

The Effect of the TWA Reading Strategy  
on the  
Reading comprehension Level of 9<sup>th</sup> - and 10<sup>th</sup> - Grade Students

by  
Jennifer Merson

Submitted in Partial Fulfillment of the Requirements for the  
Degree of Master of Education

May 2016

Goucher College  
Graduate Programs in Education

## Table of Contents

|  |    |
|--|----|
| List of Tables   | i  |
| Abstract   | ii |
| I. Introduction  | 1  |
| Statement of the Problem                                 | 2  |
| Statement of Research Hypothesis                         | 2  |
| Operational Definitions                                  | 2  |
| II. Literature Review                                    | 3  |
| Relationship between Reading and Classroom Behavior      | 3  |
| What Reading Comprehension Should Look Like              | 4  |
| Effective Strategies for Improving Reading Comprehension | 5  |
| III. Methods   | 8  |
| Design   | 8  |
| Participants   | 8  |
| Instrument   | 8  |
| Procedure  | 9  |
| IV. Results  | 11 |
| V. Discussion  | 12 |
| References   | 16 |
| Appendix A   | 19 |

## List of Tables

|  |    |
|--|----|
| 1. Mean scores on the pre and posttest | 11 |
|--|----|

## **Abstract**

The purpose of this study was to investigate the impact that the TWA strategy had on the reading comprehension level of ninth- and tenth-grade students. The measurement tool used was the Degrees of Reading Power (DRP). This study used a pretest/posttest design over a five-week period. The null hypothesis was rejected because the reading comprehension level of students significantly increased as a result of the TWA strategy. Continued research regarding increasing reading comprehension levels of students would be beneficial so that students can be college and career ready.

# **CHAPTER I**

## **INTRODUCTION**

### **Overview**

The ability to read and understand what one reads is key to success in college or in the work force. Students' inability to read or comprehend what they read negatively impacts the learning process. Students who cannot decipher informational text on grade level are left behind their peers. Those students exhibit shame, frustration, and anger to a point where they may shut down. The achievement gap widens for students who lack reading comprehension skills. This is even more true for students with special needs who have an individualized education plan or 504 plan.

Unfortunately, inability to read on grade level and to comprehend informational text is a common problem in schools. It is almost unbelievable considering that students are working with text in almost every single class from the time they start school at age four or five. Some believe that most students leave elementary school competent readers but then do not refine their skills in middle school. It is then suggested that these students come to high school with deficits in literacy.

The researcher became interested in trying to increase reading comprehension because of the deficits that her students exhibited. These students struggle with reading comprehension which adversely affects their ability to succeed on certain assignments. Realizing how widespread the issue is, the researcher wanted to put a strategy in place that would help students grasp what they read and, in turn, lead to increased student achievement. The issues with

reading and reading comprehension must be addressed if educators are to help students succeed and prepare them for college or the work force.

### **Statement of Problem**

What strategies are effective in increasing the reading comprehension level of ninth- and tenth-grade students when working with social studies text?

### **Hypothesis**

The null hypothesis is that there will be no significant difference between the reading comprehension level of students after learning how to use the TWA reading strategy.

### **Operational Definitions**

The implementation of the independent variable, the TWA reading strategy, was assessed by a checklist. TWA stands for thinking prior to reading, thinking while reading and thinking after reading. Prior to reading, students were given the checklist which asked them to identify the purpose for reading statement, three things that were already known about the topic, and what they wanted or needed to learn. When used during reading, the checklist helps students to monitor their reading speed so that comprehension can occur. After reading, the checklist asks students to identify the main idea, explain what they read, and identify a question about the text.

The reading comprehension level of students was measured by the Degrees of Reading Power (DRP). The raw scores are translated into reading levels.

Classwork is work that students complete independently or in groups after direct instruction and modeling from the teacher.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

Teaching reading comprehension skills in a general social studies classroom is one way to increase skills, teach content, and lower problem classroom behaviors. A student who is more actively engaged in the lesson is less likely to disrupt the learning environment. It is the duty of every content teacher to teach reading skills in addition to the course content. The teacher can model strategies so that students can begin to internalize and apply reading comprehension strategies on their own. Through practice, student achievement will increase and problem behavior will decrease.

This review of the literature discusses reading comprehension in the content areas. Section one investigates the relationship between reading comprehension and classroom behavior. Section two presents what reading should look like in a social studies classroom. Finally, section three outlines strategies for improving both reading comprehension and classroom behavior.

#### **The Relationship between Reading Comprehension and Classroom Behavior**

Struggling readers behave differently than their peers in a classroom setting. Mismatch is created when the reading assignment is above the capability of the student (Cipani, 2011). In order to cope with this mismatch, students either shut down or become disruptive. Poor readers exhibit off-task and disruptive behaviors more so than their peers (Wasson, Beare, & Wasson, 1990). These off-task behaviors can range from simple avoidance of work to class disruptions.

Class disruptions influence the educational environment. Students who engage in off-task behavior run the risk of possible failure of the course. This is especially true for students with

disabilities. Students rarely will want to call attention to their weakness. Therefore, students avoid work in order to conceal their poor reading skills. Some students exhibit aggression and defy authority figures (Wehby, Falk, Barton-Arwood, Lane, & Cooley, 2003). The motivation for this behavior can be hard to determine at times. However, whatever the motivation, off-task behavior is disruptive to the learning environment. In certain cases, entire class periods are derailed due to aggressive student behaviors toward teachers. Teachers cannot teach when they are constantly dealing with discipline issues.

On the other hand, some poor readers try to “play school” in order to hide their reading weakness. These students will go through the motions just like the others but without the same level of comprehension (Taylor, Hasselbring, & Williams, 2001). The student’s attempt is honorable; however, there is potential for class failure with this type of student, as well, since course content is being missed. No matter the circumstance—whether a student exhibits off-task behavior or “plays school,” it is up to the teacher to implement reading comprehension strategies to increase reading achievement. The implementation of the reading strategies will allow for students to be actively engaged with the text. The more engaged students are, the less likely they are to disrupt the classroom environment.

### **What Reading Comprehension Should Look Like in a Social Studies Classroom**

Reading comprehension is key for academic success in all content areas. It is vital that teachers be aware of each student’s reading level as well as strategies to increase reading achievement. Each class is likely to be comprised of students at a variety of reading levels. Teachers must match reading levels with strategies in order to increase skills such as reading comprehension. Strategies to increase reading comprehension include previewing text, highlighting, outlining, taking notes, and making predictions about the text (Christophe, 2011).



Once students have been taught these strategies, they can begin to apply them. In addition, reading skills improve through practice.

The document-based lesson supports instruction and reading comprehension in social studies. This method involves students navigating through primary source documents to answer historical questions while the teacher acts as a guide. The document-based lesson should be chronological and follow a flexible activity sequence composed of three parts. The first part of the lesson is establishing background knowledge. This helps to set the stage for learning. The second part of the lesson involves historical inquiry. Students are to use two to five sources from different perspectives to answer a historical question. The final step involves discussion. The discussion allows for higher order thinking as students argue their viewpoints regarding the sources (Reisman, 2012).

Primary sources provide a great alternative to textbooks. However, primary sources can prove to be difficult for students who are reading below grade level. It is important that teachers modify assignments to meet the needs of the students. Reisman (2012) suggests that teachers demonstrate cognitive modeling and close reading. It can be helpful for students to see the teacher closely read and think out loud to complete one of the documents before the student is asked to do so independently. This modeling can help students to internalize the process. Ultimately, this promotes the notion that all teachers—social studies teachers included—are responsible for increasing reading comprehension skills as well as teaching content.

### **Effective Strategies for Improving Reading Comprehension and Behavior**

There is not a one-size-fits-all strategy for increasing reading comprehension. To increase individual students' reading comprehension skills, it is the duty of the teacher to meet each student at his or her level. The TWA strategy emphasizes the importance of thinking all the way

through the process of reading. TWA stands for thinking before reading, while reading, and after reading. Prior to reading, students activate their prior knowledge regarding the topic. While reading, students summarize information and identify the main idea. After reading, students reflect on what they read and link new information with their prior knowledge (Rogevich & Perin, 2008). Activating prior knowledge is important because it sets the stage for learning to occur. Students cannot complete the assignment if they do not understand the background related to a topic. In addition, students should be provided with key vocabulary prior to reading (Vaughn et al., 2015). This ensures that students are set up for success. Comprehension cannot occur if vocabulary is missing. It is also helpful to have before, during, and after reading activities to guide the students through the assignment. Until students become experts, they need direction. A directed reading activity is designed to keep students engaged.

Behavior affects learning. It is up to the teacher to guide students to ensure learning. The more students are engaged, the less likely they are to exhibit problem behaviors. When students are having difficulty staying on task, teachers must motivate them (Benner, Nelson, Ralston, & Mooney, 2010). Students often lack intrinsic motivation, so positive reinforcement from teachers can help students find motivation to complete assignments with accuracy. This, in turn, increases student achievement and lowers problem behaviors in the classroom.

A student who lacks vocabulary and fluency will struggle with reading comprehension. One way to combat this issue is through the implementation of partner reading (O'Shea, McQuiston, & McCollin, 2009). The higher performing reader can guide the lower performing reader through the text. During partner reading, the lower performing reader cannot just pass over the vocabulary word that he or she does not know. The higher functioning reader will be there to assist and define the word. Vocabulary understanding is vital for comprehension to

occur. Partner reading can be beneficial for English language learners who are given the task of learning the content and a new language at once. The use of multicultural relevant text helps to improve reading comprehension skills as well. This motivates students by making learning relevant to them.

### **Conclusions**

There are many components to reading comprehension, and increasing reading comprehension is a continual process, both for teachers and for students themselves. Practice makes perfect. The TWA strategy allows students to think before, during, and after reading in order to link prior knowledge with new material. Students are also provided with key vocabulary so that they are set up for success. Partner reading also helps students who struggle with vocabulary and fluency. A lower achieving student is paired with a higher achieving student so that they may together analyze the text. The higher achieving student can provide assistance when needed. Positive reinforcement strategies can be used in the classroom in order to motivate students to remain on task and reduce problem behaviors. Literacy growth and reading comprehension is an ongoing process.

## **CHAPTER III**

### **METHODS**

The purpose of the study was to determine the effect that the TWA reading strategy had on the reading comprehension level students.

#### **Design**

The five-week quasi-experimental study consisted of a pre-and posttest design. The study was conducted using convenience sampling of ninth- and tenth-grade students enrolled in American Government. The independent variable was think before reading, think during reading and think after reading, better known as the TWA reading strategy. The dependent variable was reading comprehension as measured by the Degrees of Reading Power test.

#### **Participants**

The study was comprised of ten students, three girls and seven boys. The participants were all in an American Government course in a small alternative high school located in a suburban neighborhood. The neighborhood was located outside a midsized community in the Atlantic region of the United States. The total enrollment of the school at any given time is around seventy-five students. The school consists of students in grades nine through twelve.

#### **Instrument**

The standard Degrees of Reading Power (DRP) is an untimed test that measures comprehension of surface meaning of text. A modified cloze format is used in which students read nonfiction paragraphs and passages that have words omitted. The students choose from four of five words to fill in the correct missing word. The questions become increasingly more difficult. The students' raw scores can be translated into their reading levels. The reading levels ranged from below 2.5 to above grade 9.0.

A reviewer in *Mental Measurement Yearbook* noted that the internal consistency reliability of the DRP ranges from .93 to .97. The reviewer went on to say that the standard errors of measure in raw scores range from 2.2 to 3.8 (Green, 2001). A second reviewer had positive feedback regarding the DRP; however, that reviewer noted how vocabulary may play a role in a student's score. The reviewer explained that the DRP passages do not require subject matter knowledge but that limited vocabulary may result in a lower score (Margolis, 2001). Although not perfect, the DRP provides educators with one way of determining the reading comprehension level of students.

### **Procedure**

The DRP was administered to students in their English classes upon enrollment at the school. The scores obtained from the students' English teacher served as the pretest scores. The TWA reading strategy was implemented for five- weeks. Students used the TWA reading strategy when analyzing informational text, such as the textbook, and primary source documents during classwork and homework assignments. For example, students used the TWA reading strategy checklist before, during, and after reading case briefs of twenty landmark Supreme Court decisions such as, *Tinker v. Des Moines* and *Plessy v. Ferguson* in order to evaluate how the cases impacted the United States government and the rights of citizens. The reading strategy was also used during homework assignments in which students found current news articles that related to the judicial unit. Students were to summarize the article, explain how the article related to course content, and explain how the article related to their lives.

During the first week, the researcher modeled the TWA reading strategy to students so that students could learn how to put the strategy into practice when working with text in class. The researcher modeled how to craft a purpose for reading statement. The purpose for reading

statement is based on the assignment and used to help students identify what they want to know and what they need to know. The researcher also modeled strategies to help students identify prior knowledge. The think before reading components of TWA include identification of the author's purpose, identification of prior knowledge, and identification of what needs to be learned. The researcher also modeled think while reading and think after reading strategies.

The researcher explained to students that thinking during reading helps them monitor what they are reading. The checklist helps students to monitor reading speed and rereading for clarification when necessary. The think while reading components of TWA include reading at a speed that helps the student understand, rereading when something does not make sense, and connecting reading to prior knowledge. The researcher modeled thinking after reading by helping students to elicit the main idea from the text as well as summarize the text. The components of the thinking after reading of TWA include identifying the main idea, summarizing what the student read, explaining what the student read, and asking a question about the text.

After the first week of direct instruction and modeling, the students were expected to use the TWA reading strategy when analyzing informational text and primary source documents during reading assignments in class and at home. The researcher suggested that students use the reading strategy in their other core classes. The researcher provided individual feedback to students on a daily basis so that the students would become TWA experts. For example, some students wrote a purpose for reading statement that was too vague. The researcher provided feedback to each student so that he or she could potentially prevent this mistake in the future.

At the end of five- weeks, students were given the DRP for a second time. The test is 49 questions and is untimed. The raw scores were translated into the reading level of the student.

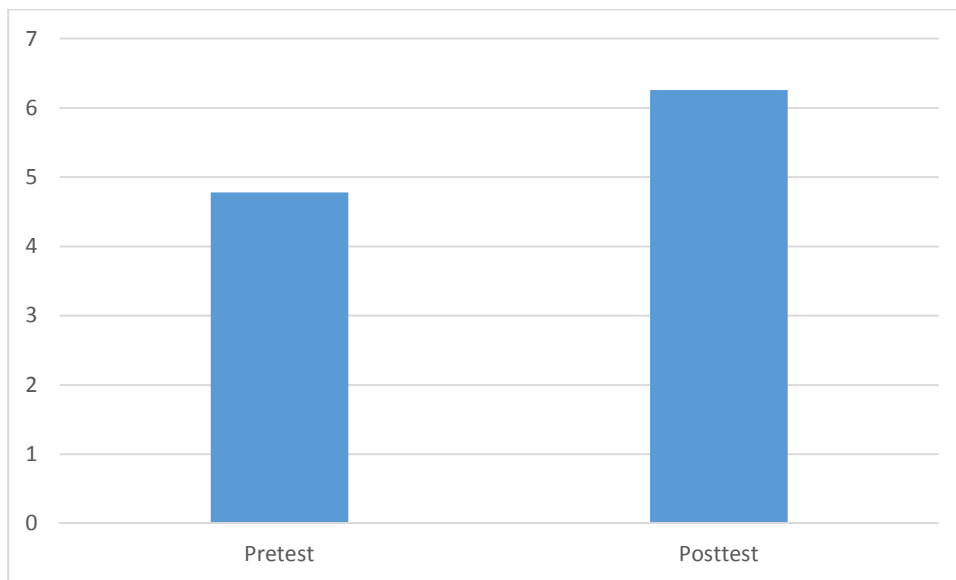
## CHAPTER IV

### RESULTS

The purpose of this study was to investigate the impact that the TWA strategy had on the reading comprehension level of students. The reading comprehension level of students significantly increased as a result of the TWA strategy  $t(9) = -2.81, p < .05$ . The mean score increased from 4.78 on the pretest to 6.26 on the posttest. When broken down by gender, male students showed significant growth  $t(6) = -2.50, p < .05$ . The mean score increased from 4.80 on the pretest to 6.13 on the posttest. However, when broken down, female students showed growth but not significant growth  $t(2) = -1.26, p = .33$ . The mean score on the pretest increased from 4.73 to 6.56 on the posttest.

Figure 1

*Mean scores on the pre and posttest*



The null hypothesis, that there would be no significant difference between the reading comprehension level of students after learning how to use the TWA reading strategy, was rejected.

## **CHAPTER V**

### **DISCUSSION**

The purpose of this study was to investigate the impact that the TWA strategy had on the reading comprehension level of students.

#### **Implications of Results**

The data showed a significant increase in the reading comprehension level of students on the posttest. Therefore, the null hypothesis, that there would be no significant difference between the reading comprehension levels of students after learning how to use the TWA reading strategy, was rejected. The seven male students showed significant growth on the posttest as a result of the intervention. The three female students showed growth, but that growth was not significant.

One practical implication of the research is that the TWA strategy helped students to stay focused and on task. Participants took an active role in their learning because they were engaged. The checklist served as a reminder for some students who tend to get off task. As a result, participants were intrinsically motivated. Also, disruptive classroom behaviors began to decrease due to the fact that students were engaged, motivated, and meeting with success. The researcher observed fewer students acting out because students appeared to be less frustrated when reading.

#### **Theoretical Implications**

This study supported the relationship between reading comprehension and classroom behavior. The implementation of the TWA reading strategy allowed students to become actively



engaged and motivated participants in the lesson. Poor readers exhibit off-task and disruptive behaviors more so than their peers (Wasson, Beare, & Wasson, 1990). However, the reading checklist helped provide guidance and support to struggling readers. Without the reading strategy in place, mismatch may have existed. Mismatch is created when a reading assignment is above the capability of the student (Cipani, 2011). However, with the reading strategy in place, students did not feel the need to mask their weaknesses by derailing the learning environment. The more engaged students are, the less likely problem behaviors are to exist.

### **Threats to Validity**

One threat to external validity involved the use of nonrandom convenience sampling. The study consisted of ten students, predominantly male, in a small mid-Atlantic high school. As a result of this threat to validity, the results cannot be generalized to include high schools with larger enrollment. One threat to internal validity was the high rate of absenteeism among some participants involved in the study. Many of the participants missed multiple days of school during the evaluation period. Lastly, mortality occurred when two participants were expelled and, therefore, removed from the study.

### **Connections to Previous Studies/Existing Literature**

Pre-existing literature was consistent with the observations of the researcher and results of the study. Strategies to increase reading comprehension include previewing text, highlighting, outlining, taking notes, and making predictions about the text (Christophe, 2011). The first step of the TWA reading strategy is to preview the text so that students can identify the purpose for reading. The TWA reading strategy was closely tied with elements of the document-based lesson. The document-based lesson uses primary source documents to engage students in historical inquiry in order to answer a historical question (Reisman, 2012). One commonality

between the document-based lesson and the TWA strategy is that both lessons involved the use of primary source documents. Secondly, both strategies stress the importance of activating prior knowledge in order to set the stage for learning. The major difference between the document-based lesson and the TWA reading strategy is that documents with different viewpoints were not always provided when using the TWA strategy. At times students were only asked to analyze one source. On many occasions, this was Supreme Court case briefs. Lastly, both the TWA strategy and document-based reading strategy conclude with discussion. Discussion demonstrates higher order thinking because students must apply their knowledge (Reisman, 2012). The students must use sources as proof to back up their viewpoints.

The literature regarding the TWA reading strategy supported the results of the study. The reading strategy cannot stand alone, meaning that if students lack fluency skills as well as reading comprehension two interventions need to be in place (Rogevich & Perin, 2008). The researcher took this into account regarding vocabulary. Key vocabulary should be provided in order to set students up for success (Vaughn et al., 2015). The researcher provided and discussed key vocabulary at the beginning of every assignment. A student cannot comprehend the material if vocabulary is not understood. Once students become more confident, context clues can be used to define new vocabulary.

### **Implications for Future Research**

Future studies that look at the long-term effects of the use of the TWA reading strategy would be beneficial. The ABAB design study method could be introduced and measured over a semester, which is 18 weeks. The researcher would obtain an initial baseline before initiating a treatment phase. After several weeks of treatments, the researcher would withdraw treatment and obtain another baseline. At that time, the researcher would initiate the treatment once again. The

reading strategy would be proven to be effective if the reading comprehension level of students improved even when the strategy was withdrawn.

Any future studies should use a larger sample. This will help solve the issue of mortality and potentially include a greater number of female students.

A study that measured how reading comprehension levels of students affects classroom behavior would be beneficial. The researcher could document students' time on task, behavior, and motivation level. The researcher could also design and document student response to a positive reinforcement program in the classroom. The program would be designed to motivate and engage students in order to increase academic achievement.

### **Conclusions/Summary**

The results of the study show that the reading comprehension level of students significantly increased over a five-week period among ninth- and tenth- grade students while using the TWA reading strategy. Despite the small sample size and length of study, the results supports the use of the TWA reading strategy. The reading strategy focused, motivated, and engaged students. This, in turn, helped to build the confidence level of students and increase student achievement. Reading comprehension is key for success in college or the workforce.

## References

- Benner, G., Nelson, R., Ralston, N., & Mooney, P. (2010). A Meta-Analysis of the Effects of reading Instruction on the Reading Skills of Students With Or At Risk of Behavioral Disorders. *Behavioral Disorders*, 35(2), 86-102. Retrieved from <http://search.proquest.com/goucher.idm.oclc.org/docview/897365368?accountid=11164>
- Christophe, K. (2011). Teaching reading in the secondary content area classroom as perceived by secondary content area teachers. (Ph.D., Capella University). *ProQuest Dissertations and Theses*, Retrieved from <http://search.proquest.com/docview/916240044?accountid=11164>
- Cipani, E. (2011). *Decoding Challenging Classroom Behaviors: What Every Teacher and Paraeducator Should Know!* Springfield, Il: Charles C Thomas.
- Green, F. (2001). [Review of Degrees of Reading Power]. In B. S. Plake & J. C. Impara (Eds.), *The fourteenth mental measurements yearbook* (pp. 1033-1038). Lincoln, NE: Buros Institute of Mental Measurements.
- Margolis, H. (2001). [Review of Degrees of Reading Power]. In B. S. Plake & J. C. Impara (Eds.), *The fourteenth mental measurements yearbook* (pp. 1033-1038). Lincoln, NE: Buros Institute of Mental Measurements.
- O'Shea, D., McQuiston, K., & McCollin, M. (2009). Improving Fluency Skills of Secondary-Level Students From Diverse Backgrounds. *Preventing School Failure*, 54(1), 77-80.

Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ845962&login.asp&site=ehost-live&scope=site;>

<http://heldref.metapress.com/openurl.asp?genre=article&id=doi:10.3200/PSFL.54.1.77-80>

Reisman, A. (2012). The "Document-Based: Lesson": Bringing Disciplinary inquiry into High School History Classrooms with Adolescent Struggling Readers. *Journal of Curriculum Studies*, 44(2), 233-264. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ963241&login.asp&site=ehost-live&scope=site;> <http://dx.doi.org/10.1080/00220272.2011.591436>

Rogevich, M., & Perin, D. (2008). Effects on Science Summarization of a Reading Comprehension Intervention for Adolescents With Behavior and Attention Disorders. *Exceptional Children*, 74(2), 135-154. Retrieved from

<http://search.proquest.com/goucher.idm.oclc.org/docview/201219274?accountid=11164>

Taylor, R., Hasselbring, T., & Williams, R. (2001). Reading, Writing, and Misbehavior. *Principal Leadership*, 2(2), 33-38. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ634802&login.asp&site=ehost-live&scope=site;> <http://www.principals.org/KnowledgeCenter/Publications.aspx>

Vaughn, S., Roberts, G., Schnakenberg, J., Fall, A., Vaughn, M., & Wexler, J. (2015). Improving Reading Comprehension for High School Students with Disabilities: Effects for Comprehension and School Retention. *Exceptional Children*, 82(1), 117-131.

Retrieved from

<http://search.proquest.com.goucher.idm.oclc.org/docview/1719015890?accountid=11164>

Wasson, B.B., Beare, P., & Wasson, J.B (1990). Classroom Behavior of Good and Poor Readers.

*Journal of Educational Research*, 83(3), 162-65. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ406329&login.asp&site=ehost-live&scope=site>

Wehby, J., Falk, K., Barton-Arwood, S., Lane, K., & Cooley, C. (2003). The Impact of

Comprehensive Reading Instruction on the Academic and Social Behavior of Students with Emotional and Behavioral Disorders. *Journal of Emotional and Behavioral Disorders*, 11(4), 225-238. Retrieved from

<http://search.proquest.com.goucher.idm.oclc.org/docview/214900585?accountid=11164>

## Appendix A

Name: \_\_\_\_\_

Date: \_\_\_\_\_

PD: \_\_\_\_

### T-W-A Check List

#### Think Before Reading:

- ☐ My purpose for reading is:
  
- ☐ I already know these three things about the topic:
  
- ☐ I want to or need to learn:

#### Think While Reading:

- ☐ I am reading at a speed where I understand and remember the details/facts
- ☐ I am re-reading for clarification when I do not understand
- ☐ I am stopping to make connections to my background knowledge

#### Think After Reading:

- ☐ The main idea is:
  
- ☐ I can summarize what you read in two to three sentences:
  
- ☐ I can explain what I learned to a partner
- ☐ A question I have about the reading is:

