Increasing Reading Scores in MAP Testing Scores by Incorporating the *Daybook of Critical Reading and Writing*

A Special Project

Presented to

Dr. Gretta Merwin

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FACULTY APPROVAL

Increasing Reading Scores in MAP Testing Scores by

Incorporating the *Daybook of Critical Reading and Writing*

Approved for the Faculty	
	Faculty Advisor

ABSTRACT

To examine if the *Daybook of Critical Reading and Writing* would increase the reading scores of seventh grade students within the specific MAP assessment strand of *Think Critical and Analyze*, a group of 19 students engaged in activities from the text. Students were given a preand post- test using the MAP assessment tool in the fall of the '06 school year and again at semester, January '07. Data was gathered and results were measured using a *t*-test. Students engaged in at least one *Daybook* lesson every other week during the course of four months. Research proved the data gathered did not include enough growth to allow statistical significance. The null hypothesis was accepted.

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CHAPTER 1

Introduction

Background for the Project

National standards were set for reading achievement through the No Child Left Behind act. This act was making dramatic impact on student achievement throughout the country. Among many of the No Child Left Behind provisions was a requirement that "schools be judged based on the percentage of students who meet a standard of proficiency established by the state" (Kingsbury, McCall, & Gage, 2004, p.1). The academic progress of Washington State students was measured through the Washington Assessment of Student Learning. At almost every grade level, students were tested on specific areas of academics that allowed teachers, administrators, districts, parents, students and all interested individuals to determine if acceptable growth was being achieved. Various state assessments indicated, "only a small percentage of our young people are reaching high level of literacy" (OSPI, 1998, p.1). The tests were designed to support the Four State Learning Goals for Washington State which were prepared to help students "live, learn and work as productive citizens of the 21st Century" (OSPI, n.d., p.1). The goal of Washington State's Office of Superintendent of Public Instruction was to ensure all students, one hundred percent, would pass all areas of the WASL test by the year 2008. A plan was directed that included collaboration with educators, students, families, local communities, business, labor and government that included four goals. The third goal specifically stated, "think analytically, logically, and creatively, and to integrate experience and knowledge to form reasoned judgments and solve problems" (OPSI, n.d. p.1). In order to practice such skills, students needed to be skilled readers and be "immersed in print-rich environments" (OSPI, 1998, p.12).

The Daybook of Critical Reading and Writing was designed to "help students become active, engaged, critical readers" and a major goal of the Daybook was to "immerse students in quality literature" (Nauman, 2005, p.2). The concept behind the development of the Daybook was to help teachers with practical concerns associated with reading. The concerns were:

1) to introduce daily (or at least weekly) critical reading and writing into classrooms, 2) to fit into the new configurations offered by block scheduling, 3) to create a literature book students can own, allowing them to mark up the literature and write as they read, and 4) to make an affordable literature book that students can carry home (Claggett, Reid & Vinz, 1999. p. 5).

The *Daybook* fostered students' ability to read critically through the "Five Angles of Literacy" that were designed to help students develop beyond basic reading skills. The "Five Angles of Literacy" presented five approaches to effective critical literacy allowing students to read critically and write effectively (Nauman, 2005).

Statement of the Problem

The Washington Assessment of Student Learning test results for the researcher's building for the previous year demonstrated a lack of proficiency in critical thinking in both literary text and informational text areas. The building was 11.6% behind the state in the seventh grade benchmark, *Informational Text Critical Thinking*, and 3.9% behind the state in the seventh grade benchmark, *Literary Text Critical Thinking* (OSPI, 2006). The researcher wanted to know if the incorporation of the *Daybook of Critical Reading and Writing* into the planned instruction of students would increase critical thinking and analytical skills as measured by a reading Measure of Academic Progress test. The researcher would ensure students were subjected to literary and informational pieces during the time of study. The *Daybook* offered students opportunities to

practice actively reading a variety of selections while reinforcing specific strategies. The *Daybook* offered students opportunities to "build essential skills, such as questioning, summarizing, and finding the main idea; to develop an appreciation for the elements of fiction, poetry, and nonfiction; and to foster an appreciation of language" (Nauman, 2005, p.2).

Purpose of the Project

The purpose of this study was to investigate the effects of reading scores from fall to the end of the first semester after incorporating the *Daybook of Critical Reading and Writing* into the aligned teachings in a general education classroom. The selected classroom of 17 students was instructed to complete lessons from the *Daybook* at least once every other week between the fall testing date in October to the end-of-semester testing date in January. Specifically, the strand of *Think Critical and Analyze* was compared from the two.

Delimitations

The study compared Measure of Academic Progress testing scores of a particular group of students. The group of students was selected from a general education classroom within a middle school, the only middle school in the district. The district was located in a small, rural town of Eastern Washington. The town's population was 2,971. The district's enrollment consisted of 1,589 students. The middle school's enrollment count was approximately 393 students with demographics of 1.0% American Indian/Alaskan Native, 1.0% Asian, 0.5% Black, 21.4% Hispanic and 76.1% White. There were 46.0% of students qualifying for free or reduced-price meals. A total of 15.5% of students belonged to the special education program. The total migrant population was 14.5%, indicating a significant percent of students who were in the district for only a short amount of time. The transitional bilingual population was 10.8% (OSPI, 2006).

The district had recently adopted the Measures of Academic Progress testing program, making fall of 2006 the first testing opportunity for the district. Teachers as well as students were new to the program. The researcher assumed that the initial testing data from the students' first Measure of Academic Progress test would be accurate even though the students were new to the system. An educational assistant, also new to the program, was assigned to schedule all of the testing within a two-week time span. The testing was completed in a computer lab out of the normal classroom setting. The teacher was in the testing room with the students, although the educational assistant conducted the instructions to the students for the Measure of Academic Progress test. There were periodic interruptions, as other students would come into the room to complete make-up tests. The students were tested within 15 minutes after the first bell at the start of the day. Students were sitting in close proximity to each other and a printer located in the corner of the lab was in constant use during testing.

Because the program was new to the district, the students were not tested until four weeks into the school year. Student maturation possibly affected the testing scores.

<u>Assumptions</u>

The district adopted the teaching materials used by the researcher for the study two years prior to the testing. A highly qualified teacher taught the material. The teacher had worked with the material for two previous, consecutive years, although no training was provided by the district. The material used was age appropriate. The *Daybook* purchased was intended for seventh grade use. The *Daybook* was a consumable item. In order to save on costs, the district split the *Daybook* into three sections; giving one to each of the sixth grade honors students, all seventh graders, and all eighth graders. Due to the fact that the *Daybooks* needed to be ordered for the studied school year, students were not introduced to the *Daybooks* until the third week of

school. The seventh graders tested had not previously worked in a *Daybook* and had to be taught how to create anecdotal notes and be involved in the text.

The instructor assumed students understood this process and put forth effort when completing assignments. The researcher assumed that migrant students, students of limited multi-cultural experiences, or students with low reading abilities understood the concepts being taught with the aid of the instructor and peers.

Hypothesis

Incorporating the *Daybook of Critical Reading and Writing* into seventh grade classroom instruction will increase reading scores in the strand of *Think Critical and Analyze* from September to January as measured by a Measures of Academic Progress reading test.

Null Hypothesis

Incorporating the *Daybook of Critical Reading and Writing* into seventh grade classroom instruction will not increase reading scores in the strand of *Think Critical and Analyze* from September to January as measured by a Measures of Academic Progress reading test.

Significance of the Project

The reading scores of the school tested were not increasing as the state guidelines indicated. The middle school students were struggling with reading and a solution to this problem was focused time and attention while learning from researched-based instruction in order to get on track and read at grade level (NCLB, 2006.). The administration specifically requested teachers in the reading department to return to more traditional means of teaching. The administration believed guided teaching would increase test scores. The *Daybook* offered several opportunities for teachers to guide students through specific reading strategies. Such strategies included: "direct instruction of how to read critically, regular and explicit practice in marking up

and annotating texts ... in-depth instruction in how to read literature and write effectively about it" (Claggett, et al., 1999). Also, the lessons incorporated in the *Daybook* were geared to help students attain a higher level of thinking, thus helping the students' reading and writing abilities. Such practice would help students achieve academic success as measured by the yearly Washington Assessment of Student Learning test.

Procedure

The homogenous group selected for testing belonged to the same block, 90-minute period, and was taught by the same instructor. The students were tested by the Measures of Academic Progress test during the fourth week of the school year. This was the first introduction to the Measure of Academic Progress testing process. The Measures of Academic Progress test for reading included the following strands: *Word Recognition, Reading Comprehension, Know Text Components, Think Critical and Analyze, Read for a Variety of Purposes*. The researcher examined the *Think Critical and Analyze* strand to determine if reading scores had improved. Data from the test was gathered in the fall and at the end of the first semester in January. A *t*-test was produced using the data from the two designated pre- and post- tests.

The *Daybook of Critical Reading and Writing* was designed as a tool to help students increase higher-order thinking skills and become "active, engaged, critical thinkers" (Nauman, 2005, p. 2). The *Daybook* was a consumable, journal-like book that was designed to improve students' reading and writing skills. The *Daybook* was also designed to be best utilized in a block- schedule class. "The brief, self-contained lessons fit perfectly at the beginning or end of a block and could be used to complement or build upon another segment of the day" (Claggett, et al., p. 6). Students were introduced to the *Daybook of Critical Reading and Writing* on the third week of school. The instructor incorporated at least two *Daybook* lessons into two weeks' time.

Daybook lessons took anywhere from 30 minutes to three days to complete with different amounts of time given on each school day. Daybook lessons were typically started in a whole-class instruction method. Student participation was a key factor in the lessons. Students had ample opportunities to evaluate and compare with peer work. Each Daybook lesson included a written task as well as a reading task, and a specific strategy or concept was focused on for each task. The teacher allowed students time to complete tasks in the classroom. Students were also given time to compare responses and collaborate ideas generated by the lesson.

Definition of Terms

anecdotal notes. Anecdotal notes were the process of writing thoughts and making casual observations within the margins while the students were reading the material. Anecdotal notes were the written example of the thoughts produced while reading, both observations and questions.

<u>block</u>. A block was two periods of instruction time put together for a larger amount of time. A block in the school researched was 90 minutes of continued instruction time.

<u>Daybook</u>. The *Daybook of Critical Reading and Writing* was a journal-like consumable text that was designed to aid students with higher-order thinking skills. The *Daybook* was leveled according to grade.

Five Angles of Literacy. The Five Angles of Literacy as described by the *Daybook of Critical Reading and Writing Research Base* were: 1) interacting with a text; 2) making connections to stories; 3) shifting perspectives to examine a text from many viewpoints; 4) studying language and craft in a selection; and 5) studying an author, focusing on student life and work.

highly qualified. Highly qualified was the terminology used by the state of Washington to label teachers' teaching ability. Being highly qualified suggested that the teacher was well trained and knowledgeable in the curriculum taught.

<u>homogenous</u>. Homogenous was corresponding in structure because of a common origin, of the same or a similar kind.

MAP testing. Measures of Academic Progress tests were state-aligned, computerized adaptive tests that accurately reflected the instructional level of each student and measured growth over time.

RIT Scale. The RIT scale was a measured scale used to measure academic progress by the Northwest Evaluation Association. The RIT scale was used to measure a student's academic growth over time. The RIT scale was short for Rasch Unit, which was named after the founder. The RIT scale was used on the MAP test to individualize students' scores in each testing area.

whole-class instruction. Whole-class instruction was teacher-directed learning which included the entire class of students. Students were taught as one large group instead of small groups.

Acronyms

WASL. Washington Assessment of Student Learning

MAP. Measures of Academic Progress

OSPI. Office of Superintendent of Public Instruction

NCLB. No Child Left Behind Act

NWEA. Northwest Evaluation Association

RIT. Rasch unit

CHAPTER 2

Review of Selected Literature

Introduction

The goal of Washington State's Office of Superintendent of Public Instruction (OSPI) was to ensure all students, one hundred percent, would pass all areas of the WASL test by the year 2008. Insurances were directed through the four goals, the third goal specifically stated, "think analytically, logically, and creatively, and to integrate experience and knowledge to form reasoned judgments and solve problems" (OPSI, n.d. p.1). In order to practice such skills, students needed to be skilled readers and be "immersed in print-rich environments" (OSPI, 1998, p.12).

The Daybook of Critical Reading and Writing was designed to "help students become active, engaged, critical readers" and a major goal of the Daybook was to "immerse students in quality literature" (Nauman, 2005, p.2). The Daybook fostered students' abilities to read critically through the "Five Angles of Literacy" which were designed to help students develop beyond basic reading skills. The "Five Angles of Literacy" presented five approaches with specific strategies that guided students to effective critical literacy allowing students to read critically and write effectively (Nauman, 2005).

Daybook of Critical Reading and Writing.

The *Daybook* was a journal-like book students were able to write in as if the book belonged to the students. The major goal of the *Daybook* was to "immerse student in quality literature" (Nauman, 2005, p.2). The *Daybook* was full of interesting, rich literature that held the students' attention with a variety of difficulty levels to ensure students opportunities to read comfortably as well as offer a challenge (Nauman, 2005). Students were expected to write in the

book as the story progressed, including the students' thoughts, questions, and connections. Included in the *Daybook* were activities that required higher-order thinking skills along with each excerpt, having "brief potent lessons that integrate quality literature, critical reading instruction, and writing (Claggett et al., 1999, p. 7). The activities were completed in a variety of methods; whole-class, small group, and individual. Students were expected to reflect and summarize on the material, and teachers used the *Daybook* as an assessment tool throughout the school year. The *Daybook* was a consumable item, which, due to funding, the district of study chose to follow the students for a total of three years. The *Daybook* included 14 units of five lessons, each of which focused on a different requirement of reading (Claggett, et al.,1999). Five Angles of Literacy.

The "Five Angles of Literacy" were defined by the *Daybook of Critical Reading and Writing Research Base*. The "Five Angles of Literacy" were intended to "help students go beyond basic reading skills, building the ability to read critically and write effectively" leading to effective critical literacy (Nauman, 2005, p. 4). Through each angle, a set of strategies was taught and reinforced through practice, enabling students to transfer skills and become autonomous, critical readers. Strategies taught through the *Daybook* to students of middle grades included: becoming active readers, making story connections, understanding the author's perspective and focusing on language and craft. The "Five Angles of Literacy" were as follows: 1) Interacting with a text; promoting active, engaged reading. Strategies included in the first angle were underlining key phrases, writing questions or comments in margins, noting word patterns, circling unknown words, and keeping track of the story idea. 2) Making connections to stories. Strategies included in the second angle were connecting story to events in students' lives, and speculating on the meaning or significance of story incidents. The previous strategies helped

enhance student engagement, motivation, and comprehension. 3) Shifting perspectives to examine a text from many viewpoints. Students examined this angle by examining point of view, changing the point of view, exploring various versions of an event, forming interpretations, comparing texts, and asking "what if" questions. Learning to ask higher-level thinking questions allowed students to begin to consider multiple possibilities, thus looking at the literature more closely. 4) Studying language and craft in a selection. In this angle, students worked on understanding figurative language in literature; attentively and imaginatively reading text in order to enhance the readers' enjoyment. The study of author's use of words among a wide variety of literature increased student awareness of how authors use language, and as a result helped the students' own writing skills. 5) Studying the author. The Daybook offered opportunities to study a specific author, focusing on work in the life of the author. Author studies involved reading what the author said about the piece of literature, and reading what others thought about the literature. Students were asked to make inferences and connections between the author's life and work, analyze the author's style, and be aware of themes and topics as repeated in an author's work. The ability to question the author improved reading engagement and comprehension and was essential to reading critically (Nauman, 2005).

MAP testing.

The Measures of Academic Progress testing was administered by the district of study. The MAP was a test of academic progress offered by the Northwest Evaluation Association (NWEA). The NWEA partnered with school districts across the nation to offer quick, appropriate feedback for testing. The NWEA worked with over 2400 partner districts in the last year. The NWEA's Growth Research Database was the largest nation-wide repository of student test results (Kingsbury, et al., 2004). There were three general areas of academics tested by the

MAP tests; reading, writing and math. Included in the reading MAP test were four strands. The strand of *Think Critical and Analyze* was the strand being researched. Five components were included in the strand of *Think Critical and Analyze*; "analyze text to draw conclusions, analyze author's purpose and techniques, analyze text for fact and opinion, analyze and evaluate validity, accuracy, persuasive devices, and analyze and evaluate author's beliefs and assumptions" (NWEA n.d. p.1).

After student testing, results were available online immediately. Teachers were given a password and had access to all of the students' individual testing results and reports online. Also available online to the teacher were individual student goals and RIT scores. A RIT scale was used to "measure a student's academic growth over time. Like units on a ruler, the scale is divided into equal intervals – called Rasch Units (RIT) – and is independent of grade level" (NWEA, 2005, p. 1). The researcher was able to determine the proficiency of each student in each of the four reading strands. MAP testing was generally conducted in districts two to three times a year to monitor student strengths and weaknesses within specific strands of the three academic areas.

Summary

Washington State has made specific goals for each student currently enrolled in a K-12 educational facility. One of the main goals of the state was for students to "acquire the knowledge, skills, and strategies that will allow them to read, write, and think critically" (OSPI, 1998, p.1). The MAP testing, with the belief that the "inclusion of information concerning growth is essential for drawing a complete picture of school success," offered an opportunity for the district to obtain specific information about each and every child's success in four strands of reading ability (Kingsbury, et al., p. 2). The testing results were measured in RIT scores. The

RIT scores in the strand of *Think Critical and Analyze* were being studied by the researcher. The strand of *Think Critical and Analyze* was enhanced by the inclusion of *The Daybook of Critical Reading and Writing*. The *Daybook* offered specific lessons and strategies to help students increase higher-order thinking skills through the use of the "Five Angles of Literacy."

CHAPTER 3

Methodology and Treatment of Data

Introduction

The goal of Washington State's Office of Superintendent of Public Instruction (OSPI) was to ensure all students, one hundred percent, would pass all areas of the WASL test by the year 2008. Insurances were directed through the four goals, the third goal specifically stated, "think analytically, logically, and creatively, and to integrate experience and knowledge to form reasoned judgments and solve problems" (OPSI, n.d. p.1). In order to practice such skills, students needed to be skilled readers and be "immersed in print-rich environments" (OSPI, 1998, p.12).

The Daybook of Critical Reading and Writing was designed to "help students become active, engaged, critical readers" and a major goal of the Daybook was to "immerse students in quality literature" (Nauman, 2005, p.2). The Daybook fostered students' abilities to read critically through the "Five Angles of Literacy" which were designed to help students develop beyond basic reading skills. The "Five Angles of Literacy" presented five approaches with specific strategies that guided students to effective, critical literacy allowing students to read critically and write effectively (Nauman, 2005).

Methodology

The study was conducted in a rural town with one school district. The results were quantitative academic data. The students selected for study were a homogenous group. The researcher used a quantitative method of research to determine the outcome of growth. Pre- and post- MAP tests were used to determine reading comprehension ability in the aspect of *Think*

Critical and Analyze at two different intervals of the academic year. A *t*-test was produced to demonstrate the results.

Participants

The participants of the study were students from a small school district in Eastern Washington. The students selected were from a general education classroom, none were in the special education program. The classroom was a reading/language arts block class in the middle school. The students spent 90 minutes with the same teacher for these two subjects. The 17 students selected were a homogenous group of both females and males. The students selected included all academic levels except gifted and talented and/or honors students. The district of study had a high percentage of students who qualified for free or reduced lunch. At almost 50%, the researcher assumed at least 30%, or five students qualified for free or reduced lunch. Of the 17 students, six were bilingual, English being the second language learned.

The teacher in the classroom of study had been teaching for seven years. For four consecutive years, the teacher taught with the studied grade level in the same district. The teacher was new to MAP testing due to the recent introduction into the district, but had worked with the *Daybook of Critical Reading and Writing* for three years. Although the teacher did not obtain any formal training as to how to implement the *Daybook*, the teacher did attend several trainings in teaching reading strategies, as well as two Pre-Advanced Placement weeklong sessions over the course of three summers.

The ethnic diversity of the students was slightly varied. The participant demographics of the classroom were broken down in Table 1.

Table 1.

Participant Demographics

	Research Class	
Caucasian	10	
Hispanic	6	
African American	1	
Female	10	
Male	7	

As the chart suggested, most of the students were Caucasian. All of the Hispanic students were bilingual with Spanish being the home language. A majority of the students was female.

Instruments

The data-gathering device used in the study was the Measure of Academic Progress (MAP) test. The test was provided by the district, and purchased from the Northwest Evaluation Association (NWEA). The MAP tests were state-aligned, computerized adaptive tests that reflected the instructional level of each student and measured student growth over time. The NWEA allowed for districts to obtain all testing outcomes twenty-four hours following testing. The MAP measured student reading ability similarly to the WASL test, allowing the researcher to focus the study on the Think Critical and Analyze strand of the MAP test.

The Daybook of Critical Reading and Writing was a consumable, journal-like book that was designed to improve student' reading and writing skills, and aid students in higher-order thinking skills. The Daybook was designed to "help students become active, engaged, critical readers" and a major goal of the Daybook was to "immerse students in quality literature" (Nauman, 2005, p.2). The concept behind the development of the Daybook was to help teachers with practical concerns associated with reading. The researcher incorporated the Daybook into the classroom lessons on a weekly basis. The method of instruction and the total number of minutes working with the Daybook varied slightly from week to week.

As well as *Daybook* inclusion, the students were subjected to other materials that may have helped increase higher-order thinking skills. Due to the period scheduling in the building of study, another teacher's instruction may have altered the scores.

Design

The experiment study used a pre-test in the beginning of the fall semester and a post-test at the beginning of the spring semester to gather data. The pre-test was given to the students in the middle of September, 2006. The researcher tested the students with the exact same MAP test

under the same conditions in January, 2007. The outcome of the MAP test scores was the data the researcher used to produce a *t*-test. The *t*-test would determine if growth was noticeable from the addition of the *Daybook of Critical Reading and Writing* into instruction.

Procedure

The homogenous group selected for testing belonged to the same block, 90-minute period, and was taught by the same instructor. The students were tested by the Measures of Academic Progress test during the fourth week of the school year. This was the first introduction to the Measure of Academic Progress testing process. The test was conducted in a computer lab so that all students were tested at the same time and place. The Measures of Academic Progress test for reading included the following strands: *Word Recognition, Reading Comprehension, Know Text Components, Think Critical and Analyze, Read for a Variety of Purposes.* The researcher examined the *Think Critical and Analyze* strand to determine if reading scores had improved by the incorporation of the *Daybook of Critical Reading and Writing.* Data from the test was gathered in the fall and at the beginning of the second semester in January. A *t*-test was produced using the data from the two designated pre- and post- tests.

The *Daybook of Critical Reading and Writing* was designed as a tool to help students increase higher-order thinking skills and become "active, engaged, critical thinkers" (Nauman, 2005, p. 2). The *Daybook* was a consumable, journal-like book that was designed to improve students' reading and writing skills. The *Daybook* was also designed to be best utilized in a block- schedule class. "The brief, self-contained lessons fit perfectly at the beginning or end of a block and could be used to complement or build upon another segment of the day" (Claggett, et al., p. 6). Students were introduced to the *Daybook of Critical Reading and Writing* on the third week of school. The *Daybook* purchased by the district was specific to the grade level being

studied. Each student "owned" a *Daybook*. The instructor incorporated at least two *Daybook* lessons into two weeks' time. *Daybook* lessons took anywhere from 30 minutes to three days to complete with different amounts of time given on each school day. *Daybook* lessons were typically started in a whole-class instruction method. Student participation was a key factor in the lessons. Students had ample opportunities to evaluate and compare with peer work. Each *Daybook* lesson included a written task as well as a reading task, and a specific strategy or concept was focused on for each task. The teacher allowed students time to complete tasks in the classroom. Students were also given time to compare responses and collaborated ideas generated by the lesson.

The *Daybook* was not the exclusive tool used for instruction. The teacher also taught daily lessons with school board-approved materials, which included an anthology.

Treatment of the Data

The data for analysis comprised of the Measures of Academic Progress pre-test taken in the early part of the school year in September. The data was compared to another Measures of Academic Progress test taken at the beginning of the second semester in January. The researcher looked for growth in the *Think Critical and Analyze* strand of the Measures of Academic Progress test to determine if the inclusion of the *Daybook of Critical Reading and Writing* into instruction helped increase reading scores within the strand. A *t*-test was constructed to determine the outcome.

Summary

The homogenous group of 17 students from a rural school district used the *Daybook of Critical Reading and Writing* in the classroom every week to help increase reading scores. The

researcher used the Measures of Academic Progress test in the beginning of the school year and at semester to determine if growth had been achieved. The teacher varied reading instruction as well as the amount of time spent on the *Daybook* on a daily basis. The teacher incorporated at least two *Daybook* lessons into two weeks' time. The students "owned" the *Daybooks* and were allowed to write and reflect in the books. The students became more comfortable with the methods of the *Daybook* as time with the books progressed. Several different methods of teaching and assessment were used with the *Daybook*.

CHAPTER 4

Analysis of the Data

Introduction

The goal of Washington State's Office of Superintendent of Public Instruction (OSPI) was to ensure all students, one hundred percent, would pass all areas of the WASL test by the year 2008. Insurances were directed through the four goals, the third goal specifically stated, "think analytically, logically, and creatively, and to integrate experience and knowledge to form reasoned judgments and solve problems" (OPSI, n.d. p.1). In order to practice such skills, students needed to be skilled readers and be "immersed in print-rich environments" (OSPI, 1998, p.12).

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Description of the Environment

The study compared Measure of Academic Progress testing scores of a particular group of students. The group of students was selected from a general education classroom within a middle school, the only middle school in the district. The district was located in a small, rural town of Eastern Washington. The town's population was 2,971. The district's enrollment consisted of 1,589 students. The middle school's enrollment count was approximately 393

students with demographics of 1.0% American Indian/Alaskan Native, 1.0% Asian, 0.5% Black, 21.4% Hispanic and 76.1% White. There were 46.0% of students qualifying for free or reduced-price meals. A total of 15.5% of students belonged to the special education program. The total migrant population was 14.5%, indicating a significant percent of students who were in the district for only a short amount of time. The transitional bilingual population was 10.8% (OSPI, 2006).

The district had recently adopted the Measures of Academic Progress testing program, making fall of 2006 the first testing opportunity for the district. Teachers as well as students were new to the program. An educational assistant, also new to the program, was assigned to schedule all of the testing within a two-week time span. The testing was completed in a computer lab out of the normal classroom setting. The teacher was in the testing room with the students, although the educational assistant conducted the instructions to the students for the Measure of Academic Progress test. There were periodic interruptions, as other students would come into the room to complete make-up tests. The students were tested within 15 minutes after the first bell at the start of the day. Students were sitting in close proximity to each other and a printer located in the corner of the lab was in constant use during testing.

Because the program was new to the district, the students were not tested until four weeks into the school year. Student maturation possibly affected the testing scores.

Hypothesis

The researcher's hypothesis stated; incorporating the *Daybook of Critical Reading and*Writing into seventh grade classroom instruction will increase reading scores in the strand of

Think Critical and Analyze from September to January as measured by a Measures of Academic

Progress reading test. The data collected from the MAP pre- and post- tests did not support the hypothesis.

Null Hypothesis

Incorporating the *Daybook of Critical Reading and Writing* into seventh grade classroom instruction will not increase reading scores in the strand of *Think Critical and Analyze* from September to January as measured by a Measures of Academic Progress reading test. As the results indicated in a *t*-test developed by the data, the data did not provide statistical significance. Therefore, the null hypothesis is accepted.

Results of the Study

Table 2.

Participating Students' Pre- and Post- MAP Test Scores

Student	Pre-test	Post-test
1	183.5	221.5
2	209	216
3	213.5	221
4	218.5	216.5
5	213.5	233
6	209.5	214.5
7	203.5	207.5
8	221	211
9	212.5	220
10	220	228.5
11	229.5	225
12	218.5	223.5
13	223.5	232.5
14	243.5	215.5
15	222.5	222
16	224.5	219.5
17	225	223.5

Table 2 represents the seventeen students the researcher used for the study. The pre-test scores represented in the table were from the test in September, 2006. The post-test scores represented in Table 2 were from the MAP reading test students took in January 2007. The researcher determined the pre- and post- scores by using a mean score of a given range from the *Think Critical and Analyze* strand of the MAP reading test. Mean scores were derived from adding half of the difference of the two range numbers to the lower of the two range numbers. The method was done consistently to each individual's score, both pre- and post-tests.

Table 3.

t-test of Pre- Po	ost- Test Results	for MAP Test	<u> </u>
Test	N	Mean	Standard Deviation
Pre	17	217.15	12.25
Post	17	220.65	6.70
df = 16		t = 1.07	p>.05

After scoring the pre- and post- tests for the MAP reading test, Table 3 indicated that there was not statistical significance with the data. Therefore, the null hypothesis was accepted. Incorporation of the *Daybook of Critical Reading and Writing* did not increase reading scores in the stand of *Think Critical and Analyze* with a significant value. Probability was greater than .05; therefore, no statistical significance was identified.

¹ The Projector Skeleton Statpak was used in conjunction with the data to produce the *t*-test

Findings

The results indicated that the incorporation of the *Daybook of Critical Reading and Writing* into weekly instruction did not help increase the reading scores with statistical significance as indicated by the MAP test. The research specifically looked at the *Think Critical and Analyze* strand within the MAP pre- and post-tests for significant growth. The data collected did not demonstrate statistical significance in this area. While most students did increase in scores, the inclusive data did not demonstrate enough growth to support the hypothesis.

Discussion

Incorporation of the *Daybook of Critical Reading and Writing* into weekly instruction was meant to help increase the *Think Critical and Analyze* scores of students as indicated by the MAP reading test. The data collected within the four months of the testing period did not support this outcome. Growth was demonstrated in most students, but not all. This could have been attributed to the fact that the students were new to the test and the testing system, which may have caused the pre- test scores to be inaccurate.

Summary

Students in the classroom that used the *Daybook of Critical Reading and Writing* to increase reading MAP scores in the *Think Critical and Analyze* strand did not improve in the strand scores as indicated by a *t*-test. The *t*-test conducted from pre- and post- MAP tests did not measure statistical significance; therefore, the null hypothesis was accepted.

CHAPTER 5

Summary, Conclusions and Recommendations

Introduction

The goal of Washington State's Office of Superintendent of Public Instruction (OSPI) was to ensure all students, one hundred percent, would pass all areas of the WASL test by the year 2008. Insurances were directed through the four goals, the third goal specifically stated, "think analytically, logically, and creatively, and to integrate experience and knowledge to form reasoned judgments and solve problems" (OPSI, n.d. p.1). In order to practice such skills, students needed to be skilled readers and be "immersed in print-rich environments" (OSPI, 1998, p.12).

The Daybook of Critical Reading and Writing was designed to "help students become active, engaged, critical readers" and a major goal of the Daybook was to "immerse students in quality literature" (Nauman, 2005, p.2). The Daybook fostered students' abilities to read critically through the "Five Angles of Literacy" which were designed to help students develop beyond basic reading skills. The "Five Angles of Literacy" presented five approaches with specific strategies that guided students to effective critical literacy allowing students to read critically and write effectively (Nauman, 2005).

Summary

Incorporation of the *Daybook of Critical Reading and Writing* into weekly instruction was meant to help increase the *Think Critical and Analyze* scores of students as indicated by the MAP reading test. Two testing dates were assigned, one in September and one in January. The researcher used the pre- and post- test data to conduct a *t*-test. Although students did demonstrate growth in the *Think Critical and Analyze* strand, as well as the other strands on the MAP test, the

growth was not enough to demonstrate statistical significance. Disappointing to the researcher, the null hypothesis had to be accepted.

Conclusions

In conclusion, the researcher did not find the data to support the hypothesis that the inclusion of the *Daybook of Critical Reading and Writing* helped increase reading scores within a specific stand of the MAP test. The fact that the MAP test was new to the district and students were new to the system may have had an effect on student pre-test scores. Overall, Table 2 indicated growth in most of the students studied. The researcher did observe improvement in classroom activities over the course of the studied time, especially that which included higher-order thinking skills, through other assessment methods such as written evaluation and classroom discussion.

Recommendations

Future research needs to be completed on this topic. Perhaps the MAP test being new to the district skewed the students' scores when testing was completed in the fall. This may account for the large increased and decreased numbers in the pre- and post- test data. Once the students are in the MAP testing system and the system is able to determine their instructional level, future testing will be more accurate. Research conducted with the *Daybook* at that time may demonstrate significant student growth.

The students' lack of knowledge with the test may have affected test scores. Students may have also been nervous or anxious when taking the test. Since the test was new, the students had no prior knowledge or expectations. The district did put a large emphasis on the test prior to the testing date, stating it was a determiner of how students would do on the WASL test. Student effort was unable to be evaluated. The researcher would like the testing area to be less

distracting. There were several interruptions, including incoming students, bells, and printer noise. There were also adult discussions occurring during testing time. This may have caused distractions or frustrations to the students being tested. Finally, this researcher believes that a continuation of study will demonstrate a connection between the growth of higher-order thinking skills and the use of the *Daybook of Critical Reading and Writing*.

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