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Abstract

With relatively stagnant levels of reading achievement in the last twenty years, it is paramount that educators not only teach content but also comprehension strategies to struggling readers. Though there are innumerable strategies available to teachers, this eight-week investigation explores the use of an anticipatory reading guide on third grade struggling readers' performance on comprehension and vocabulary questions derived from a standardized state test. Results from the quasi-experiential designed study indicate that when struggling readers have practice opportunities to use and create anticipatory reading guides for thinking about what will be asked of them after reading, they perform at higher levels than their classmates not using this strategy. Findings are relevant to reading professionals working with struggling readers in the elementary grades.

Students in the lower elementary grades are now expected to be more proficient readers than ever before in the wake of common core state standards that have been adopted in the United States, alongside similar standards found internationally. Young children are expected to independently read across genres within fiction, nonfiction, procedural texts, and poetry. Although wide reading is highly recommended by most reading professionals, it is the accompanied examinations that have many educators seeking strategies to prepare their students for answering questions on high-stakes examinations that require integration, interpretation, critique, and evaluation of texts. To reach proficiency in reading, students must read and reflect critically about what is being presented as well as organize text, identify causal relationships, and recognize important details in texts, graphs, photos, and other materials (Raphael & Au, 2005).

Children are judged, labeled, and promoted based on their academic performance, as are teachers and schools. Reading ability is one of the greatest indicators of school-wide success. Compounding the issue, many learners of diverse backgrounds are at a disadvantage because they have not had equal exposure to quality literature and as a result, struggle to establish a repertoire of skills from which to draw when reading a passage, chapter, or text. Therefore, specific skill instruction is needed for students to excel on tasks that involve reading, reflecting, and thinking.

Effective reading preparation to improve test performance can be connected to the student's reading ability, content knowledge, and "test-wiseness," defined as understanding the format of the test. Researchers recommend that reading strategies and test-taking strategies should be taught explicitly, often in a variety of contexts (Kontovourki & Campis, 2010). Still, teachers sometimes struggle with teaching reading comprehension strategies due to the complexity of designing purposeful instruction, and many programs become overwhelming when factoring in the required time to learn and implement the strategies (Scharlach, 2008). This research study attempts to determine the effectiveness of using an anticipatory reading guide on third grade struggling readers' performance on comprehension and vocabulary questions derived from a standardized test.

THEORETICAL/CONCEPTUAL FRAMEWORK

This research investigation is grounded in cognitivist theories which are heavily influenced by the works of Anderson (2000),

Gagne and Briggs (1974), and Schank (1991), all of which contend that information is received, processed, mapped, and constructed into mental models. Reading skill acquisition is a progressive process from early stages of cognition to associative to autonomous stages of information processing (Fitts & Peterson, 1964). As readers progress in their skill development, they more easily refine their understandings through contextualization and reductionism as needed.

A rich history surrounds the study of explicit reading comprehension instruction and scaffolding students towards independent practice (Author, 2011; Author, 2012; Dole, Duffy, Roehler, & Pearson, 1991; Durkin, 1981; Goodin, Weber, Pearson, & Raphael, 2009; Gauthier, Schorzman, & Hutchison, 2003). Explicit teaching in this context is defined as "a systematic method for presenting material in small steps, pausing to check for understanding and eliciting active and successful participation from all students" (Rosenshine, 1986, p. 60). The underlying conception of knowledge on reading instruction is that without ample application and practice, comprehension can be affected (Quirk, Trimen, Weinberg, & Nalin, 1975).

As the nature of literacy has changed over the years, so must the methods for teaching comprehension (New London Group, 1996; Unsworth, 2002, 2006). The use of a scaffolded approach (Wood, Bruner, & Ross, 1976), where a child has temporary support as needed, follows Pearson and Gallagher's (1983) Gradual Release of Responsibility model. Essentially, five levels of progression represent the instruction sequence—direct instruction and modeling, guided practice, consolidation, independent practice, and application (Pearson & Dole, 1987). This approach allows the teacher to activate children's learning at their own pace while adjusting the amount of support given, which is a key component in differentiated instruction. Researchers suggest that instruction designed to engage students in targeted comprehension instruction that focuses on higher level thinking strategies will promote high levels of reading achievement for all learners including struggling readers and diverse populations (Henry, 2006; Leu, Kinzer, Coiro, & Cammack, 2004).

REVIEW OF LITERATURE

Reading Comprehension Instructional Strategies

Teaching comprehension strategies to students was largely unrecognized prior to Durkin's (1978/1979) study. Although comprehension improves through extensive reading, efficient comprehension development requires that all students be taught to use comprehension strategies that good readers use (Scharlach, 2008). Reading comprehension strategies such as predicting/inferring, visualizing, making connections, questioning, determining main idea, summarizing, checking predictions, and making judgments are fundamental to reading success.

Recognizing the difference between reading skills and reading strategies is indispensable—that strategies support skills (Afflerbach, Pearson, & Paris, 2008). When Afflerbach et al. (2008) asked what good readers do, survey respondents had a difficult time answering because their strategy utility had become automatic. Explicit instruction of strategies is especially effective for students whose comprehension proficiencies are still emerging (Barry, 2002). Not all strategies are effective for all students at all times; successful readers possess the ability to assess which strategies will be effective for the given task (Afflerbach et al., 2008). For example, Dole et al. (1991) noted children use different strategies when reading expository versus narrative text.

Scharlach (2008) suggested teachers often struggle with teaching reading comprehension strategies due to the complexity of designing purposeful comprehension strategy instruction. For reading comprehension to be achieved, it must be taught in a variety of ways. Teachers need to repeatedly model strategies, even simple ones like asking questions (Barry, 2002). To be effective in implementation, teachers must have a repertoire of strategies that can be modeled, explained, and used to scaffold

practice within the lesson (Scharlach, 2008), since reading comprehension should be the ultimate goal of any reading activity (Hock & Mellard, 2005).

Strategies cannot be taught in a lecture alone; they are to be embedded within engaging and interactive lessons (Barry, 2002). Teachers must use these experiential environments for scaffolding students to the metacognitive level of operations so they can then transfer the strategy to independent settings (Scharlach, 2008). When children are cognizant of their own thinking, they can determine when and where to use particular reading comprehension strategies.

Struggling Readers

It is clear that many school-age children struggle to read as over one-third of fourth graders and one-fourth of eighth graders cannot read at a basic level (National Center for Education Statistics [NCES], 2005). Reading difficulties often persist from childhood through adulthood; approximately 23% of U.S. adults meet only basic reading proficiency levels (NCES, 2004; Pressley, Graham, & Harris, 2006). These issues have led to public concern and policy initiatives that emphasize the need for effective approaches to reading instruction beginning in the early elementary grades to prevent reading struggles and failure (Rapp, Broek, McMaster, Kendeou, & Espin, 2007).

The connection between question-answer-relationships is critical to guide students to higher levels of literacy (Raphael & Au, 2005). Carlise, Cortina, and Zeng (2010) conducted research on students in the Reading First program in Michigan. They found that the program showed success in students from high-poverty grades one and two but not grade three. The metacognition required to comprehend complex text begins for many readers at the third grade, so if children struggle to decode, they have no idea that there is really something to think about (Torgesen, 2001).

With many students, metacognitive awareness and use of strategies improve over time. Students become more cognizant of and able to use reading strategies by early adolescence (Cantrell et al., 2010). Yet for others, the cycle of falling further behind their peers is destined to repeat as text difficulty increases and become more complex. This extended failure with reading comprehension can contribute to apathy and lack of motivation, which can stifle their progress and prevent any movement toward increased competence. Thus, high-quality reading comprehension instruction is mandatory to diminish the need for futuristic interventions.

Martin and Pappas (2006) found that when asked about reading, struggling readers responded: “This is boring and frustrating,” “I will misbehave, so I won’t have to read,” “I can’t understand this assignment,” “I will never learn to read for the rest of my life,” and “I’m stupid – this is stupid – you’re stupid.” This type of negative self-evaluation will not allow students to perform at optimum levels in classwork or on a test (Sena, Lowe, & Lee, 2007).

Test Preparation

Testing has become a central topic of public discussion with the intense accountability and high standards in the schools today (Author, 2012; Kontovourki & Campis, 2010), oft times more than instruction itself. Yet, teaching children to think critically in classroom activities can have advantageous outcomes for both content acquisition and test performance. Some schools are taking this approach and having successful results. In Iowa, Mayfair Academy began analyzing data and making improvements by targeting students who were two grade levels behind. The teachers were given time to work collaboratively to examine and interpret reading performance data through the use of substitute teachers, supplemental pay for the extra work hours, and weekly meetings with administrators. The dramatic results of this intervention after two years were as follows: 96% of kindergarteners ended at or above grade level, 94% of first graders, 88% of second graders, 92% of third graders, 95% of fourth graders, and 95% of fifth graders tested proficient or

advanced in reading on state tests (Mokhtari, Thoma, & Edwards, 2009).

The three thematic topics (strategies, struggling readers, and test preparation) discussed in this literature review are equally considered and are intertwined as part of this study. This research investigation was conducted to examine the effects of using one such explicit comprehension strategy, anticipatory guides, to increase the reading achievement of third grade struggling readers as measured by questions from a standardized state test.

METHODS

Participants

Twenty four third grade students (n = 24) from a small urban Title I school participated in this study and were selected for inclusion by having characteristics of struggling readers, defined as those previously retained for their lack of proficiency in literacy, and/or currently reading below the Fountas and Pinnell Guided Reading level - M.

Demographic characteristics of the third grade population include a male/female ratio of 55/45. The ethnicity composite included 52.9% White, Non-Hispanic; 41.4% Hispanic; 2.7% Asian; 2.2 % Black; and 0.7% Native American. Nine percent were considered to be Limited English Proficient. Sixty nine percent were considered economically disadvantaged.

Assessments

The measurements used in this research include: a) multiple-choice pretest derived from the first six weeks CSCOPE reading unit assessment, and b) a multiple-choice posttest benchmark taken from a complete released State of Texas Assessment of Academic Readiness (STAAR). STAAR tests are the new state-mandated standardized tests, given annually starting in third grade in the state of Texas (United States). A four-hour timeframe was permitted as specified by the Texas Education Agency for STAAR testing. T-test analysis of pretest scores indicated that there were no significant differences between two classes of students (n = 10; n = 14); the two-tailed P value was equal to 0.2818 (see Table 1). Therefore, each class of students began the study with comparable levels of reading comprehension which provide equal baseline from which improvement can be measured equitably. Treatments were assigned randomly to the two classes.

Table 1. Pretest reading comprehension scores of third-grade participants.

Framework	M	SD	SEM
Control Group (n=10)	42	10.3	3.27
Treatment Group (n=14)	50	21.1	5.64

Instruction

Lesson plans for all participants (control and treatment groups) included passages and articles taken from the commercially produced resources Texas STAAR Coach and Buckle Down Texas STAAR. While content during the 90-minute reading block was identical between groups, an anticipatory reading guide was created for and utilized by treatment group students to provide scaffolded direction in an attempt to guide their reading focus (see Figure 1). The three-column handout informed students which paragraphs to read, what to look for, and space to record responses. Students in the treatment group took the guide and answered the multiple choice questions as part of the CSCOPE curriculum while students in the control group did not have an anticipatory guide during their reading or question answering activities. This technique was a modified version of previewing questions prior to the reading of an article. Over the course of eight weeks, students previewed the questions and

progressed to creating their own anticipatory reading guides to provide direction to their reading. Fidelity of implementation was verified using tally sheets to record when each student applied this strategy during lessons throughout the eight weeks of investigation. Data analyses resulted in over 80% application of anticipatory guide usage.

Control Group Conditions

The article or passage was distributed with the questions attached to students in the control group. Traditional classroom instruction included the following strategic steps: Students put their names on the paper as well as circling the title. Subheadings were underlined, if present. The teacher read paragraph by paragraph and together the class wrote the main idea of each paragraph in the margin. If a vocabulary word were present, visible by being bold or underlined, the students wrote a synonym or definition above the word (see Figure 2). When the entire passage or article was completed, the students individually answered the questions. Beginning on the fourth of eight weeks, students read the passages and wrote the main ideas before answering the questions, after which the teacher reviewed the main idea of the paragraphs and the correct answers to the questions. Children discussed any difficulties they had or misconceptions.

Treatment Group Conditions

The Treatment Group received a copy of the anticipatory reading guide and the article or passage. Questions were not distributed initially. The title was circled after the children put their name on the paper. The teacher first modeled and then directed the students in reading the anticipatory guide and completing each step in the stated order. Next, the questions were passed out and the students answered the questions completely independently. Four weeks into the investigation, the students began to complete the reading guide without teacher facilitation as well as the questions. During these lessons, teachers instructed them how to make their own reading guide using the questions at the end of the passage/article to direct their focus.

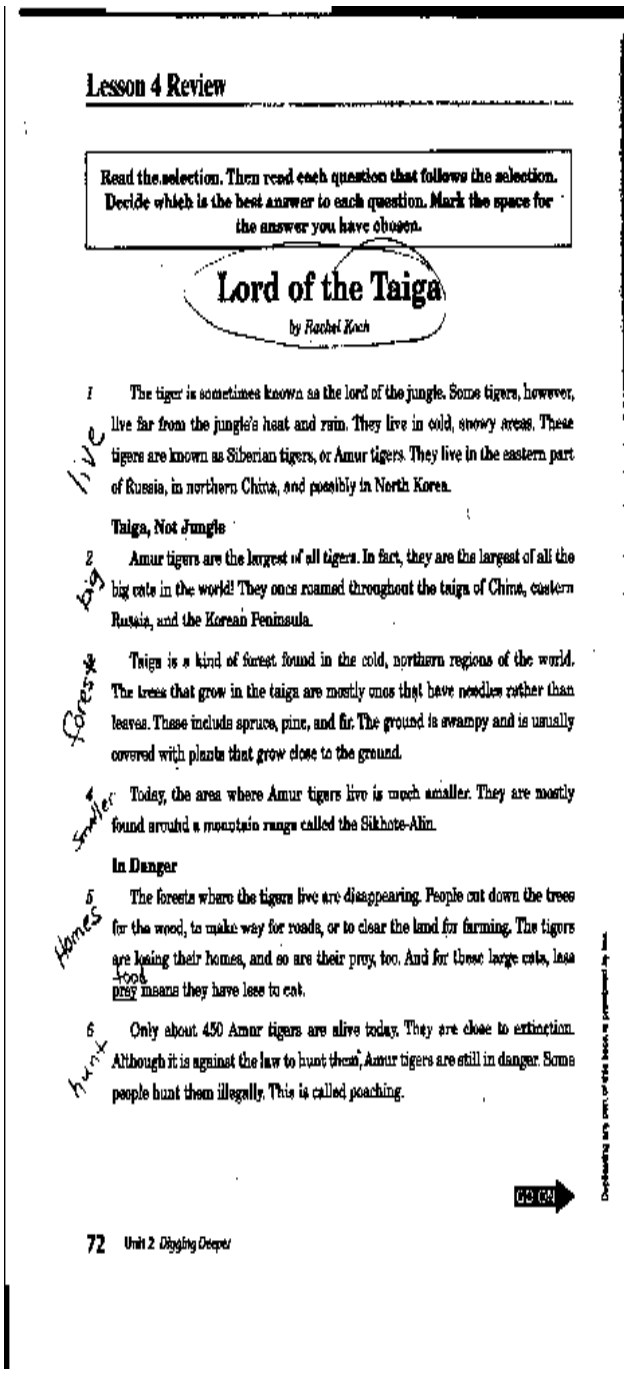
Figure 1. Anticipatory reading guide.

Selective Reading Guide

Lord of the Taiga

Look at the title, subheadings, and photo	What genre is this article? What can you most likely learn from reading this article?	
Look at the subheadings	Where would I find information about the place where Amur tigers live?	
Read Paragraph 1 & **Taiga, Not Jungle** (2&3)	Why should the Amur tiger not be called "lord of the jungle"?	
Read **In Danger** – Subheading (5&6)	What is causing the tigers the greatest danger?	
Paragraph 5 - Prey	What word helps you know that prey means?	
Read **A Success Story** – Subheading (7&8)	Why is the story of the Amur tiger a success?	
Photograph & Caption	What can you learn from reading this?	
Read **What You Can Do** (9)	How can you help?	

Figure 2. Control group lesson activity.



Lesson 4 Review

Read the selection. Then read each question that follows the selection. Decide which is the best answer to each question. Mark the space for the answer you have chosen.

Lord of the Taiga

by Rachel Koch

1 The tiger is sometimes known as the lord of the jungle. Some tigers, however, live far from the jungle's heat and rain. They live in cold, snowy areas. These tigers are known as Siberian tigers, or Amur tigers. They live in the eastern part of Russia, in northern China, and possibly in North Korea.

live

Taiga, Not Jungle

2 Amur tigers are the largest of all tigers. In fact, they are the largest of all the big cats in the world! They once roamed throughout the taiga of China, eastern Russia, and the Korean Peninsula.

big

3 Taiga is a kind of forest found in the cold, northern regions of the world. The trees that grow in the taiga are mostly ones that have needles rather than leaves. These include spruce, pine, and fir. The ground is swampy and is usually covered with plants that grow close to the ground.

forests

4 Today, the area where Amur tigers live is much smaller. They are mostly found around a mountain range called the Sikhote-Alin.

smaller

In Danger

5 The forests where the tigers live are disappearing. People cut down the trees for the wood, to make way for roads, or to clear the land for farming. The tigers are losing their homes, and so are their prey, too. And for these large cats, less ~~food~~ prey means they have less to eat.

homes

6 Only about 450 Amur tigers are alive today. They are close to extinction. Although it is against the law to hunt them, Amur tigers are still in danger. Some people hunt them illegally. This is called poaching.

hunt

GO ON

72 Unit 2 *Digging Deeper*

Duplicating any part of this book is prohibited by law.

RESULTS/DISCUSSION

This research investigation sought to determine the effectiveness of using an anticipatory reading guide on third grade struggling readers' achievement as measured by comprehension and vocabulary questions derived from a standardized test. A comparison of mean gains for both control and treatment groups revealed that the treatment group scores (M = 63.71, SD = 14.21), which increased by 13.5 points were statistically significant to mean scores in the control group (M = 48.8, SD = 20.38), an increase of 6.8 points (p = 0.04, CI95 = 0.31, 29.51) following eight weeks of explicit comprehension instruction using anticipated reading guides. Further, Cohen's effect size value (d = .43) suggested a moderate to low practical significance. Therefore, the null hypothesis was rejected that there would be no difference in reading scores between the treatment group and the control group.

Data results suggest and provide further evidence that explicit instruction of comprehension strategies such as anticipatory reading guides can improve elementary reading achievement. The need to repeatedly model strategies cannot be understated. In this study children were taught to read the question and think what it was asking and where the answer would be located including examining the title, caption, paragraph, and entire passage. The explicit instruction of an anticipatory reading guide led students in the treatment group to significantly outperform their peers in the control group. These results suggest that thinking about one's reading can not only develop reading skills but increase performance on standardized tests.

Limitations

The participant population in this study was a convenience sampling of third-grade students in a Title I South Texas school district. The effects of small sample sizes for each group could not be eliminated. Replicating this study on a larger scale using numerous reading classes throughout district would render results with increased generalizability.

The intervention program lasted eight weeks in duration and results may have varied if additional time were provided for students to gain mastery of the application of an anticipatory reading guide. Many of the children expressed concerns of not having enough time to

complete and/or create their own anticipatory guides. The materials for the lessons could have been too difficult because it was beyond their reading level and they likely struggled with the text. More time would allow students to have material on their personal reading level and master the new strategy before complex reading material was presented.

Conclusion

Though comprehension is universally known as the ultimate goal of reading (Hock & Mellard, 2005), explicit instruction of comprehension reading strategies is not always provided in the elementary grades. Comprehension instruction, though, is particularly effective in developing struggling readers abilities to deconstruct both fiction and nonfiction texts (Kamps & Greenwood, 2005). Building a small repertoire of strategies is critical for success in all content areas (Scharlach, 2008).

The findings support the teaching of the "language of the test" which refers to the vocabulary and words commonly found in test questions that include "author's purpose," "according to," "except," etc. (Kontovourki & Campis, 2010). Teaching struggling readers what is being asked allows them to think about what would make sense. As one child stated about his strategy usage, "My brain is telling me to connect the reading to the question." As students become more metacognitive in their approaches to reading, they become empowered rather than continue to struggle in their unsuccessful approaches to reading, allowing for increases in self-efficacy and academic performance.

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