

IMPACT OF RETROSPECTIVE MISCUE ANALYSIS

The Impact of Retrospective Miscue Analysis on the Reading Achievement of
Struggling Second Grade Students

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Abstract

This study examines the impact of Retrospective Miscue Analysis (RMA) on struggling second grade readers' reading achievement. RMA is a strategic reading tool that allows both student and teacher to gain insight on the student's reading process through the process of listening to the student read via audio recorder, and analyzing miscues together. This study was conducted over a six week period, implementing RMA sessions twice a week. The student would read a passage at his/her instructional reading level while being audio recorded, and then the following day a RMA session was held to discuss the student's strengths and miscues during his/her reading. The forms of data collected during this study were Attitude Surveys, Interviews, Running Records, Miscue Analysis, and anecdotal notes. Grounded Theory was used to analyze the data from which the conclusions of the study were drawn. It was evident that through the process of RMA the students' reading achievements were positively impacted. Students' reading accuracy, levels, self-correction, comprehension, and even self-perception increased over the six-week study period.

Introduction

All readers, regardless of their abilities, use specific reading strategies while reading to make sense of words and/or meaning of text. Many struggling readers often are unable to find satisfaction with their reading and believe they can never become a good reader. Yetta Goodman (1996) predicted that retrospective miscue analysis (RMA) is the key to discovering metacognition (i.e., the ability to be aware of one's thinking) during the reading process. Retrospective miscue analysis is an instructional strategy that allows readers to reflect on their own reading process by examining and discussing miscues. It is a process in which students and teachers engage in analyzing the student's miscues through listening to themselves on an audio recorder after they have read a passage. Through this process the reader will begin to understand the reading process and reflect on his or her own process of reading. The reader will also begin to build proficiency in reading comprehension by focusing on the meaning of the text, and will improve his or her self-confidence as a learner.

RMA was developed in the 1970s by a Canadian secondary school remedial reading teacher, Chris Worsnop, who used one-on-one RMA sessions with his students to help them understand their miscues and to guide them through the process of self-regulation (Goodman, 2008). Worsnop highly valued the insight that miscue analysis gave him into the reading process and began to involve his students in seeing this insight as well (Goodman, 2008). These ideas led to the methodology of retrospective miscue analysis (RMA). Worsnop would audio record individual students while they were reading and then allow them to listen to and discuss obvious miscues. Worsnop found that the process of RMA gave his students the ability to read more difficult texts as the

year progressed. While evaluating their reading and answering questions pertaining to the three-cueing systems, semantic (meaning), syntactic (grammar), and grapho-phonetic (sounds correlated with letters), students became aware of their miscues and their self-perception immediately changed. Chris Worsnop was the first to introduce retrospective miscue analysis. However, Yetta Goodman and Ann Marek (1996) popularized retrospective miscue analysis. Retrospective miscue analysis has served as both a research and instructional tool in helping readers change their perspective on their reading process.

Although miscues may be associated with the term “errors” and many people misinterpret the term to be negative, during the process of retrospective miscue analysis, the term miscue is not a negative term. The term miscue is used to express a student’s unconscious metacognition of their reading process. RMA sessions can help the student develop metacognition (being aware of one’s thinking), and help the student become a self-directed reader.

My interest in RMA connects very well with my philosophy of education. My philosophy is based around a student-centered environment, focusing on my students’ abilities, interests, and needs, and doing what I can to know my students on a personal basis (culturally, socially, etc.) to meet their educational needs. To support a student-centered environment, students should be active and responsible participants in their own learning. Through the implementation of RMA, students are constantly reflecting on their own learning. Through RMA, students’ needs are the focus, and their abilities and educational needs are the emphasis in guiding self-reflection to increase reading abilities.

My interest in the reading process has evolved from personal experience as well as my teaching experiences so far. This past year I have been student teaching at Miracle Elementary School (pseudonym) in a second grade classroom. Miracle Elementary is labeled as a Program Improvement school (PI). In California, program improvement is the formal description for Title 1-funded schools and Local Education Agencies (LEAs) that fail to make Adequate Yearly Progress (AYP) for two consecutive years under the Elementary and Secondary Education Act (California Department of Education, 2012). Miracle Elementary is in their 4th consecutive year of PI. The percentage of struggling readers is considerably high at Miracle Elementary. About 60 second grade students out of a total of 165 are far below grade level in reading and are in need of assistance from our Title 1 Reading Specialist. Within my second grade classroom, at the beginning of the year, 17 students out of 28 were not at grade level in reading on measures of reading fluency, comprehension, and accuracy. Although these students receive further assistance during the school day, there is such a large number of struggling readers that it is extremely hard to reach all of them in a precise manner.

I was interested in implementing retrospective miscue analysis sessions on a few students to see if the process of analyzing their specific needs would impact their reading abilities. My specific question was, How does implementation of Retrospective Miscue Analysis (audio recording students as they read and then analyzing it together) impact the reading achievement of struggling second grade readers? I am intrigued by the reading process and why/how some students have a hard time acquiring such skills. I was curious about the reading needs of my students and how I could help them meet their needs to become a better reader. I wanted to make sense of students' miscues and hopefully help

the students make sense of their personal miscues as well. I wanted to help students redirect their learning through self-awareness and self-correction after listening to their own reading on a recorder. I was curious if some students were aware of their reading miscues. If they are, then why are they still reoccurring, and if they are not then how can RMA impact their awareness?

The question that I was pursuing is significant because the reading process and self-analysis is extremely important to become not just a good reader but also a life long reader. Goodman (1996) suggests that reading abilities should be acquired to improve student achievement in all subjects. Therefore, if students are low readers, their abilities in other subjects may be low as well. My study offers information and teaching strategies that may be beneficial when helping struggling readers understand their miscues and misconceptions of reading. If my findings are significant, other teachers as well as myself may be inclined to implement RMA in future classrooms to enhance struggling readers' abilities.

RMA is an empowering strategy that has several key aspects of powerful instructional practices. RMA has many theoretical themes underlying a constructivist, psycho/sociolinguistic model of the reading process that supports students' metacognitive awareness through in depth discussions, revaluing, and student motivation. The psycho/sociolinguistic model, created by Kenneth Goodman (1976), builds and expands on reader's knowledge about language, and their reading process. Goodman's Whole Language, psycholinguistic theory is a literacy philosophy that implies that children should focus on meaning and strategy instructions while reading. It creates a window of insight for the teacher and student to build upon prior knowledge to make sense of not

just the text but of their learning as well. Goodman's Whole Language approach focuses on the development of knowledge of language including the graphophonic, syntactic, semantic (Goodman, 1991). Goodman explains that efficient readers do not result from precise perception and identification of letters and words, but from skill in selecting the fewest, most productive cues necessary in guessing the correct words in the text (Goodman, 1991, p. 2). A variety of cues, along with prior knowledge and experiences is used to construct meaning of a text.

Rosenblatt's Transactional theory grounds RMA in that it supports the learner's ability to make a connection between the words of the text and the reader. Each reader constructs meaning differently. Rosenblatt's theory implies that different readers transact different experiences and strategies while reading and constructs their own way of making meaning of the text. Rosenblatt states, "No two readings, even by the same person, are identical. Still, someone else can read a text efferent and paraphrase it for us in such a way as to satisfy our efferent purpose. But no one else can read aesthetically—that is, experience the evocation of—a literary work of art for us" (Rosenblatt, L., 2004, p. 1375). RMA allows teachers and students the opportunity to observe and evaluate the student's transactions with the text, and to revalue the student's strengths and abilities to impact the student's self-perception of their reading.

Review of Literature

Through the process of reviewing literature for this study, I have read several inspiring articles on the background, process, and benefits of retrospective miscue analysis. I am explicitly interested in the impact of RMA for struggling elementary

readers. I have explored various studies of RMA and have found that RMA is used with a variety of students such as adolescents, adults, proficient readers, non-proficient readers, and even implemented by parents. Through the course of reviewing literature my main focus was on the process and benefits of RMA for struggling readers. It is extremely imperative that readers are clear on the definition of reading before, during, and even after the RMA process. The way one may perceive reading may correlate with their reading abilities. In all of the studies reviewed, it became clear how reading is defined through RMA and the impact that RMA can have on students' reading abilities and self-perceptions as readers. My review of literature has converged on studies that highly support the use of RMA as an instructional tool and assessment.

Definition of Accurate Reading

The definition of accurate reading varies among readers. Some readers say accurate reading is getting all the words right, reading quickly, comprehending the text, or connecting with the text. Depending on the reader, and the reader's perspective of themselves as a reader, the answers will vary. From the perspective of struggling readers, reading is more about getting words right and wanting to read quickly. Many studies (e.g. Almazroui, 2007; Aspegren & Moore, 2001; Brantingham & Moore, 2003; Ebersole, 2005; Goodman, 1996; Martens, 1995; Vaccaro, 2012) found that struggling readers believe they are poor readers because they read slowly and do not know all the words. Goodman and Marek (1996) emphasize that rather than getting words correct, reading is the state of making sense of the text and connecting with the text using specific strategies. The misconception that most readers have about reading is conveyed by the constant

correction that is made by peers and teachers. Most of the times, when reading aloud, readers do not have the opportunity to self-reflect or self-correct before the correction is made for them. These experiences can lead the reader to focus more on reading the words correctly than making sense of the text, and for some readers, reading could then be unpleasant. However, reading should be about making sense and personally connecting with the text through prior knowledge and strategies.

Many theories such as the constructivist, psycholinguistic, and transactional theory, support RMA in believing that readers understand the reading process and make sense of the text. These theories propose that the reader's knowledge and awareness serves as key in making sense of the text (K. Goodman, 1991; Y. Goodman, 1996). Each reader brings different backgrounds, prior knowledge and strategies, and therefore perceives the text differently. Goodman states that psycholinguistics "involves an interaction between thought and language" while reading (1991, p. 2). Goodman and Marek (1996) support that scaffolding during RMA empowers discussions to help readers discover aspects of their own reading processes. Through implementation of RMA, readers become aware of their abilities and are guided to scaffold and construct meaning while reading.

Constructivist learning is constructing, creating, and developing our own knowledge on the basis of our own experiences in the world. Educators construct classroom lessons and curriculum to ensure that all students are learning the concept that is being taught. However, each student constructs his or her own unique meaning through his or her own cognitive process. The emphasis of RMA is for students to become metacognitively aware of their reading process to convert into a self-directed reader.

Students should view reading as a process of making sense of text (Goodman, 2008). Rosenblatt's transactional theory, and Kenneth Goodman's psycholinguistic transactional theory, stems from the transaction that is made between the reader and the text; through the process of making sense of, and connecting with, text. Rosenblatt and Goodman both suggest that meaning is originated from the transaction between the words of the text and the reader. This theory implies that each reader brings a different set of experiences and strategies to the text that affects the reader's meaning of the text. During RMA, teachers are able to decode such meaning and connect it with the student's background knowledge and strategies. As the teacher listens to the tape recorder of the student reading, it becomes apparent what the reader is bringing to the text and what cues are, and are not, being used. This allows both the teacher and the student to reflect and discuss what is going on in the student's mind while he/she is reading. This theory strongly supports that every reader is not the same, and through the use of RMA the teacher can understand the specific needs that the reader is encountering while reading. Readers construct meaning by using not only background knowledge but also a sequence of cues such as, grapho-phonetic, syntactic, and semantic cueing systems to help construct meaning. These cues are evaluated, analyzed, and discussed at the RMA session to guide readers in understanding their personal reading process and valuing strategies that help them make meaning of the text.

Miscues

All readers make meaning and miscues as they transact with texts. A miscue is an unexpected response to the text that is not printed. Some may refer to a miscue as an error. Miscues occur when readers use a different structure or interpret a different

meaning than the author had intended the reader to make (Martens, 1995). Miscues may also occur when the reader has lost meaning of the text, becomes overwhelmed, or frustrated. Miscues are an extremely important part of the reading process because they help readers strategize during reading transactions (Goodman, 2008). Martens (1995) expresses that every miscue is made for a reason. Some readers will self-correct their miscue when they realize what they said does not make sense within the text. Farrington (2007) suggests children should be taught to act as “reading detectives,” using the three cues of the cuing system. Research shows that readers usually use three types of cues to acquire meaning from text: semantic, syntactic, and grapho-phonetic. (Almazroui, 2007; Beatty & Care, 2009; Farrington, 2007; K. Goodman, 1991; Y. Goodman; 1996).

The semantic cue relates to the readers’ prior knowledge about language and the world. Beatty & Care (2009) state that the semantic cue is active when readers are able to determine whether what they are reading is making sense. When using meaning cues the intent of the message is still the same. For example, if the text says *large* but the reader says *big*, the text meaning is preserved. The question during a RMA session to determine if the student is using a semantic cue is, does it make sense? (Goodman, 1996). The meanings are the same however the reader used a different word to express meaning.

A syntactic cue refers to the structure of the sentence. It is when the reader reads grammatically correct and follows the rule of language (Beatty & Care, 2009). For example, using the substitution strategy, substituting *like* for *nice* in the sentence, I like my bike. The question used during a RMA session to determine if the student is using a syntactic cue is, does it sound right? (Goodman, 1996). Using the substitution of *nice* does not grammatically sound correct, *I nice my bike*. In a study conducted by Farrington

(2007), the miscue analyses showed 22 students out of 23 used the substitution strategy and had more than 15 substitutions in a text of 100 words that were not syntactically correct. The study also indicated a highly common substitution of *a* for *the*. Farrington (2007) expressed that this would call for more practice of high frequency words or simply better attention while reading. In the same study, 19 of 23 students used the omission strategy (leaving a word out of the sentence when it appears in the text), omitting over 13 words in a text of 100 words.

Readers also use a strategy called insertions; this strategy consists of adding words to the text that are not really there. Farrington explains that insertions are the most common miscues; they help the text flow and/or personalize the text to help readers understand meaning (Farrington, 2007, p.2). For example, in the sentence, *she saw a big monster*, the reader may insert the word *very*, reading the sentence as, *she saw a very big monster*. Insertions do not change the meaning of the text in most cases. However, they help readers comprehend the text.

To make sense of text, readers may also use a strategy referred to as repetition. Repetition occurs when the reader rereads a word or sentence. Farrington (2007) states, repetitions help readers figure out miscues by rereading the word or sentence (p.2). Repetitions are not seen as highly significant, but they give understanding to the reader as they try to read the text and comprehend. If the reader reads words that do not makes sense or lost meaning, they may go back to reread the sentence. Repetition is not seen as an error. However, repetition is more seen as self-correction strategies to help the reader make sense of the text. Readers also use visual strategies to help them identify a word as well. This strategy is referred to as grapho-phonics cue.

A grapho-phonetic cue is simply referring to visual cues of words. The oral response will look visually similar to the word in the text but may or may not make sense. For example, a reader may use *was* for *saw*. In Farrington's (2007) study, students reversed the lettering of the word *saw* for *was*. In a RMA session the reader would be asked, does this look right? (Goodman, 1996). If the reader was not using grapho-phonetic cues he/she would be guided to pay closer attention to letters. However, through the process of RMA, students come to understand that proficient readers do not only visually recognize words, but they also make sense of the words within the text (Martens, 1995). Proficient readers may use visual cues, however they will also use meaning cues to assure the meaning of the text makes sense. Integrating all three cueing systems during reading is challenging for most struggling readers. However, through the process of RMA the miscues that the readers are and are not using come apparent to both the teacher and the student. All readers make miscues, but what determines if the reader is proficient is the type of miscues used. Goodman (2008) emphasizes that all readers regardless of ability use the same reading strategies and cueing system to make sense of the text. However, their background, experiences, cultural and linguistic differences impacts the use of their language and cueing systems to make sense of text (Goodman, 2008).

The goal of reading is to use all three cueing systems simultaneously. Research indicates, more proficient readers are more inclined to use a mixture of the three cueing system and attempt to make corrections when sentences fail to sound correctly; less proficient readers rely more on just one cueing system, usually the grapho-phonetic cue which results in words that effect the meaning of the text (Martens, 1995; Beatty & Care, 2009; Farrington, 2007). As Brantingham & Moore (2003) explain, proficient readers

make high-quality miscues (miscues that do not interfere of making sense of the text) and less proficient readers use low-quality miscues (miscues that create difficulties in constructing meaning). In a study conducted by Brantingham and Moore, students of low, average, and high reading levels were examined on the types of miscues they used while reading a text at their instructional level (a level just above the level they are at, text should be slightly difficult for the reader). On average, 80% of students in the high reading accuracy group used miscues that preserved text meaning. Students in the low reading accuracy group demonstrated meaning in 54% of their miscues.

Brantingham and Moore (2003) express that proficient readers rely on the semantic cueing system and less proficient readers usually rely more on grapho-phonics. Less proficient readers tend to read to get all the word right while proficient readers read for meaning. A pre-service teacher, Sophie, expressed her fear of reading all the words correctly in a text as she read to her students, she feared of being corrected by her students (Theurer, 2002). Sophie began to focus more on accurate words than the meaning of the text. Sophie admitted that this is something that has been she has been doing all her life, even through adulthood (Theurer, 2002). Like many students, Sophie, has always thought a good reader gets all the words right when reading. All the other strategic strategies were not revealed to Sophie when she was young therefore she was unaware of the reading process and her own abilities. This is common in struggling readers who have not been guided to understand proper strategies and the reading process (Theurer, 2002). A teacher's experience and outlook on reading can affect the way they teach children to read. RMA sessions should be conducted in order to help both teachers and students be aware of the miscues that are being used while reading. Within the RMA

session a teacher uses a miscue analysis to analyze the readers cues (Goodman, 2008). Theurer (2003) found that the process of RMA encouraged Sophie, an adult, pre-service teacher, to revalue her own reading process and the transitive nature of the reading process. Through the use of miscue analysis a teacher can determine if the cueing systems that the students' are using are balanced or if the students' are lacking the ability, and/or awareness, to use a certain cue in becoming a more proficient reader.

Miscue Analysis

Miscue analysis was first researched and conducted by Kenneth Goodman. It has been a very important assessment and research tool for many teachers and researchers to enrich their understanding of the reading process (Brantingham & Moore 2003). Miscue analysis provides a window into the mind of the reader that allows patterns of miscues and strategies that the reader is using to be revealed. Farrington (2007) defines miscues analysis as an analytical procedure that guides readers to comprehend using oral readings and running records (recordings of miscues of a text) to determine what strategies are and are not being used through the analysis of miscues. Once the usages of miscues are revealed it enables the teacher in helping the student understand the reading process. Literature (e.g. Goodman, 1996; Goodman, 2008; Vaccaro, 2012; Farrington, 2007) expresses the analysis of students' miscues allows the teacher and/or researcher to build and expand on reading abilities, to help students become better readers. Miscue analysis does not involve the reader in analyzing and discussing his or her own miscues (Brantingham & Moore, 2003). However, through the process of RMA a revealing session is conducted that invites the readers to reflect on their miscues and become metacognitively aware of their own reading process (Brantingham & Moore, 2003).

RMA is very insightful for both teacher and student.

Throughout RMA sessions, the teacher conducts a reading session using running records and a miscue analysis of the student's reading, then discusses the miscues with the reader. Goodman (1996) states that during discussion about the miscues, the teacher helps the reader discover the reason for the miscue and guides them to use strategies to resolve any problems encountered with the text. Goodman (1996) describes the ideal structure of RMA allows sessions to be recorded and analyzed so any listener can hear the tape and stop it when an unexpected response is heard to discuss what was going on in the readers mind when the miscue occurred. Goodman also emphasizes that miscues are not mistakes rather they are unexpected responses that occur for a variety of linguistic and cognitive reasons (Goodman, 1996, p. 605). Miscue analysis allows teachers and readers to understand the reading process and evaluate strategies that may need further assistance. For over twenty-five years, Ken and Yetta Goodman have studied reading miscues to understand the linguistic and conceptual insights of the reading process (Goodman, 1996). Researchers (Beatty & Care, 2009) have stated that miscue analysis is complex and time consuming. However, miscue analysis outlines the reader's personal reading process and their use of the cueing system. During retrospective miscue analysis teachers are able to slow down the process of reading and guide the student to be aware of their unconscious strategic process of reading. The strategies aligned with the theory behind retrospective miscue analysis occur without conscious awareness. RMA reveals the metacognitive process to the reader, and guides the reader into a more directive process of reading; not just to accurately read the words but also to comprehension. Many studies (Almazrioui, 2007; Aspegren & Moore, 2001; Brantingham & Moore, 2003; Kabuto,

2009; Vaccaro, 2012) have been conducted and have proven that the use of RMA sessions have increased students' comprehension as well guided them to revalue themselves as readers.

Comprehension

The process of retrospective miscue analysis has led many researchers, teachers, and students, from word focus reading to a comprehensive focus of the text. Many researchers (Almazrioui, 2007; Aspegren & Moore, 2001; Brantingham & Moore, 2003; Kabuto, 2009; Vaccaro, 2012) have come to the conclusion that RMA is an empowering instructional strategy that helps readers reflect on their reading to increase their ability to make meaning and comprehend text. In a study conducted by Gina Vaccaro (2012), a struggling second grade reader, J.J was chosen to work with through the implementation of RMA. J.J. only knew the technique of decoding and stretching out sounds. This got in the way of J.J's comprehension abilities and negatively impacted his reading perception. Goodman (2008) emphasizes that sounding out or relying solely on grapho-phonics is not at all a good strategy. For four months J.J and four other students were given the opportunity to be a part of the RMA process in hopes to broaden their understanding of reading, be aware of their strengths and weaknesses as readers, strengthen comprehension, and increase their confidence as readers (Vaccaro, 2012). By evaluating and discussing miscues with the readers, researchers (e.g. Goodman, 1996; Brantingham & Moore, 2003) indicate that readers become aware of the strategies that they are and are not using and can redirect themselves into becoming meaningful readers. By analyzing the miscues while J.J listening to his-self read, he began to recognize the strategies he was and was not using. He paid closer attention to meaning and began to notice when he

didn't make sense. By the end of the study, J.J was fully aware when meaning was lost or if what he read didn't make sense. Kabuto (2009) explains that there are two processes of comprehending: a reader makes sense of the text by comprehending the meaning while reading, and the over all retell of the story is the process of comprehension (Kabuto, 2009, p. 217). A reader must have the strategies to comprehend meaning of the text as well as have a comprehension of the over all story, retelling details of the passage in a sequence manner.

Through the implementation of retrospective miscue analysis the teacher is constantly asking comprehensive questions to guide the student to think comprehensively. Does that make sense? Does that sound right? Does that look right? Therefore, the reader adapts to the habit of reassuring comprehension while reading. As mentioned, readers, especially struggling readers, tend to focus more on oral production rather than comprehension (Almazroui 2007, Goodman, 1996; Kabuto, 2009; Brantingham & Moore 2003; Vaccaro, 2012). A woman by the name of Carol volunteered to participate for a Family RMA session conducted by Kabuto (2009). Carol emphasized her concerns for her daughter Christie as a reader. She felt that Christie focuses more on oral production than comprehension while reading. Christie was a struggling reader and struggled to retell stories after reading. Kabuto's study showed that Christie did not balance the use of the cueing systems or strategies, which led to her comprehension problems.

This seems to be the case in most struggling readers, such as in the case of a juvenile adolescent, Dan. Dan is in a juvenile correction facility and receiving educational practices each day. His reading instructor noticed that Dan was reading four

grade levels below where he should be and he had limited strategies while reading (Aspegren & Moore, 2001). Dan and Christie both were only using low-quality miscues (grapho-phonics, sounding out) while reading. Brantingham & Moore states that low-quality miscues creates barriers to meaningful comprehension, during RMA readers are encouraged to see their reading process as strategic (Brantingham & Moore, 2003, p 467). However, by the eighth week of RMA sessions Dan gained insight about his own reading process and the strategies that he should use to become a more proficient reader. Aspegren & Moore explained that Dan had increased by 25% on his comprehension level. In the study conducted by Brantingham & Moore, a third grade boy named Nathan also became selective in using the cueing system to make sense of text. The influence of RMA helped Nathan move from 40% comprehension of first grade material to 83% comprehension of third grade material. The commonality of these cases is the impact of RMA on the students' reading comprehension abilities and the increase of strategic strategies to read accurately.

Without the implementation of RMA the struggling readers of these cases would still have a negative perceptions about reading and possibly about them-selves as readers. Martens (1995) explain that readers who experience difficulties are often resistant to and disinterested in reading. Many struggling readers believe reading is a complex process and that they are incapable of learning, which destroys their effort to read (Marten, 1995, p. 40). The most important aspect of RMA is the positive reflection of self-perception the readers gain.

Revaluing

Goodman (2008) supports that RMA helps readers revalue themselves as

“thinking” readers who use several strategies and their personal knowledge to be great readers. It has been proven that RMA greatly impacts the motivation, self-perception, and reading achievement of struggling readers (Almazroui 2007, Goodman, 1996; Kabuto, 2009; Brantingham & Moore 2003; Vaccaro, 2012). It can be extremely difficult to change the attitude and perspective that one may have about their self. It is valuable for teachers to know the attitudes, personalities, and self-perception of their students, especially in learning, more importantly in reading. Other than observations and a close relationship with students, The Burke Reading Interview can be used to discover how students feel about themselves as readers (Watson & Burke, 2005). The interview consists of questions that evaluate how the student feels about reading, about themselves as readers, and what they think defines a “good reader”. Without this information teachers will be unaware of the attitudes that lie within their students and the negative and self-conscious perceptions the students may have will persist and possibly continue to grow if unnoticed. These students may continue to have unsuccessful experiences with reading and unknowledgeable of the reading process. It is important for teachers to know this information and know that there is a reading technique that could completely change their students’ self-perception and help them revalue themselves as readers.

Retrospective miscue analysis is a strategy to help students come to value the reading process while revaluing their reading abilities and success (Goodman, 1996). As students reflect on their own reading process they begin to realize they are better readers than they had thought. Goodman (1996) termed this process “revaluing”. Goodman explains that as the students revalue themselves they become more confident in their reading (Goodman, 1996). Martens (1995) states that the readers who are struggling are

experiencing difficulties because they are using and constructing faulty, inadequate, views of the reading process (Martens, 1995, p. 41). Several studies (Almazroui 2007, Ebersole, 2005; Goodman, 1996; Kabuto, 2009; Brantingham & Moore 2003; Vaccaro, 2012) have proven and explained the success of many students who have revalued their reading through RMA. In the study with J.J (struggling second grade reader), after the eight weeks of RMA he was asked how he felt about himself as a reader. Vaccaro explained that J.J had a huge smile on his face and said “Great! I know I am getting better, and I am missing less words” (Vaccaro, 2012, p. 10). Martens states, readers have intuitive strategies, when they become aware of these strategies they become more confident as readers (Martens, 1995, p. 41). The more confident students become, the more risks and strategies they may try to help them read and comprehend.

Nathan (third grade, struggling reader) also became more confident in his reading and after the RMA study it was proven that he revalued his-self as a reader. Before the RMA study Nathan told his teacher that he was not a very good reader and he was embarrassed to read aloud in class (Brantingham & Moore, 2003, p. 466). His teacher described Nathan as a child who lacks confidence and motivation when it came to reading. She explained that it was obvious that he was discouraged and unhappy with his reading and it was affecting his classroom behavior. By broadening his understanding of the reading process and revealing his strengths and strategies he could use through the process of RMA, Nathan’s behavior started to change and he started to volunteer to read in class and to participate in class discussions about readings. In the exit interview, Nathan described himself as a “pretty good” reader who wants to get better (Brantingham & Moore, 2003, p. 472). Goodman describes RMA as a procedure that develops

understanding of the reading process and views about ones self as a reader, revaluing one's reading abilities (Goodman, 1996, p. 602). Goodman also supports that when students revalue themselves as readers they often become better readers.

Michele Ebersole, a researcher who conducted a study using the implementation of RMA, chose one of his struggling middle school students in hopes to redirect his self-perception of reading and education. Kyle, the students on whom Ebersole chose to conduct the study, perceived himself as a poor reader who was embarrassed of reading aloud and felt anxiety when he has to read in front of his peers. Through observations and a close relationship with Kyle, it was apparent he lacked confidence and needed one-on-one work. In the Burke Reading Interview, before the RMA sessions, Kyle viewed reading as "pronouncing words correctly and no errors" (Ebersole, 2005, p. 2). After many RMA sessions, in Kyle's exiting Burke Reading Interview his attitude and perspective of reading had changed. Ebersole states, "Kyle expressed happiness and when asked how do you feel about yourself as a reader? Kyle replied, "Happy, I know stuff I didn't know before about reading, before I didn't care about reading because I could hardly read. I think I am going to continue reading and improving in my reading" (Ebersole, 2005, p. 7). Kyle's self-perception had changed and he began to revalue reading.

Researchers, Eric Paulson and Pamela Mason-Egan (2007), supports that RMA is the concept of revaluing, that it guides readers to gain a new understanding of their strengths and the reading process. RMA gave Kyle, and many other students from previous studies, the opportunity to reflect upon his miscues and the abilities he has to use strategies of the cueing system to understand his own reading process and become a

successful reader. Paulson & Mason-Egan (2007) states, “that a negative self-concept impedes learning and that motivation is important for success” (Paulson & Mason-Egan, 2007, p. 4). It is important that students learn to value not just the reading process but also themselves as readers. Through the use of RMA students have the opportunity to not just become proficient readers but life long readers.

In the review of literature I have come across several commonalities of the RMA process. One commonality is that struggling readers believe that reading is the process of getting words correct. With the support of the constructivist, psycholinguistic, and transactional theory, reading is much more than getting words correctly. It’s the process of connecting background knowledge with strategies to make meaning and to comprehend the text. The RMA instructional strategy uses miscue analysis to analyze students’ miscues while reading to help students become metacognitive about their reading abilities to increase their abilities in reading. In the cases of Sophie, Dan, Christie, and Nathan, it was proven that with the use of the RMA strategy, struggling readers have increased their ability not just read words correctly but to comprehend what they are reading to make sense of the text and the overall story. Also, these studies have proven that RMA has an impact on the students’ self-perception. Readers began to revalue themselves as readers and understand that reading is a process of making sense. Once students began to have this awareness they become more confident in their abilities. This process led not just to positive results but also successful readers. All of the literature that I have reviewed has provided me with laudable information that will be of value to my study.

Methods

The question that guided my action research project was, *How does implementation of Retrospective Miscue Analysis impact the reading achievement of struggling second grade readers?* In choosing the students that were participants in this study I considered students who were below grade level and were struggling readers. In particular, I chose three students who were just below grade level and one student who was far below grade level in reading. The four students with whom I chose to implement RMA were students who were embarrassed of reading aloud and seemed to think they were not “good” readers. Three of the four participants of the study are students who I notice try hard to read accurately but they lack strategic abilities to do so. The fourth participant of the study is a student who is far below grade level reading, ashamed of his reading process, and seems to be negative about reading and about himself as a reader. My intentions were to help reassure all four students of their capabilities and help them revalue reading and themselves as readers.

Once I received parental/student consent I began my study by determining each students’ independent reading level using a Running Record. An independent level is a level at which a student can read independently with little or no help, reading at 95%-100% accuracy. After determining the students’ exact independent reading levels, the first RMA sessions were individually conducted. At the first RMA session I explained RMA’s purpose, schedule details, and administered the Burke Reading Interview and a Primary Grade Attitude Survey. Both the Burke Reading Interview and the Attitude Survey consists of questions, the students’ answers that were given gave me insight on the students’ feelings, attitudes, and thoughts about reading and themselves as readers.

After the first introduction session, sessions were conducted twice a week for six weeks, alternating from 30-45 minutes each session.

Leveled books at the students' instructional reading level, slightly above their independent level, were specifically chosen for each student. The instructional level is a text that is a little bit challenging. When they read a text at their independent level they read it at 95% accuracy, they read the text quite easily with little to no help, and make few miscues. The instructional level however, is a level just above the independent level. This level is a little more challenging; it provides the teacher insight on the student's strategic abilities. It was important that the students read at their instructional level so strategies they were and were not using when they came to a word they did not know were apparent. I also was curious if they were able to comprehend text that is slightly difficult for them to read and what strategies they were using to help them comprehend.

The first session of every week consisted of the student reading an appropriate leveled book that ranged from 400-900 words, this session was referred to as the RMI (Reading Miscue Inventory) session. As the student read I marked miscues on a Running Record sheet to record and to later use for my data analysis. The Running Record indicated the student's miscues, accuracy, self-correction, and fluency. An audio recorder was used to record the students read so that they can later listen to their own reading as well as to assure all miscues and conversations were documented. This helped me confirm that all Running Records and themes that I noticed were accurate.

After the student had read the book he/she would then retell the story. Using a rubric I would score the student's comprehension ability. The comprehension rubric consisted of numerical scoring for parts of story structure such as, did the reader recall

characters, the setting, the plot, solution, etc. The student would receive a 1 indicating a poor description, 2 fair, 3 good, or 4 outstanding. Each RMI session usually took 30 minutes and was completed after the child's retelling of the story. After each RMI session I recorded any observations, comments, and notes in my double entry journal. For example, I would note if the student made any comments while reading, what strategies they used on words they were unsure of, their attitudes, etc. I played the audio recorder to listen to the child read again to assure all miscues were marked correctly. I then analyzed the Running Record using a Miscue Analysis to decide which high level and low level miscues we were going to discuss in the following RMA session.

The following day, after the RMI session, the Retrospective Miscue Analysis (RMA) session was conducted. This session was usually about 45 minutes. During the RMA session we had two audio recorders, one was used to play the student's prior reading and the other was used to record the entire session. I organized the session to discuss both the student's strengths and his/her miscues. It is extremely important the student's high level miscues (strengths) are acknowledged and not just his/her low level miscues (strategies they were not using). We began the session talking about the student's comfort and feelings about the prior reading (Was it hard? Interesting? etc.) We then would discuss the student's high-level miscues, strengths and strategies they used while reading. This allowed the students to recognize his/her own growth and progress as a reader. After discussing the student's strengths, we played the recorder and together we listened to his/her prior reading from the RMI session. I preplanned when I was going to pause the recorder to discuss the miscues that were read. In doing so it allowed us to have an in depth conversation about the miscue. Depending on which cueing systems were

used to cause the miscue, we would stop the tape and discuss the student's thoughts and strategies when miscuing at that specific moment. I would ask the students "Why do you think you said that?" or "What could you have done differently?" I also guided the student with questions such as "Does what you read look right?" "Did what you read make sense?" "Does what you read sound right?" These questions helped the student gain insight on strategies to implement when reading. After the first four sessions, when I felt the students were comfortable, I let them pause the recorder themselves and led our discussions. When they heard themselves make a miscue they paused the recorder and led the discussion by stating with what they heard, and what miscue was made, and why they made that miscue, as well as what strategies they could have used. This allowed the students to pay close attention to their reading and allowed them to analyze their own reading process. This was beneficial to the students because they started to recognize their miscues right away and self-correct as they were reading.

After the six weeks of assessment and analysis of the data, I examined the data for themes and anything particular that stood out. I analyzed each students' results, comparing them to prior assessments before the RMA sessions to see if there was any common themes among the students' growth. I also compared the data of the selected RMA students to the students who did not receive RMA sessions and who were at similar levels of the RMA students before the study. I wanted to compare the growth of independent levels, strategies used, and comprehension of the students who received RMA and students who did not. I chose to do so to see if RMA sessions had a major impact on students reading abilities and in what ways it influenced readers.

Results

Retrospective Miscue Analysis (RMA) has proven to be a very successful reading strategy for struggling readers' reading achievements. The overall data collected indicates that RMA has many positive effects on a student's reading achievements. Through the course of this study, and a thorough analysis of the data, I noticed both commonalities among students' results as well as individual aspects of achievement. To ensure accurate findings, data used to measure students' reading achievements were triangulated using the following sources: Running records, anecdotal notes, Burke Interview. As supported by Yetta Goodman (1996), Eric Paulson, and Pamela Mason-Egan (2007), In a thorough RMA process, readers are engaged in exploration, reflection, and evaluation as a means to gain insight, set goals, monitor progress, and make necessary changes in their reading action to become a more proficient reader. Through the process of analyzing my data I have concluded that the statement above is true in the case of my four students.

In the beginning of the RMA process, data shows that all four students limited their reading abilities by only using one strategy while reading; the strategy of sounding out words. When they came to an unfamiliar word in the text all four students would sound the word out and continue reading whether what they read made sense or not. Or, they would look to me to give them the correct answer. Struggling readers tend to do this often; they don't know a word so they are quick to look up for the answer. Most teachers, including myself before I became familiar with RMA, are guilty of giving the students the correct reading before allowing them to figure it out for themselves. This only fuels the student's intent of giving up and

not trying for themselves. In doing so, the student never learns appropriate strategies and never becomes a proficient reader. However, through the process of RMA, data proves that the four participants became more aware of their miscues as they read and learned to use multiple strategies while reading to make sense, reflect, and self correct their reading.

The triangulated data proves that all four students began using multiple cues such as semantic, syntactic, and visual cues by the second week of their RMA sessions. Learning the cueing system (visual, semantic, syntactic) was a great impact on the students' abilities to read appropriately. Students began stating "That doesn't make sense" or "That doesn't sound right to me". In looking at the data, after the second week, 85 % of participants' miscues were made to maintain meaning. They began to self reflect on their reading as they read and also when they listened to themselves on the recorder. Hearing one's self on the recorder was substantially beneficial to most all of the participants. While listening to themselves read they reflected on miscues they heard and were unaware of when reading. They reflected on cues that were used as well as cues that were neglected while reading. The triangulated data is evidence that the participants changed from reading-just-to-read to reading-to-comprehend and make sense of the text within the first three weeks of the study. In our discussion throughout the RMA process it was emphasized that one must make sense of the text while reading, otherwise what is the purpose of reading? Although the students still made miscues while reading challenging texts, they integrated various cues that helped them make sense of the text. For example, they no longer just used visual cues to sound out the words. They

began to use semantic and syntactic cues to make sense of their reading. They began to demonstrate use of meaning to aid their automatic decoding skills. Through the completion of running records and anecdotal notes during and after each session, data indicates that students become self-reflective with their reading process and more aware of their miscues. By the third session the participants were making several comments and self-corrections when they were aware of miscues. In doing so, they began to incorporate multiple cueing systems to self-correct their reading.

Through the interpretation of the data it is apparent that each student partook in the process of self-monitoring his/her own reading and self-correcting his/her own miscues. The application of self-correction throughout this study was astonishing. All four students did not self-correct during their pre-RMA reading session. Each student made several miscues using only one cue and did not think to self-correct which interfered with comprehension of the text. However, over the six-week study period each student made fewer miscues each week, self-correcting at least 50% of their miscues by the fourth week. Through the integration of multiple cues when confusion arose, students were able to cross-check and self-correct when it was appropriate to do so. One of the participants began self-correcting all of his miscues, reading his last book at 100%, and to mention, it was three levels higher than the level he began the study with. Each participant began to pay closer attention to the story meaning and self-corrected miscues that did not correlate with the story's meaning or the correct spelling of the word. By using multiple cues the students were able to self-correct words that they miscued. To ensure meaning the students would then go back to the beginning of the sentence and reread. In

listening to the audiotapes, and looking at the running records and anecdotal notes, it is evident that students continuously reread sentences for clarity after they self-corrected their miscues. Rereading became a norm across the weeks of this study. This resulted in more accurate reading as well as increased reading levels.

In looking at the triangulated data, RMA is proven to be successful in helping students' reading achievements by increasing their accuracy rate and reading levels. Each student's book level and accuracy rate steadily increased simultaneously each week over the six-week study. It was remarkable that each week the students' accuracy level was above 95%, reading at a higher level each week. This indicates that the participants were reading a higher level each week at an independent level. Before beginning the study each participant's independent level, (reading a text at 95-100 %) and instructional level (reading a text at 90-94%) was identified to determine to the overall impact of RMA. Data signifies that each participant's independent reading level along with accuracy level significantly increased with each RMA session. At the end of the study, each participant was reading three to five levels higher at a higher accuracy rate than they were before the RMA sessions. However, what did not increase was the student's fluency. The running records indicate that fluency fluctuated each week between all four participants. This was mainly due to the fact that they were reading challenging books that required in depth skills and focus that required more of the students' cognitive resources. Another reason why fluency was not increased is due to the developmental level of the students. They are in the early reading process stage of mastering decoding

skills, cues, and fluency all at the same time. Though the improvement of their reading skills did not impact fluency, it did positively impact their comprehension.

Over the six-week study, data indicates that the participants' comprehension marginally improved as their reading skills developed. The first two weeks of the study all four participants gave "fair" to "good" story retells. Meaning, story structure such as characters, setting, plot, solution, details etc. may have been missing from their retell. In the beginning of the study, most of the participants lacked detail and/or events when retelling the stories even with several promptings. The comprehension retell evaluations prove that in some areas, such as characters or events, the participants were unable to recall during the retell. In looking at triangulated data it is evident that the misinterpretation or unrecalled characters or events were due to the miscues that skewed the participants comprehension. However, in analyzing the data, it is apparent that as the students read more accurately and appropriately they also began to give more detailed retells, including various aspects of story structure. By the fifth and six week, students scored "good" and/or "outstanding" in most areas on the comprehension rubric, with minimal prompting. As the participants became more aware of their progress in reading and comprehending, they also began to revalue the reading process and themselves as readers.

The participants were extremely excited and proud of themselves knowing how well they were doing each week. It was evident through discussions, observations, and the Burke Interview that the participants began to revalue reading and themselves as readers. One participant in particular constantly bragged

that other teachers were seeing his progress. All participants showed curiosity of their reading level and the notes I took during each session. Noticing their curiosity I began to share with them my notes, emphasizing their strengths and discussing future suggestions. I also began to inform them when they read higher than 95% and when they moved up a level higher. In looking at the data and listening to the recordings it was clear that the students became confident and excited about their progress. They began telling me, "this is fun, I like reading with you." As the students began to shift their views of the reading process, self-reflect and correct by examining their miscues, they began to gain insights about themselves. Yetta Goodman believes that revaluing is the process of the reader appreciating their strengths and recognizing the productive strategies they can and are using to be a proficient reader (Moore & Gilles, 2005). Through the interpretation of the pre/post Burke Reading Interview and the Attitude Survey, it is evident that the participants are more aware and confident of their reading abilities post RMA sessions.

In analyzing the data of this study I noticed several commonalities among the participants. However, each participant individually made progress in their own specific ways that impacted their reading achievements. The participants chosen for the study were struggling students who were below grade level reading. At the start of the study in April, grade level reading for second grade was a level 22, reading at 95% accuracy (independent level) and 50 words per minute. However, the four participants that were chosen for the study were reading between the levels of 12 and 17 at 95% accuracy, this is their independent level, however it is not grade level.

In analyzing the data I was able to determine and distinguish the impact that RMA had on each student's individual reading achievements. Through the course of the study I gathered an immense amount of data that proves the significance of RMA for each individual participant.

Colby

Colby is one of the students who was just below grade level. He is a student that tries hard but was struggling with reading. A pre-RMA reading proficiency test determined that Colby was reading a level 17 at 95%. This indicates that the participant's instructional level is about a level 18 (slightly above the independent level). This is the level of the text that was used for the first RMA session with Colby. In the first RMA session it was evident that Colby had limited reading strategies. He sounded out words by focusing on grapho-phonetic aspects and made up words in place of words he struggled to decode. In listening to Colby read, pre-RMA, I noticed that he read fast and carelessly, skimming words with no use of self-correcting. However, as soon as the second session of analyzing and discussing his used and neglected miscues, he began to integrate multiple strategies and self-correction during his reading. While reading, when he would come to a word that he struggled to decode he would state, "That didn't make sense" and then try to decode again and reread the sentence. Colby became more aware of his miscues and began to self-reflect on the cues that helped him make meaning of the sentence. By the third session Colby was no longer miscuing words that did not make sense, he was determined to make sense of the text as he read. In looking at the triangulated data it proves that Colby made miscues that maintained text meaning 61% of the time

through the course of his readings. In looking at the triangulated data: Running records, miscue analysis, and anecdotal notes, it is evident that Colby self-corrected one of every two miscued words by the end of the study.

As Colby listened to himself read and guided our discussions, he expressed confidence and showed that he was proud of his accomplishments. Every week, if the participants read at 95% accuracy I would challenge them with a higher-level text the following week. Every week Colby read at 96%-99% accuracy at a higher level each week. By the fourth week of the study, Colby's reading development teacher called to share with me that Colby has impressed her with his improvements in reading. A week later, during a PLC meeting, we decided to take him out of his reading group and place him into a higher reading group. This was exciting news not just for Colby, but his mother and classroom teacher as well. Colby has now shown great interest in reading, he always asks if he could read his "chapter book" during any free time we have in class. A piece of Colby's writing was collected as data for the study as well, the writing was on "What I learned in 2nd Grade". In his writing he stated, "I learned how to read better because Miss Williamson has helped me. I now love to read." This was not only enlightening to hear but also proves that the RMA sessions had greatly impacted Colby's perspective on reading.

In comparing his pre-RMA data and post-RMA data, it is obvious that Colby's reading perspectives had positively changed and he began to revalue himself as a reader. In several pre-RMA interview responses he stated that he was not a good reader. He also stated that he would like to get more words right when he reads so

he could become a better reader. In the post-RMA interviews the participant said. "I think I am a pretty good reader, well I know I am getting better!" In another survey, pre-RMA, Colby chose a sad face to describe his feelings about reading. After the six-week RMA sessions Colby took the same survey, this time coloring the happy face to indicate his feelings about reading. Colby's confidence was at a peak at the end of the study. Colby's accuracy percentage, book level, and self-correction rate also increased over the time of our six-week sessions. In looking at Figure 1 it shows Colby's reading abilities both pre and post RMA. In looking at the chart one can notice the significance of RMA on Colby's reading achievements.

Figure 1

	Book Level Read and accuracy percent	Total Miscues	Number of each type of miscue (Meaning, Syntactic, Visual) M-S-V	Self-Corrections made during reading
Pre-RMA	18 (91%)	17	2-0-16	0
Post-RMA	21 (99%)	6	3-3-3	5

Bella

Bella is a second grade student who was just below grade level reading before this study. She is very shy yet determined little girl. She tries her best in every subject but is bashful to read aloud due to the lack of her confidence in her reading abilities. The pre-RMA running records indicated that Bella's independent level was level 17, three levels below grade level. In looking at Bella's pre-RMA

running record, miscue analysis, and interviews, it is clear that she was only familiar with two reading strategies, sounding words out and recognizing spelling patterns. Bella is a reader who reads quick and smoothly but when she comes to a word she does not know she looks up at me to give her the correct word or would mumble and keep reading. In looking at the data it is obvious that Bella did not integrate multiple cues during her reading. All of Bella's miscues, pre-RMA, were focused on grapho-phonetic aspects. She would simply try to sound out the unknown words without making sure if the word she said made sense or even if that word was grammatically correct. As quickly as the second RMA session, Bella was making fewer miscues and using multiple cues to accurately read the text. The opportunity to listen to herself on the recorder was very beneficial for Bella. She specifically would tell me "Oh I read that wrong, it didn't sound right." Or "I should of reread that sentence". Bella not only was using multiple cues and rereading during our RMA sessions but she was also utilizing her skills in other classes. Her reading group teacher recognized her improvements and gave her praise. Bella's response was, "I'm used to going back and rereading, that is a skill Miss Williamson taught me. It really helps me." She began to self-reflect and become more metacognitive about her reading, not only during our RMA session but in other classes as well. By the third week she no longer looked to me when she came to an unknown word, she began integrating the multiple cues we had discussed in our prior RMA session. In looking at the data, Bella began self-correcting her miscues. The data show that by the fourth week Bella was self-correcting every one of three miscues made during reading. Many of Bella's miscues were due to the lack of background knowledge she

had about the topic of the book. For example, she read a story about a bulldozer (tractor), she read bulldozer as builder, she knew it didn't quite make sense in context but she wasn't sure what the word could be from looking at the pictures. However, she still continued to steadily increase her book level and accuracy each week. By week six Bella was reading a level 24 at 99%, five levels higher than when she started RMA, as well as reading the text at almost 100%. As Bella's book level and accuracy increase so did her comprehension. In looking at her comprehension rubrics it is obvious that Bella's retells greatly improved. The first two weeks of RMA Bella was scoring 1's (poor) and 2's (fair) on the comprehension rubric in most areas. It was noted that Bella read quickly but couldn't recall story structure during retells. This may have been from her lack of background knowledge as well. However, by week four Bella began giving more detailed retells, scoring 3's (good) and 4's (outstanding) on the comprehension rubric.

Another personal impact that RMA had on Bella is that it positively changed her perspective of reading and herself as a reader. The pre-RMA Attitude Survey and the Burke Interview indicated she was embarrassed and a bit nervous to read aloud at school and at home because she thought she wasn't a good reader. Post-RMA data shows that her self-perception increased, she indicated that reading can be hard but she doesn't mind a challenge. Her post-RMA Attitude Survey showed more happy faces than sad faces about reading. In a writing sample from class Bella wrote, "I love reading with Miss Williamson. I learned to read faster and correct my-self when reading. I am now a better reader." It is clear that Bella shows more self-confidence

in her reading and is aware of her great abilities as a reader. In looking at figure 2 below, one can see the significance of Bella's improvements.

Figure 2

	Book Level Read and accuracy percentage	Total Miscues	Number of each type of miscue (Meaning, Syntactic, Visual) M-S-V	Self-Corrections made during reading
Pre-RMA	19 (96%)	16	1-1-14	1
Post-RMA	24 (99%)	9	7-3-6	6

Omar

Omar is a second grade English Language student who also was just below grade level reading. His pre-RMA running records indicated that Omar was reading a level 20 at 93%, not quit at his independent level. Omar's reading strategies pre-RMA was the same as the other participants, sounding out. Most of the time, the unknown words that Omar read did not make sense and/or were not words from the English language, or were made up words. Pre-RMA running records, miscue analysis, and observation notes show that Omar only use grapho-phonetic cues and rarely made sure that the what he read made sense and/or was grammatically correct. Omar also showed no actions of self-awareness or self-correcting. However, by the second RMA session Omar began using multiple cues and self-correcting right away. Omar really liked to hear his recordings and did great at stopping the tape on his own to lead our discussions. Omar began using semantic and syntactic cueing

more than 70% of the time over his course of readings. He made comments while reading, trying to sound out unknown words such as, “That’s not a real word” and/or “That didn’t make sense to me”. When he made such comments, he would go back to reread the sentence or passage. Omar would constantly reread to confirm meaning every time he would self –correct or lose meaning during reading. He told his reading group teacher, “When I read it has to make sense to me. Miss Williamson told me that is really important to do when reading.” It was obvious that Omar was now reading for meaning rather than to get the words correct. As his book level and accuracy percentage simultaneously increased so did his self-correction rate. By the fourth, fifth, and six week Omar was making almost no miscues, the miscues that were made were self-corrected 98% of the time during his last couple sessions. In Omar’s last three RMA sessions he read a higher text each time, at almost 100% each time. This was such an improvement compared to his Pre-RMA results. Omar also began to comprehend the text better, giving a more clear and detailed retell. Omar’s comprehension scores remained to be 3’s (good) in most all areas.

In both pre/post RMA Interviews and Surveys Omar stated him-self to be a good reader. However, pre RMA interview and survey responses specifies that even though he thought he was a good reader he did not like to read aloud and wasn’t comfortable with answering questions after reading. In looking at the triangulated data (observation notes, comprehension rubric, interview and surveys), it is clear to state that Omar’s confidence increased. Post-RMA interview and survey responses indicated more “happy face” responses rather than “sad faces” when asked if he likes to read aloud in class and if he likes to be asked questions after reading. It is

obvious that Omar is becoming more comfortable and confident with his reading abilities. Omar showed lots of appreciation at the end of the study, thanking me several time in helping him to be a better reader. In looking at Figure 3, It is obvious that Omar has made substantial improvements.

Figure 3

	Book Level read	Total Miscues	Number of each type of miscue (Meaning, Syntactic, Visual) M-S-V	Self-Corrections made during reading
Pre-RMA	20 (93%)	27	2-0-25	0
Post-RMA	24 (100%)	3	2-2-1	3

Nathan

Nathan is also a second grade student, however he is a student who was far below grade level reading. Nathan is a student who doesn't really enjoy reading and becomes frustrated with his reading process. I chose Nathan in hopes to change his perspective and to help him improve his reading achievement. Nathan was reading a level 12 at 95%, pre-RMA. This indicates that he was an at risk students who was reading at the first grade level. Like the other participants, Nathan's only strategy used while reading was sounding out words based on grapho-phonetic aspects of the word. He is a student who shows no interest in reading and become frustrated when he comes to a word he does not know. Most of the time Nathan would get frustrated and skip the word or replace the word with another word that he thought could go

within the sentence. He made comments such as, "I know that's not the correct word in the book but that's what it should say." Over the course of RMA sessions Nathan began using multiple cueing systems while reading instead of making his own words fit into context. In looking at the running records, miscue analysis, and interview responses it is apparent that Nathan began to use semantic and syntactic cues after the third RMA session. When reading he began to make sure what he was reading was the grammatically correct word. We practiced syntactic cues such as, "Does it look right?" By the second week of RMA Nathan was not only integrating a variety of cues but also self-correcting his miscues. Through the course of the study Nathan would self-correct 41% of the time. Nathan became more self-aware of his miscues however, his fluency percentage decreased as the text became more challenging. Because Nathan lacked basic phonic skills such as vowel diphthongs, and being aware that most letter such as the letter "C" can create two sounds /k/ and /s/, it made it more difficult for him to decode. Also, like most elementary students, he confuses the letters "b" and "d" frequently. Nathan's miscuing seemed to influence his comprehension. For example, he misread the word "snowing" for "snoring" and was unable to give a detailed and accurate retell. However, as he began to self-correct his miscues he became more able to comprehend during reading. Nathan's accuracy and book level also slowly increase through the course of the study. By the sixth week Nathan was reading a level 14 at 98% (two levels higher). This is still below grade level reading but was a great improvement for Nathan. Having known of his improvements brought him excitement. He didn't show excitement much, especially listening to himself of the recorder. He would self-correct his miscue

aloud after hearing himself on the recorder, then want to fast forward the tape. However, when I informed him of his significant progress of using multiple strategies and increasing his book level he began to smile. In looking at Nathan's responses to the Burke Interview and Attitude Survey it is obvious that he incorporates multiple cues while reading as well as became more confident in reading challenging text. In looking at both pre and post Survey responses, he had changed his "sad faces" into "straight faces" for questions that refer to reading with challenging stories and reading at home or with a friend. This indicates that he has slightly changed his confidence about reading. In viewing Figure 4, one can see the improvements Nathan has made during the RMA process

In comparison to students at the same levels of all four participants, the students who did not receive RMA sessions had very different pre and post results. As the four participants of the study were receiving RMA sessions, the other students were not receiving any extra help other than their normal classroom instructions. In viewing Figure 4, one can see the improvements Nathan has made during the RMA process.

Figure 4

	Book Level	Total Miscues	Number of each type of miscue (Meaning, Syntactic, Visual) M-S-V	Self-Corrections made during reading
Pre-RMA	13 (92%)	21	2-0-18	2

Post-RMA	14 (98%)	11	8-3-11	7
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In comparison to students at the same levels of all four participants, the students who did not receive RMA sessions had very different pre and post results. As the four participants of the study were receiving RMA sessions, the other students were not receiving any extra help other than their normal classroom instruction. I chose four students who were not receiving RMA that were at the same independent level of my participants, pre-RMA. In looking at my data my RMA students increased their book levels between 2-5 levels higher from the level they were reading before RMA. The students who did not receive RMA increased their accuracy by 2 or 3% and only improved one level higher within the six-week period. The students who did not receive RMA also did not integrate multiple cues while reading. Most all of the non-RMA students still used only one cue when decoding. All four students, who did not receive RMA, also neglected to self-correct and/or reread both pre and post the RMA study. In comparing these students with the student who received RMA, it is clear that RMA significantly impacts students reading abilities in positive ways. It is evident that RMA quickly helps students develop a conscious and self-directed reading process.

Recommendations

Retrospective Miscue Analysis has made a big impact not only on my students' reading achievements but my teaching perspective as well. The RMA process was most beneficial for students who are just below grade level, who have basic phonic and phonemic awareness skills. Students who have not yet acquired such skills are not

developmentally ready to integrate and discuss multiple strategies because their decoding process and knowledge of phonics limits their ability. However, because RMA is such an influential reading tool, one may conduct more in depth and precise RMA sessions directly relating to the student's needs and incorporate phonic skill building as well. This may consist of longer RMA sessions and/or a longer study. Another limitation to the study that I would recommend considering is student interest. Background knowledge seems to be an issue through the course of reading. The lack of background knowledge truly affected the students' process to read and comprehend text. I found that students read and comprehended better when the text was on a topic of their interest or one with which they were at least familiar. I would also strongly recommend documentation of growth such as a graph that could be visible to the students, especially if confidence and motivation is an aspect that the researcher would like to improve. All four participants were very excited every time I informed them that they moved up a book level. Having a visual graph will physically allow students to see their incline in reading achievements.

I strongly recommend RMA to future teachers, parents, and paraprofessionals who have students who are just below their appropriate grade level and would like to improve their reading skills. I implemented this study to learn the impact of RMA and found it to be significant. I am very excited to apply the RMA process into my own classroom. Based on the data collected I am confident that RMA can and will improve students' reading achievements, and will be a meaningful tool for teachers, as well as myself, to implement to help struggling readers become successful and confident readers.

References

- Almazroui, K. (2007). Learning together through retrospective miscue analysis: Salem's case study. Department of Education, United Arab Emirates University, Al Ain-United Arab Emirates.
- Beatty, L., & Care, E. (2009). Learning from their miscues: Differences across reading ability and text difficulty. *The University of Melbourne*, 32(3), 226-241.
- Brantingham, K. L., & Moore, R. A. (2003). Nathan: A case study in reader response and retrospective miscue analysis. *The Reading Teacher*, 56(5), 466-473
- Department of Education (2012). Program improvement. Retrieved November 16, 2012 from <http://www.cde.ca.gov/ta/ac/ti/programimprov.asp>
- Ebersole, M. (2005). Reflecting on miscues in content area reading. *Academic Exchange Quarterly*, 9(2).
- Farrington, P. (2007). A window into the mind: Using miscue analysis. *Literacy Today*, 52, 10-11
- Goodman, K (1991). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6, 126-135
- Goodman, K. (2003). On the revolution of reading: The selected writings of Kenneth S. Goodman. Portsmouth, NH. Heinemann
- Goodman, Y.M., & Marek, A.M. (1996). Retrospective miscue analysis: Revaluing readers and reading. Katonah, NY: Richard C. Owen Publisher, Inc.
- Goodman, Y.M. (1996). Revaluing readers while readers revalue themselves: Retrospective miscue analysis. *The Reading Teacher*, 49(8), 600-609
- Goodman, Y. M. (2008). Retrospective miscue analysis: An overview. Retrieved

- November 16, 2012, From www.rcowen.com/WordDocs/RMA-OverviewChapter.doc
- Kabuto, B. (2009). Parents and children reading and reflecting together: The possibilities of family retrospective miscue analysis. *The Reading Teacher*, 63(3). 212-221.
doi: 10.1598/RT.63.3.4
- Martens, P. (1995). Empowering teachers and empowering students. *Primary Voices K-6*, 3(4), 39-42.
- Mason-Egan, P. & Paulson, E. (2007). Retrospective miscue analysis for struggling postsecondary readers. *Journal of Developmental Education*, 31(2).
- Rosenblat, M. Louis, (2004). The transactional theory of reading and writing. *Theoretical Models and Processes of Reading*, 5th edition, Robert B. Ruddell, & Norman J. Unrau, editors, International Reading Association, article 48, 1363–1398.
- Theurer, J. L., (2002). The power of retrospective miscue analysis: One preservice teacher's journey as she reconsiders the reading process. *The Reading Matrix*, 2(1).
- Vaccaro, G. (2012). Turning on the light bulb. *Illinois Reading council Journal*, 40(4), 7-10.