection have been used in order to ensure triangulation of data.

The curriculum in the Eau Claire Area School District is aligned to the Common Core standards. The *STAR Reading Assessment* is also aligned to the standards. Therefore, data from the *STAR Reading Assessment* was considered a valid assessment.
because it closely resembled what students were being taught in their classrooms daily. Reliability of the assessment was measured in a random national sample. Results showed that the assessment’s reliability estimate ranged from 0.93 to 0.95 within grades (“The Research Foundation”, 2013). Because the goal of this action research was to report on the effectiveness of an instructional tool in one context and not to define a truth, this study may not have generalizability to all classrooms and contexts.

**Ethical Considerations**

An informed consent form was drafted and sent home to the participants’ parents/guardians in September 2019. The form provided parents/guardians with the information describing the research project. Through this form, I asked for adult consent to use data collected from their child for the study. By signing this form, parents/guardians declared that they have read the information and gave consent for their child to participate in the research. Parents and students were also informed that students could withdraw at any time during the study with no consequence. After obtaining parent consent from all three students, the students and I completed the oral assent form together at school before the sessions began.

Personal identity remained anonymous and all information was kept confidential throughout the action research. The participants’ data was not linked to personally identifiable information. Students were not at risk of any personal harm and were not inconvenienced since the study occurred during the normal class time allotted for independent reading in the school day. Because this study measured the effectiveness of typical instructional practices in reading, no additional procedures were required to minimize risk.
CHAPTER 4

RESULTS

This study was conducted in order to explore the impact of using RMA on reading growth and motivation in third-grade students. Reading growth from the start of the study to the end was measured using data from the STAR Reading Assessment. Anecdotal notes on student progress were collected using the RMA Session Organizer for each student. Two of the three students worked with the teacher individually and followed the two-day RMA procedure as described in the Methods section above. The impact of student choice of texts on motivation to read was also examined. This was measured by the Motivations of Reading Questionnaire (MRQ). Students met with the teacher for a total of twenty-two sessions. Three of those sessions were used for administration of the MRQ, and two were used for administration of the STAR Reading Assessment.

Research Questions

Three different measures of data-collection were used in the study to explore these research questions:

What is the effect of using retrospective miscue analysis on the overall reading growth and motivation of third-grade students who are reading below benchmark? What will be the impact of using a balance of teacher-selected and student-selected texts?

At the start of the study, all three students were given the Motivations of Reading Questionnaire as a group. All students were also given the STAR Reading Assessment, which was used as a pretest measure. RMA was conducted during individual reading
conferences with Student 1 and Student 2 throughout the study. Data in the form of anecdotal notes were collected using the RMA Session Organizer. The third student was given the same MRQ and STAR Reading Assessment and acted as the control for the study and did not participate in the RMA process. Data from this student were used to compare to the other two students. At the end of the study, all students were given the same MRQ and took the STAR Reading Assessment again. Results from each of the data collection methods will be explained in greater detail below.

**MRQ Results**

The revised MRQ survey contained 32 items designed to reflect 10 of the 11 constructs of reading motivation. The Reading for Grades construct was omitted since it was not applicable to the population of students. The initial MRQ was given in one thirty-minute session, while the post-study MRQ was split between two shorter sessions due to time constraints and scheduling conflicts. Survey questions were read aloud to the students, and they were given the opportunity to ask clarifying questions as necessary. To respond to the items in the survey, students circled a number from 1 to 4 (1= very different from me, 2= a little different from me, 3= a little like me, and 4= a lot like me). Scores were added together for each construct and given a percentage out of the total number of questions in that construct. For example, a score of 100% in the Competition in Reading construct suggests that a student is highly motivated by competition in reading. Data from the initial and post-study MRQ are shown in Table 1.
<table>
<thead>
<tr>
<th></th>
<th>Reading Efficacy (3 items)</th>
<th>Reading Challenge (4 items)</th>
<th>Reading Curiosity (4 items)</th>
<th>Reading Involvement (4 items)</th>
<th>Importance of Reading (1 item)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student1: Initial</strong></td>
<td>11/12 92%</td>
<td>12/16 75%</td>
<td>16/16 100%</td>
<td>12/16 75%</td>
<td>4/4 100%</td>
</tr>
<tr>
<td><strong>Student 1: Post</strong></td>
<td>10/12 83%</td>
<td>15/16 94%</td>
<td>15/16 94%</td>
<td>9/16 56%</td>
<td>1/4 25%</td>
</tr>
<tr>
<td><strong>Student 2: Initial</strong></td>
<td>11/12 92%</td>
<td>14/16 88%</td>
<td>14/16 88%</td>
<td>14/16 88%</td>
<td>4/4 100%</td>
</tr>
<tr>
<td><strong>Student 2: Post</strong></td>
<td>9/12 75%</td>
<td>11/16 69%</td>
<td>16/16 100%</td>
<td>13/16 81%</td>
<td>2/4 50%</td>
</tr>
<tr>
<td><strong>Student 3: Initial</strong></td>
<td>9/12 75%</td>
<td>13/16 81%</td>
<td>14/16 88%</td>
<td>6/16 38%</td>
<td>4/4 100%</td>
</tr>
<tr>
<td><strong>Student 3: Post</strong></td>
<td>9/12 75%</td>
<td>9/16 56%</td>
<td>10/16 63%</td>
<td>8/16 50%</td>
<td>2/4 50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Reading Work Avoidance (3 items)</th>
<th>Competition in Reading (3 items)</th>
<th>Recognition for Reading (3 items)</th>
<th>Social Reasons for Reading (4 items)</th>
<th>Compliance (3 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student1: Initial</strong></td>
<td>6/12 50%</td>
<td>8/12 67%</td>
<td>6/12 50%</td>
<td>9/16 56%</td>
<td>6/12 50%</td>
</tr>
<tr>
<td><strong>Student 1: Post</strong></td>
<td>3/12 25%</td>
<td>3/12 25%</td>
<td>5/12 42%</td>
<td>14/16 88%</td>
<td>5/12 42%</td>
</tr>
<tr>
<td><strong>Student 2: Initial</strong></td>
<td>9/12 75%</td>
<td>8/12 67%</td>
<td>11/12 92%</td>
<td>14/16 88%</td>
<td>6/12 50%</td>
</tr>
<tr>
<td><strong>Student 2: Post</strong></td>
<td>5/12 42%</td>
<td>8/12 67%</td>
<td>8/12 67%</td>
<td>13/16 81%</td>
<td>9/12 75%</td>
</tr>
<tr>
<td><strong>Student 3: Initial</strong></td>
<td>6/12 50%</td>
<td>7/12 58%</td>
<td>10/12 83%</td>
<td>8/16 50%</td>
<td>8/12 67%</td>
</tr>
<tr>
<td><strong>Student 3: Post</strong></td>
<td>8/12 67%</td>
<td>3/12 25%</td>
<td>9/12 75%</td>
<td>9/16 56%</td>
<td>7/12 58%</td>
</tr>
</tbody>
</table>
Table 1. *Motivations of Reading Questionnaire* Results

**Changes in Construct Scores**

As shown in Table 1, each student showed some significant changes from the initial to post-study questionnaires in certain constructs. An increase in the percentage suggests that the student’s motivation in that particular construct has increased. A lower percentage suggests that the student is not motivated by that particular construct of reading. Post-study scores from Student 1 show that the reading motivation construct of Reading Challenge increased from 75% to 94%. Reading Involvement and Importance of Reading both decreased, from 75% to 56% and 100% to 25% respectively. Student 1 also showed a 25% decrease in Reading Work Avoidance and a 32% decrease in Competition in Reading constructs. Scores in Social Reasons for Reading also increased from 56% to 88%.

Post-study scores from Student 2 show that Reading Importance decreased by 50%, and Work Avoidance decreased from 75% to 42%. Compliance increased by 25%, while Recognition for Reading decreased by 25%. Scores for Student 3, the student who did not participate in the RMA procedure, did not show as many significant changes. For example, Importance of Reading decreased by 50%, Competition in Reading decreased by 33%, and Reading Challenge decreased by 25%.

Some additional verbal comments were recorded during the post-study questionnaire. When reading question 17 (*It is very important to me to be a good reader.*), Student 1 commented “No. I just like to read”. After question 45 (*I talk to my friends about what I am reading.*), Student 1 also made a similar comment: “I just like to read.” After completing question 49 (*I always try to finish my reading work right away.*),
Student 2 commented “Right when I get home I run to find my book and set my timer. Sometimes I read in my tent, too.” Student 3 did not make any verbal comments during either of the MRQ sessions.

Student 1’s highest construct scores on the post-study questionnaire were Reading Curiosity and Challenge (both 94%), which indicates that this student may be motivated by their own internal curiosity for reading. Encountering challenges while reading may also be a source of motivation for this student. Student 2’s highest construct score on the post-study questionnaire was also Reading Curiosity. Student 3’s highest construct score on the post-study questionnaire was Recognition for Reading and Reading Efficacy. This suggests that the student may be motivated by receiving praise from teachers and other students about their reading. Furthermore, this student may be more motivated to read or engage in a reading task when she feels she can experience success with it.

To gather additional data on the research question related to teacher-selected compared to student-selected texts during the RMA procedure, Students 1 and 2 were given an additional question (How did you feel about getting to choose your books, rather than reading the books that were chosen by the teacher?) after the completion of the MRQ. Student responses to this question are shown in Table 2.

<table>
<thead>
<tr>
<th></th>
<th>Response to question:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>“I just like reading. But when I was choosing, I wasn’t confused anymore because I was reading that book for awhile already, and I could get into that book”</td>
</tr>
<tr>
<td>Student 2</td>
<td>“For books I don’t get to choose, it’s a little scary and curious. When I got to choose, I wasn’t that scared anymore because it was a different book that I could choose, and it was a little easier”</td>
</tr>
</tbody>
</table>

Table 2. Additional Student Responses Regarding Book Choice
When asked to choose between being able to read teacher-selected and student-selected books, Student 1 and 2 both chose student-selected books. Since Student 3 did not participate in the same RMA procedure, this student was asked to think about times in the current school year during independent reading or assessments when the book was chosen by the teacher and times when they were able to choose the book. Student 3 did not give a clear response (“Picking my own is better because I am in control and I know what I am picking, but I will still read the teacher’s books too.”)

**RMA Session Organizer Findings**

Student 1 and 2 both met with the teacher in eight separate settings, following the two-day plan for RMA as described in the Methods section. On average, each student read four or more pages, depending on the size of the text. In some sessions, students read a single passage. Each session lasted between ten to twenty minutes. Anecdotal data from these sessions were collected and recorded on a separate *RMA Session Organizer* for each session. A detailed description of the findings for each student is included below.

**Student 1**

Student 1 showed evidence of reading self-awareness throughout the sessions and was able to consistently identify miscues with independence by Session 6. Prior to Session 6, Student 1 was able to discuss miscues after they had been identified by the teacher while listening to the recording. In Session 2, Student 1 had a high self-correction ratio but a lower oral reading rate. All of the identified miscues were high-quality (did not significantly change the meaning). In Session 4, all of Student 1’s three miscues were
identified as high-quality. The one miscue that would have been low-quality (fluiding for flooding) was self-corrected by the student.

By Session 6, Student 1 began identifying miscues independently while listening to the recorded reading. This was the first session using student-chosen books. The student appeared to be comfortable reading aloud with other students present at the same table. When asked why the student chose that particular book to read, the student said, “I chose to bring this book because I just started it in my book box, and I’m into animals.”

When discussing the number of miscues the student made and the possible reasons for the miscues, Student 1 related his thinking during reading to an outside activity that he participates in, as shown in Table 3.

In Student 1’s last recorded session, he chose a non-fiction book about reptiles that was more difficult than the previously selected books. He miscued on words such as Carolina, Burmese, and ancient. He self-corrected Burmese independently when it came up again on the second page. After initially making a miscue on ancient, the student was able to read the word correctly the second time while listening to himself read. He shared that he knew what ancient means because he was studying about ancient Greek columns in art class. In this session, Student 1 was able to decode more difficult words independently, including self-correcting some of the scientific words describing reptiles that were unknown to the student. After this session, Student 1 was asked to share his feelings about using RMA as a reading strategy. His response was as follows: “It’s good. I can go back and check which mistakes I made.” When asked if he thinks using this strategy more would help him become a better reader, he responded with: “Yes, because I can fix up my mistakes and figure out that word for the next time.”
Student 2

Student 2 also listened to the recorded readings and analyzed miscues. Some of the recorded comments on the RMA Session Organizers were more general and less detailed than those of Student 1. In Session 2, the teacher asked the student how the reading sounded while listening. Student 2 replied with “It sounded good.” When asked if the miscues from this reading affected the meaning, the student said, “Kind of.”

In Session 5, Student 2 reread the same passage from Session 2 (The Biggest Surprise). In this second reading, the student’s self-correction ratio increased. The student went back to reread the text more often after making initial miscues and appeared to be self-monitoring more when the words read did not align with the meaning of the text. At the beginning, the student read Pam is a happy, then went back to reread and self-correct. Her response to this miscue is included in Table 3 below.

In Session 6, the student read a teacher-chosen book titled Molly’s Pony. Six of the eight total miscues were low-quality (changed the meaning). The student did not self-correct these and did not show evidence of self-monitoring for meaning while reading. When retelling the key points, the student was able to identify characters, setting, and some story episodes. The retelling was basic and did not include any story details. The student missed some key episodes. Because of the high number of miscues and low comprehension, the teacher asked the student if they thought this book was a “good fit” for them as a reader. The response was as follows: “It was a little harder for me. It’s not a good fit. I will put it back and try a new one.” The student’s response is also included in Table 3 under the theme of metacognitive awareness.
In Sessions 7 and 8, Student 2 was asked to choose books of her own to read and record. In Session 7, the student had three low-quality and three high-quality miscues that were analyzed and discussed. When asked about the substitution of *hair* for *herder*, the student said it was because she had never seen the word *herder* before. The student appeared to be relying on knowledge of known words and picture clues rather than using decoding skills to decode unfamiliar words. In the last session, the student appealed for help with the word *attention* and had three other low-quality miscues. The student had difficulty identifying these miscues independently while listening to the recording. The teacher used this session as an opportunity to teach the importance of decoding the first part of an unfamiliar word and then checking the picture clues to aid in the process of decoding.

Overall, Student 2 was not able to identify most miscues independently and needed prompting from the teacher to identify and analyze them throughout the sessions. After this session, Student 2 was also asked to share her feelings about using RMA as a reading strategy. Her response was as follows: “I was kind of excited the first time, and it felt fun.” When asked if using this strategy more would help her become a better reader, she responded with: “It makes my reading sound smoother. It doesn’t make me embarrassed to talk about mistakes because everyone does.”

Some common themes from the data and related student comments are shown in Table 3. More student comments and miscues were discussed and analyzed, but only the most significant examples that connect to common themes are included in the results.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Student and Session Number</th>
<th>Example Student Comment/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of high-quality miscue</td>
<td>Student 1, Session 2</td>
<td>“Even though I forgot the -ed ending, it still makes sense”</td>
</tr>
<tr>
<td>Awareness of low-quality miscue</td>
<td>Student 1, Session 6</td>
<td><em>(adapt/adopt)</em> “I can go to the glossary to find out what that means”</td>
</tr>
<tr>
<td></td>
<td>Student 2, Session 6</td>
<td>“We should stop and read it again”</td>
</tr>
<tr>
<td>Self-correction</td>
<td>Student 1, Session 4</td>
<td>“Because it didn’t make sense; it’s flooding”</td>
</tr>
<tr>
<td></td>
<td>Student 2, Session 5</td>
<td>“Because I heard my mistake”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Because I heard the word ‘a’ instead of the word ‘is’. That didn’t make any sense”</td>
</tr>
<tr>
<td>Focus on comprehension</td>
<td>Student 1, Session 2</td>
<td>“I heard myself say <em>pretended</em>. I know Zane is a dog, so it’s supposed to be <em>petted</em>”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-corrected <em>ancient</em> and shared knowledge of the word meaning because of studying ancient Greek columns in art</td>
</tr>
<tr>
<td></td>
<td>Student 1, Session 7</td>
<td>“I read it like <em>hand-some</em>. I know it’s about a prince and I checked the picture”</td>
</tr>
<tr>
<td></td>
<td>Student 2, Session 7</td>
<td></td>
</tr>
<tr>
<td>Improvements in independence</td>
<td>Student 1, Session 7</td>
<td>Decoded unfamiliar multisyllabic word (<em>Mississippiensis</em>)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identified a miscue independently and shared “I heard it!”</td>
</tr>
<tr>
<td>Metacognitive awareness/awareness of</td>
<td>Student 1, Session 6</td>
<td>“I just need to go slow like in piano”</td>
</tr>
<tr>
<td>appropriate level of book</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
“It was a little harder for me. It’s not a good fit. I will put it back and try a new one”

<table>
<thead>
<tr>
<th>Low-quality miscues not corrected that changed the meaning</th>
<th>“Read Drink the cold water of water instead of During the cold days of winter”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2, Session 6</td>
<td>Student 2, Session 2</td>
</tr>
</tbody>
</table>

Table 3. Common Themes from RMA Session Organizers

Comparison of Teacher-Selected and Student-Selected Texts

Additionally, anecdotal data collected on the RMA Session Organizer forms during the first three weeks was compared to the data collected during the last three weeks. Comparing this data was necessary to answer the second part of the research question: What will be the impact of using a balance of teacher-selected and student-selected texts? For either student, there was not a significant change between the number of miscues or level of understanding when reading student-selected books during the last three weeks of the study. Both students shared that they preferred to read books chosen by themselves rather than the teacher but were equally willing to read the books chosen by the teacher.

STAR Reading Assessment Findings

The STAR Reading Assessment from Renaissance Learning was used to measure the impact of RMA on reading growth of the selected students. All students were given the initial reading test on individual iPads at the start of the study, before engaging in the RMA procedure. Students took the assessment on their iPads again at the conclusion of the study. This assessment is adaptive, which means the level of difficulty adjusted to each student’s individual reading level determined from the initial assessment. On the second assessment, students’ test questions were either more difficult or less difficult
than the initial assessment, depending on their initial score. The assessment is norm referenced, which means it represents how well students performed compared to the performance of a nationally represented sample. It is important to note that this assessment only gives one representation of the student’s current skill level in reading and is not a comprehensive measure. The results of these assessments for each student are shown in Table 4. A guide to the assessment’s abbreviations is included in Table 5.

<table>
<thead>
<tr>
<th>Student 1</th>
<th>Score</th>
<th>Growth Score</th>
<th>Est. ORF</th>
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</thead>
<tbody>
<tr>
<td>Initial</td>
<td>433</td>
<td>880</td>
<td>104</td>
</tr>
<tr>
<td>Post-study</td>
<td>403</td>
<td>877</td>
<td>98</td>
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</table>

<table>
<thead>
<tr>
<th>Student 2</th>
<th>Score</th>
<th>Growth Score</th>
<th>Est. ORF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
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<td>806</td>
<td>35</td>
</tr>
<tr>
<td>Post-study</td>
<td>106</td>
<td>796</td>
<td>34</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student 3</th>
<th>Score</th>
<th>Growth Score</th>
<th>Est. ORF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>244</td>
<td>854</td>
<td>59</td>
</tr>
<tr>
<td>Post-study</td>
<td>191</td>
<td>822</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 4. *STAR Reading Assessment* Results

<table>
<thead>
<tr>
<th>Measure</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Score</em></td>
<td>Overall score measured by <em>STAR Enterprise</em> scale</td>
</tr>
<tr>
<td><em>Growth Score</em></td>
<td>Uses all items to estimate a student’s overall mastery of reading</td>
</tr>
<tr>
<td><em>Estimated ORF</em></td>
<td>An estimate of ability to read words quickly and accurately while maintaining sufficient comprehension, reported in correct words per minute</td>
</tr>
</tbody>
</table>

Table 5. Score Definitions (*Renaissance Learning*, 2018)
As shown in Table 4, all of the students’ total scores and growth scores decreased from the initial to post-study assessments. The estimated oral fluency scores were also lower on the post-study assessment for each student.

**Summary**

Results from the *Motivations of Reading Questionnaire* and *STAR Reading Assessment* were reported on. Anecdotal notes recorded on the *RMA Session Organizer* forms were analyzed, and common themes in the data were identified and shown in Table 3. The *MRQ* data showed Students 1 and 2 had more changes in their constructs of reading motivation compared to Student 3, who showed less significant changes. Findings did not show an increase in reading growth or estimated oral fluency in the students who used RMA, as measured by the *STAR Reading Assessment*. 
CHAPTER 5

DISCUSSION

The purpose of this study was to determine if retrospective miscue analysis has an impact on reading growth and motivation to read in third-grade students. The second part of the research question aimed to determine if there is a difference in motivation when reading student-selected compared to teacher-selected texts. The hypothesis gathered before the start of the study was that using RMA as a reading strategy during independent reading would have a positive impact on reading growth, shown as an increase on the STAR Reading Assessment. I expected to see an increase in motivation to read independently from the start of the study to the end of the study. I also hypothesized that students would be more motivated to read student-selected texts and would read these texts more accurately and with greater comprehension. This chapter will discuss and interpret the results and discuss limitations that may have affected the results of the study. Implications for teachers, implications for further research, and conclusions about the study will also be discussed.

Evaluation and Interpretation of Results

Both qualitative and quantitative data were collected and analyzed in this mixed-method, quasi-experimental action research study. As shown by the studies in the Literature Review, RMA is generally used in small-group intervention settings or in one-on-one conferences with a teacher. Compared to other studies, the results of this study are
unique because the study took place in a general education third-grade classroom with a total of twenty-one students and was conducted by the teacher researcher.

**Motivations of Reading Questionnaire**

This measure was used to determine if RMA would impact students’ level of motivation to read. Data from the initial and post-study questionnaires were separated by construct and given a percentage out of the total number of questions. At the start of the post-study questionnaire, Students 1 and 2 approached the directions with a smile and increased confidence compared to their reaction to the MRQ at the start of the study.

Student 1 and Student 2 were the students who participated in the RMA procedure during the study. These two students also showed more changes in their post-study questionnaire than Student 3 did. This suggests that RMA had a positive impact on their motivation to read. During the post-study questionnaire, Student 1 began reading the questions aloud. This did not occur during the initial questionnaire, and all questions were read by the teacher at that time.

Further analyzing into each individual construct may determine each student’s greatest area of motivation for reading. Knowing this would be a starting place for the teacher to build upon that motivation area. For example, because Student 1 and 2 are both motivated by challenges, the teacher could incorporate more challenging texts.

It is also important to note that only Student 1 and 2 provided additional comments during the post-study assessment. None of the students made additional comments during the initial assessment. Student 2 said, “Right when I get home I run to find my book and set my timer. Sometimes I read in my tent, too”. This recorded student response suggests an increase in motivation to read independently and an increase in the
attitude that the student can read independently with confidence. Overall, Student 2 showed an increase in reading confidence and positive reading behaviors after the completion of the study.

Student 1 also showed an overall increase in confidence after completion of the study. For example, this student took the lead and read the questionnaire aloud to all students during the session, which did not occur during the first session. This demonstrates increased confidence and ownership in reading. RMA is a strategy aimed at developing confident readers who see mistakes as learning opportunities and evidence of thinking. Use of the strategy may have contributed to the increased confidence seen in both Student 1 and 2 at the completion of the study. Student 1’s comments during the post-study questionnaire (“I just like to read”) indicate that reading itself may be intrinsically motivating to this student. These comments were not expressed in the initial questionnaire. The post-study questionnaire showed that he was not as motivated by social reasons, completion of tasks, and compliance. He seemed to be motivated simply by reading alone and not by some of the other constructs of reading motivation. Part of this intrinsic motivation could have been developed through the use of RMA and the support the teacher provided.

Student 1’s highest construct scores on the post-study questionnaire were Reading Curiosity and Challenge (both 94%), which indicates that this student may be motivated by their own internal curiosity for reading. Encountering challenges while reading may also be a source of motivation for this student. Student 2’s highest construct score on the post-study questionnaire was also Reading Curiosity. Student 3’s highest construct score on the post-study questionnaire was Recognition for Reading and Reading Efficacy. This
suggests that the student may be motivated by receiving praise from teachers and other students about their reading. Furthermore, this student may be more motivated to read or engage in a reading task when she feels she can experience success with it.

The significant decrease in the Importance of Reading construct for each student was important to evaluate. On the initial assessment, both Student 1 and Student 2 responded with ‘A lot like me’ to question 17 (“It is very important to me to be a good reader.”). However, for the same question on the post-study questionnaire, Student 1 responded with ‘Very different from me’. Student 2 responded with ‘A little different from me’. Student 1 also commented, “I just like to read” when answering this question. It is possible that after engaging in RMA and discussing that all readers miscue, students developed a new definition of what it means to be a good reader. Prior to the study, they may have believed that “good readers” never make mistakes. However, this construct contained only one item, while the other constructs all had a greater number of items. This may explain why the percentages would likely experience greater change between the two questionnaires.

Another important finding from the questionnaire was that the Work Avoidance construct increased for Student 3 but decreased in the other two students. Motivations by Reading Challenge also went up in Student 1 and 2 but decreased in Student 3. This suggests that the use of RMA may equip students with the skills necessary to encounter challenges while reading with confidence, rather than avoiding challenges and reading effort.

RMA Session Findings
Overall, both students met with the teacher willingly and read aloud without hesitation. All sessions were conducted with other students present in the room. Neither student appeared to be self-conscious about reading aloud with others present or when their recorded reading was played aloud. It was important to note that other students in the classroom made comments such as, “When do I get to read and record with you?” Student 3 was one of the students who made this comment. Students appeared to participate in the process with a positive attitude and did not miss any of the planned sessions.

The goal of using the RMA strategy was for students to begin identifying and analyzing miscues independently after listening to themselves reading a previously recorded section of a book or passage. Student 1 was able to do this independently by Session 6. Finding miscues independently seemed to be motivating for Student 1 because it was accompanied with smiles and enthusiasm. He seemed to enjoy the challenge of listening closely to identify miscues and then analyzing whether they changed the meaning of the text. He was often able to self-correct the miscue after listening to himself read it. He also had fewer low-quality miscues than Student 2 overall. Student 2 needed teacher support to identify miscues and analyze whether the miscues changed the meaning. This student also had a greater number of low-quality miscues, which greatly affected the student’s ability to comprehend text.

Metacognition. In this study, Student 1 made more self-corrections during reading than Student 2. Student 1 was also able to analyze miscues more thoughtfully than Student 2. However, Student 2 did begin to self-correct more often in the last sessions of the study; this may suggest that further practice of the strategy would be necessary to increase self-
corrections and self-monitoring behaviors. The process of listening to oneself read and analyzing miscues through RMA may be a strategy that helps to increase the number of self-corrections readers make because they are taught to be more aware of their miscues and thinking while reading. Self-corrections show that students are actively thinking about meaning as they read. If a student is metacognitive while they are reading, they are more likely to fix miscues by self-correction compared to a student who does not show metacognition. Student 1 had a higher number of self-corrections and was able to analyze why miscues and self-corrections occurred based on the meaning of the text. However, the results of this study do not prove that there is a direct correlation between using RMA, an increase in metacognition, and an increase in the number of miscues self-corrected.

By analyzing the comments and responses of the two students who used RMA, it was clear that Student 1’s comments were more metacognitive overall. This student was able to find most miscues independently, while Student 2 was not. This suggests that RMA may only be an effective strategy for some students. For example, students who tend to be metacognitive learners already may benefit from using this strategy. On the other hand, if a student is not able to listen and identify miscues and analyze the miscues independently, this strategy may not be an effective way to increase reading growth. However, further research could confirm if a student similar to Student 2 in this study could learn to become more metacognitive if the RMA strategy was used for a longer period of time and with more intensity. This hypothesis was evidenced in Session 5 with Student 2. After reading the same passage a second time and being prompted to look for
miscues, the student was more aware of miscues and did more self-monitoring when the text did not align with the meaning of the passage.

**Reading Independence.** Listening to recorded readings and noting the level of accuracy and fluency may also be a way for students to judge whether a book is a “good fit” for them as a reader. As noted in the Literature Review, struggling readers often have difficulty knowing their instructional level and choosing appropriate books. This strategy effectively helped both students decide whether a book was appropriate for them. While listening to the recording, if students noticed that too many miscues interfered with reading fluency and comprehension, they were able to express that the book was not an appropriate level for them.

Another important factor in being able to comprehend accurately and independently is the ability to make connections to background knowledge. RMA gave students an opportunity to revisit miscues and use strategies to self-correct words that were previously counted as miscues. An example from Session 7 showed Student 1 making a connection to learning in other subject areas that helped him self-correct a previous miscue. RMA gave the teacher an opportunity to teach skills such as backing up to reread, self-monitoring for meaning, and using context clues to solve unknown words.

Data collected on the *RMA Session Organizer* forms indicate that the students showed some ability to analyze their reading errors, use this knowledge to self-correct errors in future reading, and reflect on their thinking while reading, as a result of engaging in the procedure. The examples presented suggest that RMA was more of an effective strategy for overall reading growth and development of metacognition for Student 1 than for Student 2.
Evidence of Reading Growth

The hypothesis was that all students who participated in RMA would show some overall reading growth from the initial score to the post-study score on the *STAR Reading Assessment*. All of the three students involved in the study did not show growth from their initial to post-study overall scores, growth scores, or estimated oral reading fluency. This could be due to the nature of the adaptive assessment, which increases in difficulty in response to correct answers. The initial assessment was the first *STAR Reading Assessment* students had taken, since their school district begins using the assessment in the fall of third grade. Therefore, there were no prior scores to compare to the initial assessment.

Evaluation of the Balance of Texts Used

In the first three weeks of the study, students were given books to read during the RMA sessions. In the last three weeks, students were asked to choose their own books for the sessions. Data in the form of student responses on the questionnaire and additional questions, as well as evidence of comprehension of texts were analyzed to decide if using student-selected texts had an impact on positive reading behaviors, motivation to read, and reading growth, as compared to using teacher-selected texts. No significant increase in motivation was noted when using student-selected books. However, students did show greater comprehension on the *Retelling Guide* when reading their familiar and chosen texts, compared to the books chosen by the teacher. This could be due to the greater level of background knowledge and interest when students were reading a book of their choice.
Furthermore, the students expressed a preference for reading student-selected books, but I did not find an actual difference in motivation to read with any of the students, based on the MRQ results and the responses to additional questions. All students were motivated to read both the student-selected and teacher-selected books throughout the study, but this could also be due to wanting to simply comply with teacher directions. For either student, there was not a significant change between the number of miscues or level of understanding when reading student-selected books during the last three weeks of the study. Both students shared that they preferred to read books chosen by themselves rather than the teacher but were equally willing to read the books chosen by the teacher. However, students did appear to be more engaged in the discussions when using student-selected books. For example, the last sessions of both students took longer than the first sessions because of the increase in comments shared about the book. As shown in Table 3 above, Student 1 made more connections that aided in comprehension during the student-selected sessions than he did during the teacher-selected sessions.

Based on the student responses included in the Results, two of the three students expressed a preference for reading student-selected books, but this preference does not indicate an actual change in motivation when reading student-selected books. Students appeared to be equally motivated to read both teacher-selected and student-selected books. However, the comprehension of student-selected books was greater in both students, which may be due to greater background knowledge and interest.

Limitations

This action research was completed in my third-grade classroom of twenty-one students. Due to the amount of time required to meet with each student, a small sample
size was chosen so that the research did not interfere with the daily schedule of the classroom. Some unavoidable limitations that may have affected the study’s results include the small sample size and the limited space in the classroom. With other students in the room, it was difficult at times to listen to the recorded reading simply due to the volume level of other occurrences in the room. I met with students at a table in the back of the room, but other students in the room often interrupted during the time the study was being conducted.

Another limitation was identified in the results of the post-study STAR Reading Assessment. On this assessment, all students completed the test quickly (Student 1: 17 minutes, 44 seconds; Student 2: 7 minutes, 37 seconds; Student 3: 13 minutes, 59 seconds). This assessment has an average of 34 questions and takes students an average of 15-30 minutes to complete. Students took the assessment with other students in the room who were working on various assignments; therefore, it was difficult to control outside factors such as noise level and distractions. Students were not able to take their assessments in a space free of distractions, which may have influenced the results.

RMA is a strategy that requires ample time to read, analyze, discuss, and teach new skills as they arise. This study was conducted for six weeks, which may be considered a limitation. More sessions with each student would be needed to see more definitive results. I had to stay firm to a strict schedule in my classroom. More flexibility to allow sessions to run longer would have allowed me to respond more effectively to the needs of students, which may have produced more results. Although students showed signs of increased metacognition, self-corrections, and confidence, it may be concluded that six weeks is not enough time to see reading growth using this strategy.
Conclusions

Results gathered during this study indicate that RMA may be an effective strategy for improving reading fluency and self-monitoring skills. Listening to and analyzing reading may also help students decide if a book is an appropriate level for them. Qualitative data also showed some increases in motivation to read in the students who participated. Results of the STAR Reading Assessment did not show an increase in reading growth as a result of using the strategy. However, quantitative data from the RMA sessions show increases in self-correction ratio in the students who participated. Therefore, this strategy may be particularly useful for students working on fluency. Other students in the classroom not involved in the study showed interest in the strategy and asked about being able to participate. These findings indicate that the RMA process of reading, recording, and listening to your recorded reading may be motivating for some students.

Implications for Teachers

RMA may be used to teach students how to be metacognitive about the reading process. As Goodman, Martens, Flurkey (2016) suggest, RMA fits well in a classroom that is grounded in rich, authentic reading experiences for students. Furthermore, RMA may fit in a reader’s workshop framework, in a classroom setting that models student agency and personal ownership in the reading process. I found through the study that this was an effective reading strategy in my classroom because I value these aspects of learning. My classroom changed as a result of the study because students began to take more ownership in the reading process, became more confident in reading aloud, and became more comfortable discussing mistakes. This strategy also taught me to be more
metacognitive as a teacher. Intentionally setting aside time to analyze the thought-processes of readers helped me decide the next steps for instruction of individual students. I now have the opportunity to share my findings with colleagues who may find benefits from using the reading strategy in their own classrooms.

This strategy does not take more than twenty minutes to implement each day, which means teachers may conduct the strategy with students during independent reading conferences without making significant changes to the classroom schedule. This study was conducted for six weeks, with only one of those days reserved for teaching the routines. This proves that the routines may be taught rather quickly; students are then able to use the strategy with independence after some practice. However, because of the limitations and challenges noted above, RMA may be more effective when used in a small-group reading intervention setting. In a setting free of distractions, students may have had a better opportunity to use the strategy effectively.

**Implications for Further Research**

While it appears as though RMA positively impacted the overall reading abilities and confidence level of the students in the study, it is still unclear whether the use of this strategy may truly increase reading growth and motivation. Several questions have emerged from the results and discussion of the study. If I were to continue using this strategy with the target population and include other students in the process, I am curious to see if students would begin to show reading growth when given more time. I would also like to investigate the same procedure in a targeted intervention setting rather than a general education classroom. Further research could also be conducted with a population of students with learning disabilities.
REFERENCES


