

Reading Self-Concept and Academic
Reading Ability in Beginning
Readers: Do They Match?

by

Cynthia Lynne Lange

A Thesis (Capstone Project)

Submitted in Partial Fulfillment of the
Requirements for the
Masters of Science Degree in Education

Graduate Studies

Martin Luther College

New Ulm, MN

May 2011

© Cynthia Lange, 2011

Signature Page

Date:

This thesis paper has been examined and approved.

Examining Committee:

Cindy Whaley, Ph.D., Chair

Carla Melendy, Ph.D.

David Wendler, Ph.D.

Graduate Studies
Martin Luther College
New Ulm, MN

Author: Lange, Cynthia L.

Title: *Reading Self-Concept and Academic Reading Ability in Beginning
Readers: Do They Match?*

Graduate Degree: MS Education

Research Advisor: Cindy Whaley, Ph. D.

Month/Year: May 2011

Number of Pages: 89

ABSTRACT

A mixed-method study was conducted over the course of one school year to determine if the reading self-perception of beginning readers matched their academic reading ability. Students were interviewed and administered subtests of the Woodcock Reading Mastery Test-Revised/Normative Update (WRMT-R/NU). A rubric was used to evaluate the interview and rank student reading self-perception. The software program, Automated System for Scoring and Interpreting Standardized Tests (ASSIST), generated labels of student achievement. The labels were used to rank the students' academic performance. These numbers were used to correlate a comparison of self-perception and student performance. While the students in this study displayed a positive correspondence between reading self-perception and academic reading ability, the positive self-perception of the first and second grade students decreased slightly as their reading ability increased.

Graduate Studies

Martin Luther College

New Ulm, MN

Acknowledgements

Many people have encouraged me in this endeavor but there are several people to whom I would like to say a special word of thanks.

I had the good fortune to start my journey in one of Dr. Carla Melendy's classes. She calmly and patiently guided this eager but neurotic student as I began online graduate work. Without her encouragement I would not have continued my graduate work and would have missed this wonderful opportunity for personal and professional growth. I feel there is a lovely symmetry in having her on my committee and seeing my work to completion.

A special word of thanks must go to my advisor, Dr. Cindy Whaley. I could not have asked for a more patient, knowledgeable, and encouraging advisor. Thank you for your help, support, and unflagging confidence in my ability to complete this research project.

I would like to thank Dr. David Wendler for agreeing to serve as a member of my committee. Your expertise, enthusiasm, and constructive criticism were invaluable.

Thank you to my dear friend and colleague, Cori, who acted as a counselor, sounding board, discussion partner, and played the devil's advocate as I progressed through every class.

John, thank you for all you have said and done as I have worked my way through this endeavor. But most of all, thank you for all the things you purposely left unsaid.

Table of Contents

Signature Page	iii
Abstract	iv
Acknowledgements	v
Table of Contents	vi
List of Tables	viii
CHAPTER I: INTRODUCTION	1
Problem Statement	1
Purpose of the Study	1
Research Question	2
Assumptions and Limitations	2
Methodology	2
CHAPTER II: LITERATURE REVIEW	4
Introduction	4
Summary	8
CHAPTER III: METHODOLOGY	10
Introduction	10
Research Question	11
Research Design and Procedures	11
Population and Sample	14
Instrumentation	15
Data Analysis Procedures	17

Limitations	18	
CHAPTER IV: RESULTS	20	
Introduction	20	
Data and Analysis	20	
CHAPTER V: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	28	
Introduction	28	
Summary of the Results	28	
Conclusions	28	
Implications and Recommendations	32	
REFERENCES	36	
APPENDIX A	Sample Research Participation Letter and Permission Form	39
APPENDIX B	Student Interview Questions	40
APPENDIX C	Rubric for Student Interview Evaluation	42
APPENDIX D	WRMT – R/NU and Student Interview Results	45
APPENDIX E	Student Data Used for Calculating the Spearman Rank	81
	Session A	81
	Session B	86
	Session C	88

List of Tables

- | | |
|---------|---|
| Table 1 | Means and Standard Deviations of the WRMT- R/NU and Interview Scores for Beginning Readers in Grades Kindergarten, First and Second |
| Table 2 | Means and Standard Deviations of the WRMT- R/NU and Interview Scores for Beginning Readers in Grades Kindergarten and First and Second Grade Combined |
| Table 3 | Means and Standard Deviations of the WRMT- R/NU and Interview Scores for Beginning Readers in Grades First and Second |
| Table 4 | Spearman Rank Calculations for WRMT- R/NU and Interview Variables |

CHAPTER I: THE PROBLEM

Introduction

Self-perceptions of reading ability often play a part in influencing when, how often, and what people read. Generally, students who read often improve their reading ability. That is, students who frequently read generally improve skills such as decoding and comprehension. Therefore, it is reasonable to believe that over a period of time an individual's reading self-perception may impact his or her actual reading abilities. A person's reading abilities often have direct and indirect long range effects on his or her life (Wise, 2009). It might then be argued that reading self-perception has a profound impact on a person's life. Therefore, reading self-perception is a concept worthy of teacher attention.

Problem Statement

Primary grade teachers are aware that many students begin to classify themselves as good or bad readers while they are still quite young and their skills are emerging. Teachers must be concerned with their students' self-perceptions as these self-perceptions impact learning (Gose, Wooden, & Muller, 1980; Hamachek, 1995). But first they might wonder: Are these perceptions accurate? Do the self-perceptions of beginning readers match their actual academic reading ability?

Purpose of the Study

This research attempts to answer these questions and add to the understanding that self-perception is a component of the beginning reading process. This research may also provide teachers with fresh insight into how self-perception is affected during the course of a school year as reading instruction and practice progresses. The researcher anticipates

that the information gained from this study will add to the body of information that aids educators in becoming more effective reading teachers. Since each student's successes and struggles in reading class shape his or her current and future opinions and attitudes toward reading (Corbiere, Fraccaroli, Mbekou, & Perron, 2006), it is imperative that teachers continually work at the art and science of teaching reading.

Research Question

Do the self-perceptions of beginning readers match their actual academic reading ability?

Assumptions and Limitations of the Study

The assumption was made that most kindergarten students would enter school with a positive self-perception which would increase as their reading instruction progressed. The supposition that many first and second grade students would start the school year with a high self-perception was also made. That the self-perceptions of all of the students would vary during the course of the school year, according to their academic success, was considered highly likely.

The research study involved a relatively small sample of students attending private schools serving predominately middle class families.

Methodology

This mixed-method study compared the self-perceptions of students in grades kindergarten, first, and second with their actual word decoding and reading comprehension scores. Subtests of the Woodcock Reading Mastery Tests-Revised/Normative Update (WRMT-R/NU) were used to measure each student's academic reading ability. An interview consisting of open ended questions was conducted

with each student and then scored with a rubric to determine his or her reading self-perception.

CHAPTER II: LITRATURE REVIEW

Introduction

The ability to read is an essential element of academic success (Lynch, 2002). The importance of reading is reflected in the myriad of available reading materials and programs accessible to teachers. The federal government has even taken a stance on the importance of reading in the No Child Left Behind Act of 2001. But what is reading? Reading can be described and defined in different ways, but many reading teachers and researchers alike would agree that reading involves some element of decoding (phonics) and the ability to understand or comprehend the words or symbols that have been recognized or decoded (Kamps, Abbot, Greenwood, Wills, Veerkamp, & Kaufman, 2008).

Learning to read involves moving through developmental stages which are hierarchical and overlapping (Foster & Miller, 2007). Developing an understanding of the alphabetic principle that the sounds in words are represented by letters is a necessary skill for beginning readers. However, knowing this is true does not automatically indicate that beginning readers can correctly apply this skill to their early attempts at reading. Therefore, one role of early reading instruction is an ever more sophisticated application of the alphabetic principle (Mesmer, 2005). Many students must be specifically taught how to apply phonemic awareness to the reading process (Manyak, 2008). Educators and researchers are divided in their opinions concerning the benefits and efficacy of various methods of phonics instruction. However, the vast majority agree that some form of phonics training is a necessary component of reading instruction (Wyse & Goswami, 2008). Students who spend a considerable amount of time and energy decoding a large

number of words within a given text often struggle to derive meaning from that text. Foster & Miller's (2007) research indicates that kindergarten students who engage in phonics have decoding skills necessary to transition into the next phases of reading development. Supporting this concept is research indicating that good decoding skills are related to fluency which contributes to reading comprehension (Bashir & Hook, 2009).

While fluency plays an important part in comprehension, there is research to suggest that teachers cannot assume smooth decoders or fluent readers understand what they are reading (Applegate, Applegate, & Modla, 2009; Patton, Crosby, Houchins, & Jolivet, 2010). This research demonstrates that some students who were very fluent readers struggled to comprehend what they had read. Many students will not continue reading if what they are decoding in the text does not make sense (Wilson, Martens, Arya, & Altwerger, 2004). Therefore, being able to comprehend what was read by drawing meaning from what has been decoded is an essential skill for reading success.

Drawing meaning from words and symbols plays a pivotal role in reading any text. Reading comprehension is not just the simple understanding of word definitions but also embraces the aesthetic stance of reading championed by Louise Rosenblatt (2005). In part, reading comprehension involves the definitions of words and how they are used in the text. But comprehension also involves what those words mean to the reader and how the reader experiences the text. Evidence suggests that this aesthetic reading has a role in the development of effective readers (Murphy, 1998). Reading isn't solely a cognitive process; it is also an emotional process (Chapman & Tunmer, 2003).

An author chooses words which will convey his or her intended meaning in a particular text. However, the author's intended meaning may not be the meaning the

reader derives from the text. Louise Rosenblatt (1995) asserted in her transactional theory that this is because the reader brings his or her own background, understanding, experiences, and attitudes to that particular text and creates meaning. She argued that the reader's interaction with the text created a transaction which gave meaning to the words on the page. In effect, every reader brings his or her own unique contribution into a "transactional" relationship with the text which in that moment creates meaning for the reader (Rosenblatt, 1994).

And yet, a reader cannot enter into a transactional relationship with any text unless he or she can recognize or decode the words of the text. Therefore, it seems reasonable to suggest that a balanced approach is needed in reading instruction. A student must have knowledge of phonics and a set of decoding skills at his or her disposal as well as a set of personal experiences upon which to call in order to make meaning from print.

The research previously cited would seem to indicate that both the cognitive and emotional components of the act of reading are necessary for students to develop into successful readers. Logically, then, students who are effectively developing these skill sets would become successful readers. Research indicates that these successful readers generally develop a positive self-perception regarding reading.

Researchers have explored the impact of students' academic experiences and students' self-perceptions upon student achievement. The research of Corbiere, Fraccaroli, Mbekou, & Perron (2006) indicates that readers who continually have poor or unsatisfactory experiences with text may develop a negative reading self-perception. Hamachek's (1995) research suggests a strong interactive link between self-concept and academic success. Researchers have also found a strong correlation between

academic self-perception and academic success (Gose, Wooden, & Muller, 1980; Pershey, 2010). Wattenburg and Clifford (1964) found that measures of self-confidence taken in kindergarten were predictive of reading achievement through the beginning of third grade. A more recent Canadian research study suggests that the students' academic self-concept is a predictor of their level of academic attainment ten years later (Guay, Larose, & Boivin, 2004). However, it should be noted that some researchers suggest there is no relationship between self-concept and academic achievement due to possible unknown and uncontrolled variables (Pottebaum, Keith, & Ehly, 1986).

A study conducted by Larned and Muller (1979) investigated the relationship between self-concept and academic achievement. They documented developmental changes in self-concept and self-esteem among students in grades one through nine. The study also examined relationships between specific measures of self-concept and academic achievement across grades two through nine.

A total of 1,471 boys and girls from two rural New Mexico school districts were involved in the research study. These students were administered the Self-Descriptive Inventory (SDI) to evaluate self-concept and self-esteem. The students were also administered the Comprehensive Tests of Basic Skills to measure academic achievement.

Larned and Muller (1979) analyzed each of the eight self-measures related to self-concept and self-esteem represented in the SDI according to a sex by grade analysis of variance. A Newman-Keuls analysis indicated that there were no significant self-concept or self-esteem mean differences between girls and boys in the same grade level or between means in adjacent grade levels for students of the same sex. Pearson product-moment correlation coefficients indicated the relationships by grade level between

achievement scores and each of the SDI self-measures for girls and boys. The correlation between academic achievement and the academic success self-concept seemed to increase across grades one through six. The data revealed that developmental trends for girls and boys were parallel.

Larned and Muller's (1979) research indicated that the academic success self-concept was the only self-concept measure to reliably correlate with academic achievement. This correlation increased with grade level. However, the researchers pointed out that self-concept and self-esteem generally "reflect past achievement patterns." These researchers also stated that their results "suggest that accuracy of self-concept is at best moderate." Their research findings contribute to the purpose of the current study which will explore the question of whether beginning readers' self-perceptions match their actual academic reading ability.

Students make judgments about their reading ability, the reading ability of their classmates, and the factors that make reading difficult or easy. One research study indicated that first grade students in schools with traditional basal based reading classes and children in schools using a whole language approach all gave decoding related responses to questions concerning what might make something difficult to read (Stahl & Pagnucco, 1996). When asked, students in this study demonstrated that they had already formed opinions about themselves as readers and indicated who they thought were the best readers in their class.

Summary

It is important for teachers to understand that although a young child's academic self-concept is not always accurate (Henk & Melnick, 1995), many children begin school

with a positive self-perception. This suggests that the first months of a child's first year in school are to be considered a critical period for developing a positive reading self-concept (Aunola, Leskinen, Onatsu-Arviolommi, & Nurmi, 2002). There is evidence which suggests that reading self-concept may precede the formation of academic self-concept in primary grade children (Chapman & Tunmer, 2003). Banks & Woolfson (2008) suggest that the way in which students perceive themselves as academic achievers is even more important to academic success than their teacher's perception. Since a significant relationship has been found between children's overall reading achievement and their self-perceptions of reading progress (Lynch, 2002), primary grade teachers must work to encourage their students' positive feelings about reading. Self-perceptions of academic competence have been shown to evolve as students advance through elementary school (Bouffard, Marcoux, Veseau, & Bordeleau, 2003).

Therefore, teachers would do well to determine how their students perceive themselves as readers. Teachers can then provide many and varied opportunities to support and encourage students to see themselves as successful readers.

CHAPTER III: METHODOLOGY

Introduction

Primary grade teachers are aware that many students begin to classify themselves as good or bad readers while they are still quite young and their skills are emerging. Teachers must be concerned with their students' self-perceptions as these self-perceptions impact learning (Gose, Wooden, & Muller, 1980; Hamachek, 1995). But first they might wonder: Are these perceptions accurate? Do the self-perceptions of beginning readers match their actual academic reading ability?

This mixed-method study compared the self-perceptions of students in grades kindergarten, first, and second with their actual word decoding and reading comprehension scores. Subtests of the Woodcock Reading Mastery Tests-Revised/Normative Update (WRMT-R/NU) were used to measure each student's academic reading ability. An interview consisting of open-ended questions was conducted with each student and then scored with a rubric to determine his or her reading self-perception. Each student was assigned a number to rank his or her performance on the standardized test and another number to rank self-perception based on his or her interview results.

The numbers one through five, representing the WRMT – R/NU summary results, and the numbers one through four, representing student interview rubric scores, were used to calculate the student populations' mean and standard deviation for both the test and interview scores for each data gathering session. A Spearman Rank correlation was also calculated for each data gathering session.

Research Question

Do the self-perceptions of beginning readers match their actual academic reading ability?

Research Design and Procedures

A mixed-method research study was designed to investigate the correlation between beginning readers' academic reading ability and their reading self-perception. The study took place during the course of the 2009-2010 school year. Data was gathered from the participating students three times during the course of the school year. The students were interviewed and then given subtests of the WRMT – R/NU form G on each of these three visits.

Prior to the school year, five teachers were contacted and asked if they would be willing to allow their students to be part of the research study. After hearing the research proposal, four teachers agreed to participate. The teachers sought and received permission from their principals to participate in this study and then followed their schools' protocol to gain permission for their students to participate in the research study.

A meeting was held with the classroom teachers before the study began to discuss specific procedures and needs. They discussed the dates data would be gathered from their students, the location within each building where the testing and interviews would take place, the time required with each student for the interview and test, the least disruptive and most efficient way in which students would be removed from class, and how makeup dates for gathering data would be arranged in the event of a school day cancellation or the possibility of student illness. Each teacher was given a personalized explanatory letter and permission form for the parents or guardians of their students and instructed to send this letter out one month prior to the start of the study.

A total of eleven days were used to test and interview students. The first set of data was gathered on the sixteenth, eighteenth, and twentieth of November and the second of December, 2009. The second set of data was collected on the sixteenth, eighteenth, twenty-third, and twenty-fourth of February, 2010. The final data set was gathered on the eleventh, twelfth, and thirteenth of May, 2010.

Each teacher was required to provide an area as quiet and free of distractions as possible in which to conduct the student interviews and testing. The teachers were asked to supply a table and chairs for the researcher and students. A school library, an empty conference room, an office that had been vacated, a partitioned off section of one teacher's large classroom, and the end of a little used hallway were employed as the quiet spaces in which to gather data.

On the agreed upon day shortly before the school day began, the designated testing and interview area was set up and the day's schedule was confirmed with the classroom teacher. On the first visit to each school, the participating teachers provided a list of student names and birthdates for the students who had permission to take part in the study. The signed permission slips were also collected from the classroom teacher at this time. At the beginning of this first day, the classroom teacher introduced the researcher to her students.

After the school day began, the classroom teacher determined when students were available during the day and sent them out of the classroom one at a time. The interviews were always conducted first. Every student was interviewed before any testing was begun. This was done so that any possible negative experience with the standardized test would not influence the student's answers and comments during the interview. Before

each interview every student was shown the tape recorder and told, “I am going to ask you some questions about reading. There is no right or wrong answer to any of my questions. Your answers are important to me so I will record them and write them down.” Then the tape recorder was started and the student was interviewed by means of the prepared interview guideline questions. Each student’s responses were written down as he or she spoke in the event that any tapes might be accidentally damaged, destroyed, or the recorder malfunctioned. The length of the interview varied depending upon how much the student had to say, how quickly he or she spoke, the duration of any pauses between answers, and how many probing questions the researcher asked. The shortest interviews lasted just over two minutes while the longest interviews lasted just over five minutes.

After the student interviews were completed, the classroom teacher sent the students out again one by one for the test session. The Word Identification, Word Attack, and Passage Comprehension subtests of the WRMT – R/NU form G were administered and recorded exactly as described in the test book. Due to the way in which a ceiling is established in this test, some students required more time to finish the examination than others. At the start of the study, most kindergarten students finished in less than ten minutes. During the course of the study, most students required approximately fifteen minutes to finish the test. The same protocol for interviewing and testing students was followed in all three data gathering sessions over the course of the school year.

All of the interviews and tests were numbered to preserve student anonymity. Every student was randomly assigned a number. The student’s number appeared with a

lowercase k, f, or s to denote his or her grade level. This number and letter combination became the identifier on the charts used to record the students' interview and test results.

Population and Sample

This study involved students from three private Lutheran elementary schools located in mid-Michigan. All three schools serve predominantly white middle class families. One school is situated in a rural township of roughly 5,000 people a few miles from a small city. Another school is located in a rural town of just under 3,000 people. The final school is in an established neighborhood of a city with a population of just over 34,000 people. All three kindergarten through eighth grade schools are small with total student populations of 65, 50, and 75 respectively.

The research study included students from four classrooms: a multi-graded kindergarten through second grade classroom, two kindergarten classrooms, and one classroom containing grades one and two for a total of thirty-eight study participants. One of these classrooms was the researcher's own classroom. In order to have a reasonable sampling of beginning readers, all of the students in each classroom were asked to participate in the study. Nineteen students involved in the study were in kindergarten, fourteen were in first grade, and five were in second grade. In total, twenty boys and eighteen girls participated. The division for each grade level was as follows: kindergarten- eleven boys and eight girls; first grade- eight boys and six girls; second grade- one boy and four girls. At the start of the study, the students ranged in age from five years three months through seven years eleven months. The age range of the students at the end of the study was between five years nine months and eight years four months.

To preserve anonymity as data was reported, students were assigned numbers as identifiers. Students in kindergarten were randomly assigned a number from one to nineteen as an identifier. First grade students were randomly assigned a number from twenty to thirty-three while the second grade students were randomly assigned a number from thirty-four through thirty-eight.

The parents or guardians of the students received a letter describing the research study and informing them that any and all information gathered during the research project would be kept strictly confidential. Parents were also informed that they had the right to withdraw their child from the study at any time in which case that student's data would not be included in the project. The parents were also informed that their child's identity would be kept confidential and no student would be identified in the research paper. All of the students' parents or guardians signed a permission form before their child participated in the research study. No students were withdrawn from the study.

Instrumentation

The Woodcock Reading Mastery Tests – Revised/Normative Update (WRMT – R/NU) form G was used to quantitatively measure the students' academic reading ability. The Word Identification and Word Attack subtests which comprise the Basic Skills Cluster were administered to assess decoding skills or what the WRMT-R/NU refers to as "basic reading skills." The Total Reading Cluster – Short Scale which is a combination of the Word Identification and Passage Comprehension subtests was used to measure student reading comprehension.

The WRMT – R/NU is a norm-referenced test which identifies a student's strengths and weaknesses in skills needed for reading. This assessment has been in use

for over ten years. Various subtests have been used by researchers such as Vadasy, Sanders, & Tudor (2007) who used the Word Identification subtest during the course of their research concerning spelling, reading fluency, and decoding. The tenth and fourteenth volumes of the Mental Measurements Yearbook do raise some concerns and cautions regarding reliability, validity, and representativeness of the WRMT – R/NU but do concede it may be “a reliable instrument useful in measuring some aspects of the reading process.” The test was not used for placement in any support program nor was it used to diagnose any special needs of the examinees during this study. Therefore, it was deemed an acceptable standardized instrument for measuring academic reading ability in this study.

There are several respected formal and informal reading assessments available that measure reading skills. The WRMT – R/NU was chosen because it is designed to include children who are five years old. Other respected tests that were considered did not accommodate five year old students but began with six year olds or first grade as their pre-primer, primer, or beginning reading level. Because of the state’s kindergarten entry age requirements, many of Michigan’s kindergarten students are just turning five as they enter school.

Test administration time was another factor taken into consideration when selecting an assessment. All the assessments considered for this study needed to be administered individually. The WRMT – R/NU is designed so that the test administrator may give the entire battery of tests or only the subtests necessary to assess the reading skills in question.

The qualitative data was gathered in the form of in-depth interviews. An interview guide approach was used to ask open-ended questions in a brief, informal conversation with each student. Each interview was recorded using a small microcassette recorder. A researcher developed rubric was used after each interview to score the student's reading self-perception.

The rubric was designed specifically to be used only in conjunction with the open-ended questions the researcher formulated for the student interviews with the beginning readers. This rubric contains examples of many comments young students might make when they are confident or lacking confidence in their reading ability. Each confidence level designated on the rubric contains a different balance of positive and negative comments students might give.

Understanding exactly how the students perceived themselves as readers is an integral part of this research project. Therefore, capturing the students' reading self-perceptions in their own words was essential. The student interviews revealed aspects of the students' self-perceptions that would not have been revealed in a test format. Open-ended questions and probing questions asked in an informal conversational setting allowed better understanding of the student responses. Nuances in students' comments that were pertinent to the study were explored in the interview format.

Data Analysis Procedures

Each student interview was transcribed from the tape recording made of that interview. Any notes made during that particular interview were also checked. The researcher generated rubric was then used to evaluate the student's self-perceived level of confidence by assigning a number to his or her confidence level. The levels were 4-

highly confident, 3- somewhat confident, 2- lacking confidence, and 1- no confidence evident. In the event that a student's answers created a tie between two confidence levels, the higher confidence level was awarded. The rubric used to evaluate the student interviews is Appendix C.

The student answers from the WRMT – R/NU subtests were recorded on form G as directed. They were then entered into the test's ASSIST software to calculate each student's results. When the software generated each student's standard score and percentile ranking, it also labeled that student in a narrative report as well-below average, below average, average, above average, and well-above average for his or her performance on each subtest according to his or her age and grade equivalents. These software assigned labels from the summary section of each student's result report were translated into the numbers 1, 2, 3, 4, 5 respectively to indicate each student's academic ability level on his or her result table. See the tables in Appendices D.

The assigned confidence level numbers representing student self-perception and the numbers representing the WRMT – R/NU summary results were used to calculate the student populations' mean and standard deviation for both the test and interview scores for each data gathering session. A Spearman Rank correlation $1 - \frac{6\sum D^2}{n(n^2-1)}$ was also calculated for each data gathering session. Tables listing the students' data used to calculate the Spearman ranks are found in Appendix E.

Limitations

The small student sample used in this study may prevent making generalizations for a large population. The second grade sample, which was part of the participating

multi-graded classroom, was exceptionally small. All of the participating schools served predominately middle class families.

Chapter IV: RESULTS

Introduction

Using a mixed-method approach and a sample of beginning readers, this research study answered the question: Reading self-concept and academic reading ability in beginning readers: Do they match? The study also provides teachers with a sample snapshot of how the self-perception of beginning readers is affected during the course of one school year as reading instruction and practice progresses.

Data Analysis

The numbers one through five, representing the WRMT – R/NU summary results, and the numbers one through four, representing student interview rubric scores, were used to calculate the student populations' mean and standard deviation for both the test and interview scores for each data gathering session. A Spearman Rank correlation $1 - \frac{6\sum D^2}{n(n^2-1)}$ was also calculated for each data gathering session. The numbers assigned to the WRMT - R/NU served as Rank X while the scores from the interviews were used as Rank Y. See Appendix E.

The mean and standard deviation calculated for each of the three data gathering sessions using the WRMT – R/NU summary scores from all thirty-eight students is shown in Table 1. The mean does rise slightly during the course of the year but remains within the average classification. The standard deviation score indicates a slightly greater deviation as the year progresses.

Table 2 presents the test mean and standard deviation scores for the kindergarten students as a group and the first and second grade students combined as a group. The average test scores for the kindergarten group do rise modestly over the course of the

year and the standard deviation becomes slightly greater. The average kindergarten scores are lower than the group as a whole with the beginning mean score slightly below average and the final mean solidly in the average classification. The first and second grade students combined as one group display the highest mean scores throughout the year and end the year with a mean that represents the above average classification. Their standard deviation scores follow the same pattern as the other groups.

Table 3 presents the first and second grade test score means and standard deviations separately. The table shows the first grade students' average scores to be higher than the entire groups' mean scores throughout the year but lower than the second grade students' scores. The second grade students are the only group whose standard deviation scores represent less deviation with each data gathering session.

Tables 1, 2, and 3 also present the mean and standard deviation for the various groups' interview scores. In Table 1, the interview mean for each session represents the somewhat confident classification for the group as a whole. The kindergarten interview mean scores (Table 2) follow the pattern of the group as a whole. They, too, are within the somewhat confident range although the kindergarten mean scores are slightly lower than the entire groups' scores.

The first grade students (Table 3) have mean interview scores representing the somewhat confident classification over the course of the year. Their mean interview score peaks very slightly in session B during the middle of the school year. The mean interview scores of the first and second grade students combined (Table 2) are also at their highest in session B. As shown in Table 3, the second grade students begin the year with a mean interview score representing the highly confident classification and a standard deviation

of zero. The second grade’s mean interview scores drop slightly over the course of the year as their standard deviation spreads. The second grade ends the year with a mean interview score representing the somewhat confident classification. The students’ interview scores tend to show less deviation throughout the school year with the exception of the second grade.

Table 1

Means and Standard Deviations of the WRMT – R/NU and Interview Scores for Beginning Readers in Grades Kindergarten, First, and Second

	Sessions					
	A		B		C	
	Mean	SD	Mean	SD	Mean	SD
	All students ($n = 38$)					
WRMT – R/NU	3.08	.85	3.37	.88	3.58	.98
Interview	3.42	.76	3.58	.64	3.60	.64

Note. The WRMT – R/NU ASSIST program generated the descriptors well-above average, above average, average, below average, and well-below average. These descriptors were numbered 5 through 1 respectively. The interview rubric generated classifications of highly confident, somewhat confident, lacking confidence, and no confidence evident which were represented by the numbers 4 through 1 respectively. The interview rubric scores and the WRMT – R/NU summary label scores were used to calculate the Mean and Standard Deviation.

Table 2

Means and Standard Deviations of the WRMT – R/NU and Interview Scores for Beginning Readers in Grades Kindergarten and First and Second Combined

	Sessions					
	A		B		C	
	Mean	SD	Mean	SD	Mean	SD
Kindergarten students (<i>n</i> = 19)						
WRMT – R/NU	2.68	.67	3.00	.66	3.16	.76
Interview	3.11	.81	3.32	.75	3.53	.70
First and second grade students (<i>n</i> = 19)						
WRMT – R/NU	3.43	.84	3.74	.96	4.00	1.00
Interview	3.74	.56	3.84	.37	3.68	.58

Note. The WRMT – R/NU ASSIST program generated the descriptors well-above average, above average, average, below average, and well-below average for each student. These descriptors were numbered 5 through 1 respectively. The interview rubric generated classifications of highly confident, somewhat confident, lacking confidence, and no confidence evident which were represented by the numbers 4 through 1 respectively. The interview rubric scores and the WRMT – R/NU summary label scores were used to calculate the Mean and Standard Deviation.

Table 3

Means and Standard Deviations of the WRMT – R/NU and Interview Scores for Beginning Readers in Grades First and Second

	Sessions					
	A		B		C	
	Mean	SD	Mean	SD	Mean	SD
First grade students (<i>n</i> = 14)						
WRMT – R/NU	3.29	.83	3.50	.94	3.71	.99
Interview	3.64	.63	3.86	.36	3.79	.43
Second grade students (<i>n</i> = 5)						
WRMT – R/NU	4.00	.71	4.40	.55	4.8	.45
Interview	4.00	.00	3.80	.45	3.4	.89

Note. The WRMT – R/NU ASSIST program generated the descriptors well-above average, above average, average, below average, and well-below average for each student. These descriptors were numbered 5 through 1 respectively. The interview rubric generated classifications of highly confident, somewhat confident, lacking confidence, and no confidence evident which were represented by the numbers 4 through 1 respectively. The interview rubric scores and the WRMT – R/NU summary label scores were used to calculate the Mean and Standard Deviation.

Table 4

Spearman Rank Calculations for WRMT – R/NU and Interview Variables

Students	<u>Spearman Rank (r_s)</u>		
	Sessions		
	A	B	C
All Students ($n = 38$)	.996	.997	.995
Kindergarten ($n = 19$)	.981	.991	.987
First and Second Combined ($n = 19$)	.989	.984	.974
First Grade ($n = 14$)	.976	.971	.967
Second Grade ($n = 5$)	.900	.750	.250

The Spearman rho calculations indicate a strong agreement between the test summary and the student interview ranks. The notable exception is the second grade in sessions B and C.

The student interviews were conducted to gain insight into the students' ideas and opinions concerning different aspects of reading. During the course of the interviews, questions that were meant to reveal the students' attitudes toward reading and their views of themselves as readers were asked. Four students in the first interview session, two in the second session and three in the third, specifically said they could not read. However,

these same students named books they enjoyed and recounted positive reading experiences and attitudes connected with home and school.

During interview sessions A, B, and C, 94 %, 86 %, and 84 % of the students respectively reported that they felt happy when reading to someone in their family. Twenty-six students, 68 %, from each of the three sessions stated they felt “happy” or “good” while reading at school. Although the number of students who answered in this way remained consistent, the specific students who gave this answer varied slightly. It should be noted that some students (between 13% and 24 %) felt “nervous,” “sad,” or “scared” when reading aloud at school. These uncertain feelings were reported most often in the second interview session. Two students (5 %) in the first interview session reported that they never read to their teacher. This increased to five students (13 %) in the mid and final interviews. The number of students who felt “happy,” “good,” or “excited” when they figured out new words changed most noticeably from the first to the second interview session increasing from 60 % to 95 %. The number decreased to 84 % in the third interview session.

A few students, 5, 5, and 7 respectively, did not know what kind of readers they might be. By the final interview session, fifteen students (39 %) labeled themselves as “good” readers. However, most of the students in all three interview sessions labeled themselves as readers in different ways. Some examples of the types of readers they considered themselves to be are as follows: “a telling reader”, “an animal reader”, “a school reader”, “a bookworm”, “a Michigan reader”, “a doggy reader”, “a chapter book reader”, “a book reader”, and “a family reader.” The students seemed to indicate that these were positive labels.

Nearly half of the students in every interview session seemed to have an understanding that some type of reading practice enhanced reading improvement when asked how they might become a better reader. Some student comments to this effect are as follows: “by reading books”, “keep on reading”, “read so much every day and every month”, “read lots more and more books”, “by reading easier then harder”, “by reading harder books”, “practicing doing it again and again”, “by asking people to read to me.” One child summed it up by saying, “Practicing every year until you die!”

Approximately one quarter of the students in each session chose books to read that they considered “fun.” All of the students were able to name some type of book, or specific book titles, that they enjoyed hearing read or reading themselves.

CHAPTER V: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The study results provide three snapshots of a small group of beginning readers over the course of a school year. The sample size may prevent making generalizations for a large population, but it does provide insights into the self-perceptions and academic abilities of beginning readers. The data suggests that the self-perceptions of these beginning readers do correspond closely with their academic reading ability. Although, it must be noted that the positive self-perceptions of the first and second grade students decreased slightly while their reading ability increased.

Summary of the Results

The Spearman rho calculations indicate a strong agreement between the test summary and the student interview ranks. The notable exception is the second grade scores from sessions B and C. The results of these sessions indicated a rise in the second grade mean test scores and a slight decrease in their mean interview confidence rankings as the school year progressed. Kindergarten was the only group to raise their mean standardized test score and their mean interview confidence ranking in each session over the course of the year.

Conclusions

The kindergarten students began school feeling somewhat confident in their abilities as readers and the WRMT – R/NU results correlated with their self-perceptions. It was expected that the kindergarten students would have positive self-perceptions, but it was not anticipated that their test scores would match their perceptions to the degree that they did. It was interesting to note that as a whole the kindergarten students' positive self-

perceptions grew as they learned more over the course of the school year as evidenced by the increase of their mean test scores and mean interview scores. This result corresponds with research that indicates that kindergarten students with positive academic self-perceptions tend to experience academic success (Wattenburg and Clifford, 1964; Guay, Larose, & Boivin, 2004).

However, the kindergarten group's beginning mean standardized test score falls into the below average classification. Over the course of the school year, this mean score rose to a position solidly within the average range. The average kindergarten test scores over the course of the year are lower than the group as a whole but do indicate steady growth. The kindergarten group may have first scored within the below average classification due to the wide range of reading exposure and capabilities with which individual kindergarten students begin school.

Interestingly, even in the beginning of the year when their mean test score is within the below average classification, the kindergarten mean interview score is within the somewhat confident range. This indicates that many students feel positive about reading even though they may not yet be efficient decoders or able to completely comprehend the text they are given to read. The interview comments from session A at the start of the year also reflect a positive attitude toward reading among the kindergarten students. This has significant implications for the classroom teacher.

Although adults, older children, and standardized test scores may classify students entering kindergarten as unable to read, this does not mean that the students view themselves as non-readers. Nor does their rudimentary ability at this stage necessarily indicate a poor reading self-perception. Concerted teacher effort to nurture these positive

self-perceptions and strengthen the positive emotional connection to reading while supporting each student's growth in reading skills, such as decoding and comprehension, will benefit the beginning reader. This aligns with the research of Aunola, Leskinen, Onatsu-Arvilommi, & Nurmi (2002) which indicates that the beginning of a child's first year of school is a critical period for developing a positive reading self-perception.

The first grade students' WRMT-R/NU mean scores placed the group in the average range. They stayed within this classification throughout the school year although their mean academic test score rose slightly in session B and again at the end of the year in session C.

The first grade reading self-perception interview mean scores stayed within the somewhat confident classification during the course of the school year. The mean score rose slightly in the middle of the school year as measured in session B but dropped slightly in session C at the end of the school year. These self-perception interview results came as a surprise. The first grade reading self-perception mean score was expected to rise and mimic the kindergarten self-perception results.

The second grade results were also unexpected. These students began the school year perceiving themselves as highly confident readers. Their measured academic performance was notable beginning the year with a mean score in the above average range. By the end of the year, their mean test score had risen to just short of the well above average range. Yet as their standardized test scores improved in session B and again in session C, their mean reading self-perception score dropped noticeably from the highly confident range at the beginning of the school year into the somewhat confident classification in session C at the end of the school year.

As indicated by the mean scores of the WRMT-R/NU, the first and second grade students made academic reading progress over the course of the school year. The individual student results recorded in Appendix D indicate that some students made great academic gains over the course of the school year while other students made a smaller degree of progress. This would account for the mean scores indicating modest academic growth over the course of the school year while the classification label for the group remained the same as in the case of the first grade group remaining academically in the average range.

The first grade group's reading self-perception score was lower at the end of the school year as compared to the middle of the school year. Possible causes for this were considered. The decrease in the second grade group's reading self-perception scores each time they were measured in spite of their continued academic growth was also contemplated. Perhaps positive reading self-perception is eroded for some students who lack a rich reading related background as they begin to encounter more difficult reading material. It is possible that some students might struggle because a curriculum or teaching style does not support their needs or style of learning. This may diminish positive reading self-perception for some students. There is also the possibility that many students are simply becoming less egocentric at this time. As these students become more aware of the world around them, they may simply realize that they have more to learn. This might have the effect of shaking their self-confidence if only for a little while. This study was not designed to determine why a student might begin to lose confidence as a reader. Reasons why readers lose self-confidence are an area for further research. Understanding why some students gain confidence as they are given reading instruction while others

begin to lose confidence in their reading ability has the potential to help teachers become more effective reading instructors.

The small number of students included in this study was a limitation. This small sample may have contributed to the lack of statistical variety within the recorded scores. Another limitation of the study was the rather homogeneous nature of the sample of students. The schools involved with the study draw their student populations from predominately middle class neighborhoods. All of the participating classrooms were in private Lutheran schools which traditionally place a great emphasis on students successfully learning to read. Comments made by the students in their interviews seemed to indicate that the majority of the parents are involved with reading to their child at home.

Implications and Recommendations

The results of this study indicate that kindergarten is a time of positive reading self-perception which grows throughout the school year. This seems to imply that many students are confident in themselves and excited about learning. It seems logical that kindergarten teachers would make every effort to capitalize on the generally positive nature of these students as they teach reading. Instead of calling to attention what various kindergarten students may not yet have mastered, it may prove beneficial to use and reinforce their basically positive self-perceptions to allow them to see themselves as readers as they learn and practice the various fundamentals of decoding and comprehension. The ways in which teachers and parents help kindergarten students see themselves as readers may be a topic for further research.

The first and second grade students in this study also began the school year with positive reading self-perceptions. Although their perception of themselves as readers stayed positive, the slight drop indicated in the statistics may provide a source of motivation for primary grade teachers to monitor closely their beginning readers, not only academically, but also in the area of reading self-perception. Beginning readers in these grades are working with a variety of concepts in phonics. They are also beginning to be expected to comprehend longer pieces of text and draw more sophisticated conclusions from that text than their kindergarten classmates. It is possible that these new reading demands begin to chip away at the self-confidence of new readers even as their reading skills improve. This may be an area of further study. Another area for future research might be the ways in which teachers can support positive student self-perceptions as reading instruction progresses and becomes more demanding.

Several student responses to the request, “Tell me about a time you read to your teacher,” were puzzling. A number of students replied that they did not read to their teacher. A few students said that they did not read at school. However, the researcher knew from being at the schools and speaking with the students’ teachers that all of the students in the study did read to their teachers. One classroom also had assigned reading buddies from a fifth grade classroom. Therefore, it might be of interest to conduct further research into what beginning readers classify as reading at school or reading to their teacher. Research might also be done into how teachers communicate to their students that they are actually reading.

The question, “What kind of reader are you?” elicited a variety of surprising answers. Until the final interview session it was very rare for a student to label him or

herself as a “good” reader. Instead, the students often equated the type of reader they might be with the types of books they enjoyed reading. For example, the student who answered, “A doggy reader,” had indicated earlier in the interview that books about dogs and kittens were her favorite. The student who indicated she was a “chapter book reader” had stated that chapter books were her favorite type of books.

Students also equated where they read or to whom they read with the type of reader they might be. The student who answered he was a “family reader” indicated during the interview that he read at home with his family. “I’m a school reader,” was an answer given by a student who told the interviewer school was the place he read.

These students’ comments and many like them in the interviews seem to underscore Louise Rosenblatt’s aesthetic stance and her ideas concerning a transactional relationship with text. The interview comments made by many of the students indicated that reading a book was pleasurable. They were not concerned with phonics or fluency or even comprehension. They were concerned with finding a book that was “funny” or that contained people or objects which they enjoyed. Their answers indicated that they brought their ideas and preferences to the text and then gained enjoyment from that text.

These student answers indicate primary grade teachers would do well to have available a variety of books for their beginning readers. The students themselves indicated in the interviews that people became better readers “by reading more books.” Therefore, it may be of great benefit to students if their teachers made an effort to discover and provide the type of books they enjoy. This may aid students in advancing academically while practicing their reading skills and building a positive self-perception of reading. Teachers who continue to provide a variety of engaging reading material will

likely have the most favorable opportunities to assist students in maintaining the positive reading self-perception with which they began school.

References

- Applegate, M. D., Applegate, A. J., & Modla, V. B. (2009). "She's my best reader: She just can't comprehend": Studying the relationship between fluency and comprehension. *The Reading Teacher*, 62(6), 512-521.
- Aunola, K., Leskinen, E., Onatsu-Arvilommi, T., & Nurmi, J. (2002). Three methods for studying developmental change: A case of reading skills and self-concept. *British Journal of Educational Psychology*, 72, 343-364.
- Banks, M., & Woolfson, L. (2008). Why do students think they fail? The relationship between attributions and academic self-perceptions. *British Journal of Special Education*, 35, 49-56.
- Bashir, A. S., & Hook, P. E. (2009). Fluency: A key link between word identification and comprehension. *Language, Speech, and Hearing Services in Schools*, 40(2), 196-200.
- Bouffard, T., Marcoux, M., Vezeau, C., & Bordeleau, L. (2003). Changes in self-perceptions of competence and intrinsic motivation among elementary school children. *British Journal of Educational Psychology*, 73, 171-186.
- Chapman, J. W., & Tunmer, W. E. (2003). Reading difficulties, reading-related self-perceptions, and strategies for overcoming negative self-beliefs. *Reading & Writing Quarterly*, 19, 5-24.
- Cooter, R. B. (1989). Review of the woodcock reading mastery tests – revised. In J. C. Conoley & J. J. Kramer (Eds.), *The tenth mental measurements yearbook* (pp. 910-916). Lincoln, NE: Buros Institute of Mental Measurements.
- Corbiere, M., Fraccaroli, F., Mbekou, V., & Perron, J. (2006). Academic self-concept and academic interest measurement: A multi-sample European study. *European Journal of Psychology of Education*, 21, 3-15.
- Foster, W. A., & Miller, M. (2007). Development of the literacy achievement gap: A longitudinal study of kindergarten through third grade. *Language, Speech, and Hearing Services in Schools*, 38, 173-181.
- Gose, A., Wooden, S., & Muller, D. (1980). The relative potential of self-concept and intelligence as predictors of achievement. *The Journal of Psychology*, 104(2), 279-287.
- Guay, F., Larose, S., & Boivin, M. (2004). Academic self-concept and educational attainment level: A ten-year longitudinal study. *Self and Identity*, 3, 53-68.

- Hamachek, D. (1995). Self-concept and school achievement: Interaction dynamics and a tool for assessing the self-concept component. *Journal of Counseling & Development, 73*(4), 419-425.
- Henk, W. A., & Melnick, S. A. (1995). The reader self-perception scale (RSPS): A new tool for measuring how children feel about themselves as readers. *The Reading Teacher, 48*(6), 470-482.
- Jaeger, R. M. (1989). Review of the woodcock reading mastery tests – revised. In J. C. Conoley & J. J. Kramer (Eds.), *The tenth mental measurements yearbook* (pp. 913-916). Lincoln, NE: Buros Institute of Mental Measurements.
- Kamps, D., Abbott, M., Greenwood, C., Wills, H., Veerkamp, M., & Kaufman, J. (2008). Effects of small-group reading instruction and curriculum differences for students most at risk in kindergarten: Two year results for secondary- and tertiary-level interventions. *Journal of Learning Disabilities, 41*(2), 101-114.
- Larned, D. T., & Muller, D. (1979). Development of self-concept in grades one through nine. *The Journal of Psychology, 102*, 143-155.
- Lynch, J. (2002). Parents' self-efficacy beliefs, parents' gender, children's reader self-perceptions, reading achievement and gender. *Journal of Research in Reading, 25*, 54-67.
- Manyak, P. C. (2008). Phonemes in use: Multiple activities for a critical purpose. *The Reading Teacher, 61*(8), 659-662.
- Mesmer, H. A. E. (2005). Text decodability and the first-grade reader. *Reading & Writing Quarterly, 21*(1), 61-86.
- Murphy, S. (1998). Remembering that reading is "A way of happening." *Clearing House, 72*(2), 89-96.
- Patton, B., Crosby, S., Houchins, D., & Jolivette, K. (2010). The comparative effects of fluency instruction with and without a comprehension strategy for elementary school students. *International Journal of Special Education, 25*(2), 100-112.
- Pershey, M. G. (2010). A comparison of african american students' self-perceptions of school competence with their performance on state-mandated achievement tests and normed tests of oral written language and reading. *Preventing School Failure, 55*(1), 53-62.
- Pottebaum, S. M., Keith, T. Z., & Ehly, S. W. (1986). Is there a causal relation between self-concept and academic achievement? *Journal of Educational Research, 97*(3), 140-144.

- Rosenblatt, L. M. (1994). *The reader, the text, the poem: The transactional theory of literary work*. Carbondale and Edwardsville: Southern Illinois University Press.
- Rosenblatt, L.M. (1995). *Literature as exploration* (5th ed.). New York: The Modern Language Association of America.
- Rosenblatt, L. (2005). The acid test for literature teaching. In L. Luedeke (Ed.), *Making meaning with texts: Selected essays / Louise Rosenblatt* (pp. 62-71). Portsmouth, NH: Heinemann.
- Stahl, S. A., & Pagnucco, J. R. (1996). First graders' reading and writing instruction in the traditional and process-oriented classes. *Journal of Educational Research*, 89(3), 131-144.
- Vadasy, P.F., Sanders, E. A., & Tudor, S. (2007). Effectiveness of paraeducator-supplemented individual instruction: Beyond basic decoding skills. *Journal of Learning Disabilities*, 40(6), 508-525.
- Wattenburg, W. W., & Clifford, C. (1964). Relation of self-concepts to beginning achievement in reading. *Child Development*, 35(2), 461-467.
- Wilson, P. G., Martens, P., Arya, P., & Altwerger, B. (2004). Readers, instruction, and the NRP. *Phi Delta Kappan*, 86(3), 242-246.
- Wise, B. (2009). Adolescent literacy: The cornerstone of student success. *Journal of Adolescent & Adult Literacy*, 52(5), 369-375.
- Wyse, D. & Goswami, U. (2008). Synthetic phonics and teaching reading. *British Educational Research Journal*, 34(6), 691-710.

Appendix A: Sample Research Participation Letter and Permission Form

Dear Parents and Guardians,

My name is Cynthia Lange. I teach (list grades) at (name school) in (name city), Michigan and am currently working toward my Master's degree in education.

During the course of the 2009-2010 school year, I will be conducting research at several schools including (name school). This research will allow me to write my thesis and complete my degree program.

I have received permission from (name principal and/or school board) to include students in (name classroom teacher) classroom in my research study. I am now asking you for permission to include your child in my research study. My research involves gathering information three times during the school year from Kindergarten, first, and second grade students in the form of a reading assessment and an interview.

Individual interviews will be conducted and recorded or taped to determine each student's perception of himself (herself) as a reader. I will also administer a few short grade appropriate sections of the Woodcock Reading Mastery Test to get a "snapshot" of each student's academic reading ability. I will be working with (name classroom teacher) so that your child will miss very little classroom instruction time while I give tests and conduct interviews.

Any information I gather concerning your child during my research will be kept completely confidential and in my possession. Your child will not be named or identified in any way in my research paper (thesis). After analysis, the written records and recordings of the interviews will be destroyed. If for any reason during the course of the school year you wish to withdraw your student from the research study, you may do

so by notifying me or (name classroom teacher). If you would choose to withdraw your child from the study, any information concerning him/her which had already been gathered would be destroyed.

If you have any questions concerning this research study please contact me at (home phone number; school phone number) or contact (name classroom teacher).

Thank you,

Mrs. Cynthia Lange

Please fill out the form below and return it to (name teacher) by (date).

Yes, _____ has permission to participate
(Write your child's name here.)

in the reading research study during the 2009-2010 school year.

No, _____ does not have permission to
(Write your child's name here.)

participate in the reading research study during the 2009-2010 school year.

Parent or Guardian signature: _____

Date: _____

Appendix B: Student Interview Questions

1. Tell me about a time you read a book because you wanted to and not because someone said you had to?
2. What kind of books do you like to read?
3. Why do you like to read those books? (mentioned above)
4. Tell me about a time when you read to someone in your family.
5. How did they like listening to you? (Explain how you know that.)
6. How does it make you feel when you read to people in your family?
7. How do you feel when you read out loud in class (at school)?
8. Tell me about a time you read to your teacher.
9. How does it make you feel when you figure out words?
10. Tell me about a time you did not understand what you read.
11. Tell me why you think you are a reader?
12. What kind of reader are you? (Possible probes: Why? or Why do you say that?)
13. How can you become a better reader?

Appendix C: Rubric for Student Interview Evaluation

Score	Rating	Attributes and Student Comments
4	<i>Highly Confident</i>	<p>The student:</p> <ul style="list-style-type: none"> _generally feels good about reading most of the time; _is eager to read many words and/or pictures; _is sure that others like to listen to him/her read; _can explain or give examples of how he/she figures out “hard” or new words and indicates the willingness to do so; _can name several books he/she enjoys reading; _names different times and places where he/she may read; _names people to whom he/she reads; _associates positive emotions with reading; _is not upset or does not quit when faced with new/challenging words, concepts, or story lines; _articulates ways/the areas in which he/she thinks personal reading progress has been made; _indicates/expresses that he/she is able to understand what he/she reads or knows how to figure out the meaning of the text; _may say “I’m smart,” “I’m good at reading,” “I can figure (it) out.”
3	<i>Somewhat Confident</i>	<p>The student:</p> <ul style="list-style-type: none"> _often feels good about reading but names certain situations/times/places when it is “hard” or uncomfortable to read; _is eager to read some words and many pictures; _will often try to read an unfamiliar word but may give up or classify it as “too hard, “too big/long,” or say “I don’t know that one yet;” _likes to read “short” words or familiar words; indicates that he/she understands what he/she reads but sometimes is confused or doesn’t understand the text or the context clues; _tells about both positive and negative experiences/emotions but is more positive than negative; _can name some people he/she reads to who respond positively but may also name someone who does not want to hear him/her read; _can name books he/she enjoys reading but may have to think about it or may qualify some of the books such as “It’s a book I know already,” or “It has lots of pictures;” _thinks he/she is getting better at reading but may not be able to say how or why or names only one or two ways in which he/she is improving;

		<p>_acknowledges that he/she is a “good” reader but names someone/other people in his/her class that he/she thinks are better readers.</p>
2	<i>Lacking Confidence</i>	<p>The student:</p> <p>_may only want to read in a few comfortable, familiar, or private settings/situations;</p> <p>_prefers to read pictures or very familiar words such as “cat;”</p> <p>_is reluctant to try new words and/or will only try unfamiliar words with teacher support;</p> <p>_may easily give up trying to read or refuse to read anything that looks unfamiliar;</p> <p>_may not be able to explain how he/she reads new words; may explain how he/she tries to read new words but expresses how it often may not work;</p> <p>_may be unsure if people want to hear him/her read; may name more people who do not want to listen to his/her reading than will listen;</p> <p>_may read only to a “safe” audience such as a very young sibling, grandparent, etc. but not to classmates or in a group setting;</p> <p>_generally only wants to read books and texts that are well rehearsed and very familiar;</p> <p>_may name books he/she enjoys reading but may also say he/she does not want to/like to read and would rather “play;”</p> <p>_may describe the books he/she reads as “easy/beginner/baby” books or “books I already know;”</p> <p>_may have some positive feelings about reading but also expresses feelings of fear, frustration, and/or negativity;</p> <p>_may express he/she finds more enjoyment listening to someone else read than reading him/herself;</p> <p>_can understand what is read but is very unsure about using strategies to figure out unfamiliar text;</p> <p>_may get confused when reading and then does not fully understand what he/she read;</p> <p>_may not classify him/herself as a “good” reader but if he/she does, he/she names quite a few others as being “better” readers;</p> <p>_may be unsure if he/she is getting better at reading or feels it is happening slowly or with considerable help from others.</p>
1	<i>No Confidence Evident</i>	<p>The student:</p> <p>_does not feel that he/she can read;</p> <p>_may say “I don’t know how to read yet” or “I can’t figure out those words;”</p> <p>_may express only dissatisfaction with his/her own reading performance or ability;</p> <p>_does not want to read to others;</p> <p>_may enjoy listening to others read;</p>

		<ul style="list-style-type: none">_may or may not read familiar text along with someone else but will not try to read anything alone;_may name books that others read to him/her but does not name books that he/she reads;_may express emotions connected with his/her own reading that are generally fearful, negative, or representative of frustration;_may be unsure if he/she is learning to read or state that he/she “can’t do that yet;”_does not think he/she is improving as a reader or may not know if his/her reading is improving;_does not classify him/herself as a reader;_may classify him/herself as a “bad” reader.
--	--	--

Appendix D: WRMT – R/NU and Student Interview Result Tables

Table D 1

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
	A	B	C
WRMT Clusters			
Basic Skills	2	2	1
Reading-Short Scale	2	2	2
WRMT Subtests			
Word Identification	2	2	1
Word Attack	3	3	2
Passage Comprehension	3	3	3
WRMT Summary	2	2	2
Student Interview			
Reading Self-Perception	2	2	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 2

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
2k	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 3

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
3k	A	B	C
WRMT Clusters			
Basic Skills	2	4	4
Reading- Short Scale	2	3	3
WRMT Subtests			
Word Identification	2	3	4
Word Attack	3	4	4
Passage Comprehension	3	3	3
WRMT Summary	2	3	3
Student Interview			
Reading Self-Perception	2	3	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 4

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading-Short Scale	2	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	2	3	3
WRMT Summary	2	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 5

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
5k	A	B	C
WRMT Clusters			
Basic Skills	2	3	4
Reading- Short Scale	2	3	3
WRMT Subtests			
Word Identification	2	3	4
Word Attack	3	4	4
Passage Comprehension	3	3	2
WRMT Summary	2	3	3
Student Interview			
Reading Self-Perception	2	3	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 6

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
6k	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading-Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	2	2	2
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 7

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
7k	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading-Short Scale	3	3	4
WRMT Subtests			
Word Identification	3	3	4
Word Attack	3	3	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	4
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 8

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
8k	A	B	C
WRMT Clusters			
Basic Skills	2	3	3
Reading-Short Scale	3	3	3
WRMT Subtests			
Word Identification	2	3	3
Word Attack	3	3	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	2	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 9

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
9k	A	B	C
WRMT Clusters			
Basic Skills	3	4	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	4	4
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	3	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 10

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
10k	A	B	C
WRMT Clusters			
Basic Skills	3	4	4
Reading- Short Scale	3	4	4
WRMT Subtests			
Word Identification	3	4	4
Word Attack	3	4	4
Passage Comprehension	3	4	3
WRMT Summary	3	4	4
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 11

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
11k	A	B	C
WRMT Clusters			
Basic Skills	3	3	4
Reading-Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	4
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	3	3	2

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 12

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
12k	A	B	C
WRMT Clusters			
Basic Skills	3	4	4
Reading- Short Scale	3	4	4
WRMT Subtests			
Word Identification	3	4	4
Word Attack	3	4	4
Passage Comprehension	3	3	4
WRMT Summary	3	4	4
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 13

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
13k	A	B	C
WRMT Clusters			
Basic Skills	3	4	5
Reading- Short Scale	4	4	4
WRMT Subtests			
Word Identification	3	4	4
Word Attack	3	4	5
Passage Comprehension	4	3	3
WRMT Summary	4	4	4
Student Interview			
Reading Self-Perception	3	3	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 14

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
14k	A	B	C
WRMT Clusters			
Basic Skills	2	3	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	2	3	3
Word Attack	3	4	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	2	3	2

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 15

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
	A	B	C
15k			
WRMT Clusters			
Basic Skills	3	3	3
Reading-Short Scale	2	3	3
WRMT Subtests			
Word Identification	2	3	3
Word Attack	3	3	3
Passage Comprehension	3	3	3
WRMT Summary	2	3	3
Student Interview			
Reading Self-Perception	3	3	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 16

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
16k	A	B	C
WRMT Clusters			
Basic Skills	3	3	5
Reading-Short Scale	3	3	4
WRMT Subtests			
Word Identification	3	3	5
Word Attack	3	3	4
Passage Comprehension	3	3	4
WRMT Summary	3	3	4
Student Interview			
Reading Self-Perception	3	2	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 17

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
17k	A	B	C
WRMT Clusters			
Basic Skills	3	4	4
Reading- Short Scale	3	3	4
WRMT Subtests			
Word Identification	3	3	4
Word Attack	3	4	4
Passage Comprehension	4	3	3
WRMT Summary	3	3	4
Student Interview			
Reading Self-Perception	3	4	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 18

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
18k	A	B	C
WRMT Clusters			
Basic Skills	1	1	1
Reading- Short Scale	1	1	1
WRMT Subtests			
Word Identification	1	1	1
Word Attack	2	1	1
Passage Comprehension	1	1	1
WRMT Summary	1	1	1
Student Interview			
Reading Self-Perception	4	2	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 19

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
19k	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading-Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	3	3	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 20

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
20f	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	4	5	5
WRMT Subtests			
Word Identification	5	5	5
Word Attack	5	5	5
Passage Comprehension	4	4	4
WRMT Summary	4	5	5
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 21

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
21f	A	B	C
WRMT Clusters			
Basic Skills	3	3	4
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	4
Word Attack	3	3	3
Passage Comprehension	3	2	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 22

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
22f	A	B	C
WRMT Clusters			
Basic Skills	3	3	4
Reading- Short Scale	3	3	4
WRMT Subtests			
Word Identification	3	3	4
Word Attack	4	3	4
Passage Comprehension	3	3	4
WRMT Summary	3	3	4
Student Interview			
Reading Self-Perception	3	3	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 23

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
23f	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading- Short Scale	3	3	4
WRMT Subtests			
Word Identification	3	3	4
Word Attack	2	2	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	4
Student Interview			
Reading Self-Perception	2	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 24

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
24f	A	B	C
WRMT Clusters			
Basic Skills	2	2	2
Reading- Short Scale	2	2	2
WRMT Subtests			
Word Identification	3	3	3
Word Attack	2	2	2
Passage Comprehension	2	2	2
WRMT Summary	2	2	2
Student Interview			
Reading Self-Perception	3	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 25

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
25f	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	5	5	5
WRMT Subtests			
Word Identification	5	5	5
Word Attack	5	5	5
Passage Comprehension	5	4	5
WRMT Summary	5	5	5
Student Interview			
Reading Self-Perception	4	4	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 26

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
26f	A	B	C
WRMT Clusters			
Basic Skills	4	4	5
Reading- Short Scale	4	4	5
WRMT Subtests			
Word Identification	4	4	5
Word Attack	4	4	5
Passage Comprehension	4	4	4
WRMT Summary	4	4	5
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 27

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
27f	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	2	3
Passage Comprehension	2	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 28

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
28f	A	B	C
WRMT Clusters			
Basic Skills	2	3	3
Reading- Short Scale	2	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	1	3	4
Passage Comprehension	2	3	3
WRMT Summary	2	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 29

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
29f	A	B	C
WRMT Clusters			
Basic Skills	4	4	4
Reading- Short Scale	4	4	4
WRMT Subtests			
Word Identification	4	4	4
Word Attack	4	4	4
Passage Comprehension	3	4	3
WRMT Summary	4	4	4
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 30

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
30f	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	2	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 31

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
31f	A	B	C
WRMT Clusters			
Basic Skills	3	4	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	4	4	3
Passage Comprehension	3	3	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 32

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
32f	A	B	C
WRMT Clusters			
Basic Skills	3	3	3
Reading- Short Scale	3	3	3
WRMT Subtests			
Word Identification	3	3	3
Word Attack	3	3	3
Passage Comprehension	2	2	3
WRMT Summary	3	3	3
Student Interview			
Reading Self-Perception	3	3	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 33

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
33f	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading-Short Scale	4	5	5
WRMT Subtests			
Word Identification	5	5	5
Word Attack	4	4	5
Passage Comprehension	3	5	5
WRMT Summary	4	5	5
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 34

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
34s	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	4	5	5
WRMT Subtests			
Word Identification	5	5	5
Word Attack	5	5	5
Passage Comprehension	3	4	4
WRMT Summary	4	5	5
Student Interview			
Reading Self-Perception	4	3	3

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 35

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
35s	A	B	C
WRMT Clusters			
Basic Skills	4	4	4
Reading- Short Scale	3	4	4
WRMT Subtests			
Word Identification	3	4	4
Word Attack	4	3	4
Passage Comprehension	3	3	4
WRMT Summary	3	4	4
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 36

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
36s	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	5	5	5
WRMT Subtests			
Word Identification	5	5	5
Word Attack	5	5	5
Passage Comprehension	5	5	5
WRMT Summary	5	5	5
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 37

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
37s	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	4	4	5
WRMT Subtests			
Word Identification	4	4	5
Word Attack	5	5	5
Passage Comprehension	3	3	4
WRMT Summary	4	4	5
Student Interview			
Reading Self-Perception	4	4	2

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Table D 38

Student Interview and Woodcock Reading Mastery Test – Revised N/U (WRMT) Results

Student	Session		
38s	A	B	C
WRMT Clusters			
Basic Skills	5	5	5
Reading- Short Scale	4	5	5
WRMT Subtests			
Word Identification	4	4	4
Word Attack	5	5	5
Passage Comprehension	3	4	4
WRMT Summary	4	5	5
Student Interview			
Reading Self-Perception	4	4	4

WRMT Scoring Scale: 5- well above average; 4- above average; 3- average; 2- below average; 1- well below average

Reading Self-Perception Scoring Scale: 4- highly confident; 3- somewhat confident; 2- lacking confidence; 1- no confidence evident

The scores from the WRMT summary and the student interview reading self-perception were used to calculate the mean, standard deviation, and the Spearman ranks for sessions A, B, and C.

Appendix E:
Student Data Used for Calculating the Spearman Rank: Sessions A, B, C

Table 5 E

Session A

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
1	2	2	0	0
2	3	4	-1	1
3	2	2	0	0
4	2	4	-2	4
5	2	2	0	0
6	3	4	-1	1
7	3	4	-1	1
8	3	2	1	1
9	3	3	0	0
10	3	4	-1	1
11	3	3	0	0
12	3	4	-1	1
13	4	3	1	1
14	3	2	1	1
15	2	3	-1	1
16	3	3	0	0
17	3	3	0	0

Table 5 E continued

Session A

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
18	1	4	-3	9
19	3	3	0	0
20	4	4	0	0
21	3	4	-1	1
22	3	3	0	0
23	3	2	1	1
24	2	3	-1	1
25	5	4	1	1
26	4	4	0	0
27	3	4	-1	1
28	2	4	-2	4
29	4	4	0	0
30	3	4	-1	1
31	3	4	-1	1
32	3	3	0	0
33	4	4	0	0
34	4	4	0	0
35	3	4	-1	1

Table 5 E continued

Session A

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
36	5	4	1	1
37	4	4	0	0
38	4	4	0	0

Table 6 E

Student Data Used for Calculating the Spearman Rank

Session B

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
1	2	2	0	0
2	3	4	-1	1
3	3	3	0	0
4	3	4	-1	1
5	3	3	0	0
6	3	4	-1	1
7	3	4	-1	1
8	3	4	-1	1
9	3	4	-1	1
10	4	4	0	0
11	3	3	0	0
12	4	4	0	0
13	4	3	1	1
14	3	3	0	0
15	3	3	0	0
16	3	2	1	1
17	3	4	-1	1
18	1	2	-1	1
19	3	3	0	0

Table 6 E continued

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
20	5	4	1	1
21	3	4	-1	1
22	3	3	0	0
23	3	4	-1	1
24	2	4	-2	4
25	5	4	1	1
26	4	4	0	0
27	3	4	-1	1
28	3	4	-1	1
29	4	4	0	0
30	3	4	-1	1
31	3	4	-1	1
32	3	3	0	0
33	5	4	1	1
34	5	3	2	4
35	4	4	0	0
36	5	4	1	1
37	4	4	0	0
38	4	4	0	0

Table 7 E

Student Data Used for Calculating the Spearman Rank

Session C

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
1	2	3	-1	1
2	3	4	-1	1
3	3	4	-1	1
4	3	4	-1	1
5	3	4	-1	1
6	3	4	-1	1
7	4	4	0	0
8	3	4	-1	1
9	3	4	-1	1
10	4	4	0	0
11	3	2	1	1
12	4	4	0	0
13	4	4	0	0
14	3	2	1	1
15	3	3	0	0
16	4	4	0	0
17	4	3	1	1
18	1	3	-2	4
19	3	3	0	0

Table 7 E continued

Student	WRMT – R/NU Rank X	Interview Rank Y	Difference D	D ²
20	5	4	1	1
21	3	3	0	0
22	4	4	0	0
23	4	4	0	0
24	2	4	-2	4
25	5	3	2	4
26	5	4	1	1
27	3	4	-1	1
28	3	4	-1	1
29	4	4	0	0
30	3	4	-1	1
31	3	4	-1	1
32	3	3	0	0
33	5	4	1	1
34	5	3	2	4
35	4	4	0	0
36	5	4	1	1
37	5	2	3	9
38	5	4	1	1