8-2007

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Michelle Te Grootenhuis

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Document Type

Thesis

Degree Name

Master of Education (MEd)

Department

Graduate Education

First Advisor

Pam Adams

Keywords

Master of Education, thesis, Christian education, gradual release of responsibility, elementary education, second graders, DRA2, children's literature

Subject Categories

Curriculum and Instruction | Education

Comments

Action Research Report Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Education

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By

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B.A. Northwestern College, Orange City, Iowa 1993

Action Research Report
Submitted in Partial Fulfillment
of the Requirements for the
Degree of Master of Education

Department of Education
Dordt College
Sioux Center, Iowa
Summer 2007

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Abstract

This action research explored the effects of using the gradual release of responsibility instructional method (Harvey and Goudvis, 2000) to improve the synthesis abilities of fourteen second grade students who attend a small rural school. The specific treatment involved the students in modeled, shared, guided, and independent practice of the synthesis strategy using authentic children's literature. The DRA2 interpretation scores of the students were compared before and after the treatment. The results showed that twelve of the students scored within the independent or advanced level, one student improved from frustration to instructional level, and one student remained at the frustration level.

Introduction

Seven year old Emma (all student names are pseudonyms) has big beautiful, doe-like brown eyes, an expression of utter innocence, and the reading fluency of an academy award winner. When one listens to Emma read, one thinks, "Wow! What a reader!" The actress in her causes Emma to deviate from the text occasionally, resulting in a few points taken off for accuracy, but she has always scored 95% or better, within the independent range (Clay, 2006) in her accuracy scores on running records. Unfortunately, when one probes a little farther into reading assessment with Emma, one sees that while Emma is able to recall basic factual information, she has difficulty interpreting the author's message and providing answers to higher level questions without support from the text.

Emma is not unlike many of the image bearers in this teacher researcher's second grade classroom. This elementary school does an excellent job of teaching phonics and decoding to primary age children. According to data from spring Qualitative Reading Inventory (QRI) scores from first grade, students generally come into second grade with grade level oral reading accuracy rates in the 95% or better range. It appears that this school's systemic phonics instruction is effective.

However, we have allowed students to become passive vessels, waiting to be filled with the teacher's knowledge. Robert Bruinsma reflects in his book *The Joy of Language* (2003) about a conference at which Donovan Graham spoke of a Christian understanding of the learner. He reflects that if children are made in the image of God, then we must remember that the image of God includes being active, purposeful, creative, free, responsible, and in fellowship with Jesus, the Spirit, and creation. Simply filling these vessels with isolated skills, teaching them to decode words from a story, and relying

on recall questioning as assessment is not treating them as the active, purposeful and creative beings that they truly are. Our duty as Christian educators is to enable our students to think about their reading and to become cognizant of the strategies they use so that they may be efficient code breakers, meaning makers, text users, and text critics (Ash, 2005) as we train them for discipleship.

Thus, in light of current educational research associated with the National Reading Panel Report (2000) and with recent staff development in the field of guided reading and comprehension strategy instruction, this school has begun a gradual movement away from basal-based, stagnant skill-focused ability groups. This movement began years ago with seeking a balanced approach centered on flexible guided reading groups using leveled texts alongside the basal, followed later with the addition of whole class modeled and shared reading experiences in which reading comprehension strategies were explicitly taught. And most recently, using the "Gradual Release of Responsibility" model (Fielding and Pearson, 1994), strategy instruction has now been carried through to guided and independent reading. With this movement, we have confronted what we have suspected all along—that while we may have a classroom full of "good decoders," we certainly have our work cut out for us in developing "strategic readers" that can move beyond accuracy and basic recall.

With this realization, we sought to find an assessment tool that moved beyond our district created running records which include five to seven recall level comprehension questions. A handful of teachers had tried the Diagnostic Reading Assessment (DRA) with mixed feelings due to the length and depth of the test. Upon much discussion and the finding of a newer version involving less scribing by the teacher and better scoring

rubrics, we decided to pilot the DRA2 program for the 2006-2007 school year. This assessment tool thoroughly assesses three areas: reading engagement, oral reading fluency, and comprehension, literal and interpretive (Beaver, 2006).

While in the midst of piloting this assessment program, this teacher researcher has discovered several students having difficulty synthesizing the author's message. Therefore, this action research study will explore the effects of using the gradual release of responsibility instructional method and specific children's literature to develop the ability to synthesize the author's message. Specifically, the teacher researcher will examine whether modeling of synthesis using authentic children's literature and subsequent shared and guided practice of synthesis will result in scores within the independent or advanced range on the "interpretation" component of DRA2 tests for all regular education students in the classroom.

Definition of Terms

Diagnostic Reading Assessment (DRA/DRA2) is an assessment tool which evaluates proficiency in reading engagement, oral reading fluency, and comprehension. DRA is an in-depth tool that not only measures a student's basic comprehension, but also measures how well a student can summarize, interpret, and reflect upon their reading. It was originally abbreviated as DRA (1998-2003 copyrights). At the time of this thesis it is known as the DRA2 for the 2006 copyright (Beaver, 2006).

Qualitative Reading Inventory is an individually administered, informal reading assessment designed to provide information about the ability of the student to comprehend grade level text successfully (Leslie and Caldwell 1995).

Zone of Proximal Development (ZPD) is a term coined by educational psychologist Lev Vygotsky to describe the range of what a child can do alone to solve a given problem and their problem solving potential under the guidance of an expert (Vygotsky, 1978).

Independent Level is the level at which the student can read accurately without any kind of support. Generally, for oral reading accuracy, the student's word recognition during an oral reading exam needs to be 95% or better to be considered independent (Leslie and Caldwell, 1995).

Instructional Level is the level at which the student can read accurately with support from an expert, usually a teacher. Generally, if the student's word recognition during an oral reading exam falls between 90%-95%, the student is at instructional level (Leslie and Caldwell, 1995). Referred by Vygotsky as the "Zone of Proximal Development," reading at this level is somewhat challenging, but can be successfully completed with guidance from the expert (Lyons, 2003).

Frustration Level is the level at which the student is unable to read the text accurately. Generally, if the student's word recognition during an oral reading exam falls below 90%, the student is at frustration level and will exhibit signs of difficulty and tension (Leslie and Caldwell, 1995).

Reading skill is a competency to be mastered within a given time frame and subsequently used without conscience attention (Pressley, 2002; Learning Point Associates, 2006).

Reading strategy is an intentional action a reader takes which slows his thought processes in order to remember and understand a text. Reading strategies can be

effectively taught but need to be continually revisited as text difficulty increases (Learning Point Associates, 2006). Researchers have specifically pinpointed seven such strategies (Harvey and Goudvis, 2000).

Summarization is a precursor to synthesis in which the reader gives the gist of the story in a short, concise description, without telling too much. Effective summarization often begins with retelling story details

Synthesis is a strategy employed by skilled readers that involves combining information from a text with prior knowledge to form an original idea or interpretation (Harvey and Goudvis, 2000). Summarizing and then identifying the theme or author's message of a story would be examples of synthesis.

Interpretation is a strategy involving the synthesis of a text in which the reader actively examines the text in search for the theme of the story. The reader progresses through a series of evolving thoughts as he synthesizes the author's message. Once decided upon, a skilled reader can provide examples from the text to support his interpretation. Effective interpretation often begins with summarizing a story.

Running record is traditionally a quick assessment of a student's oral reading fluency used to determine oral reading accuracy and words per minute. It is often accompanied by an analysis of miscues to determine the type of errors a reader makes most often in an effort to intelligently guide specific instruction of the reader.

Oral Reading Fluency is a term that encompasses the accuracy of a student's reading, his/her use of appropriate phrasing and expression, and the pace, or words per minute at which the student reads. Many educators fail to recognize all three aspects of fluency and focus on rate and accuracy at the expense of phrasing and expression.

Reading Engagement is a component of the DRA/DRA2 test which measures how well a student can identify and describe favorite books, pick an appropriately difficult text, and sustain his reading for an age appropriate amount of time.

Levels of Metacognitive Knowledge, as defined by David Perkins and Robert Swartz, are four terms (tacit, aware, strategic, and reflective) used to differentiate levels of metacognitive knowledge that are helpful in describing the learner's progression from less to more sophisticated ways of monitoring their thinking (Harvey and Guodvis, 2000).

Tacit Readers are "readers who lack awareness of how they think when they read" (Harvey and Goudvis, 2000, p 17). In an effort to better describe this kind of reader to primary students, this teacher researcher referred to tacit readers as "racing rabbits" (see Appendix A) and paraphrased the definition as, "Readers who don't THINK about what they are reading and quite often don't make sense. They read a story once just to get done," with a quote under the rabbit icon saying, "What? You want me to THINK?" to remind the students that tacit knowledge requires very little thought.

Gradual Release of Responsibility Approach is an instructional technique involving modeling, shared, guided, and independent experiences, moving from direct teacher instruction to independent practice gradually through a deliberate release of responsibility from the teacher to the student. Referred to as an "I do it—We do it—You do it" approach (Learning Point Associates, 2006, p. 32).

Transactional Strategies Instruction (TSI) is an instructional approach similar to the gradual release method in which interactions between the teacher, the students, and the text drive the instruction. As described by the National Reading Research Center, like the gradual release model, early in the TSI method, the teacher assumes the majority

of the responsibility, eventually allowing students to assume more responsibility as class interactions prove they are ready (1995).

Scaffolding is a term coined by Wood, Bruner, and Ross to describe the interactions between a teacher and student and the amount of support the teacher provides in aiding the child to solve the given problem as independently as possible (Wood and Wood, 1996).

Modeling is an instructional technique in which the teacher "thinks aloud" about what she is demonstrating and in doing so shows the metacognitive processes involved in the strategy. Modeling is the demonstration of the task by the teacher.

Anchor Lesson is the first step in modeling. The anchor lesson provides a visual analogy which "anchors" the students' understanding of the given strategy often through the creation of an "anchor chart" and gives students a visual to which they may refer throughout the course of study (Miller, 2002).

Shared Reading is an instructional technique in which the teacher and the students simultaneously share the responsibility of reading and practicing the given strategy, thinking aloud together.

Guided Reading is an instructional technique in which the teacher works with students with similar needs in flexible groups for a time to practice reading skills and strategies, while monitoring them and scaffolding instruction. The teacher specifically chooses texts within the instructional or independent readability level of the students in the group.

Independent Practice is an instructional technique in which the student has total responsibility for applying the strategy, usually assessed by completing a given

assignment, but also assessed through one-on-one conferences between the student and the teacher.

National Reading Panel (NRP) is an appointed group that includes leading scientists in reading research, representatives of colleges of education, teachers, educational administrators, and parents convened by Congress late in 1997 to perform a meta-analysis of reading research in order to find the most effective approaches to teach children to read. The group, and consequent subgroups met over a period of two years and in April of 2000 published a 449 page document reporting its findings as well as a 33 page summary of the document and a video entitled, "Teaching Children to Read" (National Institute of Child Health and Human Development, 2000).

Literature Review

Not unlike Emma, Dewitz and Dewitz wrote about "Mark" in their case study published in *The Reading Teacher* in 2003 entitled, "They can read the words, but they can't understand: Refining comprehension assessment." In this in-depth case study analysis of Mark's reading, Dewitz and Dewitz found that even though Mark orally read accurately, well within the independent range on the six Qualitative Reading Inventory (QRI) assessments administered, his comprehension scores fell at or below frustration level. The authors also administered the QRI to nine other students reportedly to have excellent oral reading accuracy, but difficulty with comprehension. Using three passages from the QRI, the researchers found similar results, averaging 94% on oral reading accuracy, yet having difficulty with the comprehension questions, namely inferential

questions (Dewitz and Dewitz, 2003). This teacher researcher has worked with many accurate and fluent readers like Emma and Mark, but only a handful of strategic readers.

In 1996, 36% of the fourth graders in the United States that took the National Assessment of Educational Progress (NAEP) test were reading below the Level 200, "Partially Developed Skills and Understanding" (US Department of Education & Office of Educational Research and Improvement, 2000). Subsequently, in 1997 Congress asked the Director of the National Institute of Child Health and Human Development (NICHD) to convene a national reading panel (NRP) to assess the effectiveness of different approaches used to teach children to read (NRP, 2006). From 1998 to 2000, the panel reviewed thousands of research studies, performing the largest meta-analysis of reading research to date. Then in April of 2000, the panel produced a 449 page document describing the results. Thankfully, they also produced a 33 page summary (NICHD, 2000). The panel specifically examined five areas of literacy research: alphabetics (phonemic awareness and phonics), fluency, comprehension, teacher education, and computer technology and reading instruction. In the area of comprehension, a meta-analysis of 481 studies which met the panel's criteria for methodology were examined. The panel found seven comprehension instructional methods that seemed to have significant scientific basis for improving comprehension in non-impaired readers. Those seven methods included: comprehension monitoring, cooperative learning, use of graphic and semantic organizers, question answering and generation, story structure, and summarization (NICHD, 2000). The panel also concluded that "the evidence suggests that teaching a combination of reading comprehension techniques is the most effective," (NICHD, 2000, p 15).

Since that report, the nation's top literacy experts have been pumping out volume after volume of professional literature aimed at instructing educators on how to teach comprehension strategies. A common thread throughout these resources is the importance of not only teaching isolated skills, but explicitly teaching lifelong comprehension and thinking strategies as well. Gerald Duffy, whose research appears throughout the panel's 449 page report, cited the difference between skills and strategies:

> Strategies do not replace skills. Strategies are plans for solving problems encountered in constructing meaning. Unlike skills, these plans cannot be automatized because the uniqueness of each text requires readers to modify strategies to fit the demands of the text (Duffy, 1993, p. 232).

In their book, *Mosaic of Thought* (1997), Ellin Oliver Keene and Susan Zimmerman specifically describe seven strategies including comprehension monitoring and fix-up strategies, making connections, determining important ideas, posing questions, using sensory images, making inferences, and synthesizing information. The National Reading Panel found evidence to support such strategies. Learning Point Associates, a nonprofit educational organization that seeks to "help educators and policymakers make research-based decisions that produce sustained educational improvements," (*About Learning Point*, n.d.) offers a practical guide to understanding the panel's report. In the guide, summarizing, questioning, and comprehension monitoring are specifically recommended as being highly effective in the studies that were examined by the panel (Shanahan, 2006).

Of all the aforementioned strategies, summarization and synthesis appear to be the ultimate and most difficult. In their second edition of *Mosaic of Thought*, Keene and

Zimmerman note the subtle difference between these two reading comprehension strategies. A summary in the traditional sense is a brief retelling of the highlights of a text, void of any personal connections or thoughts. Synthesis is then a step beyond a summary, where the reader not only includes the highlights of the text, but infuses it with personal meaning. The readers "actually create new narratives—verbal or written synthesis that fix the meaning of the piece firmly in their memories," (Keene and Zimmerman, 2007, p. 231). The authors describe the process of teaching synthesis as being difficult (1997), yet they offer the following:

> ...synthesis is absolutely basic—in the air and water category—if we are talking about essentials for learning: literacy learning, life learning. The magnitude and complexity of the information we and the children with whom we work must manage every day is staggering. (p. 183)

Jesus himself expected his "students" to synthesize as he told his parables (Knight, 1998). A simple summary of the Prodigal Son is a necessary first step in understanding, but would be void without a personal synthesis. The ability to summarize and synthesize information is essential in purposeful learning and educators must introduce this strategy beginning at the primary level.

In her book *Reading with Meaning, Teaching Comprehension in the Primary Grades* (2002), Debbie Miller poetically describes her own evolution of thought in teaching synthesis as she progressed through instructing her first grade students in this strategy for the first time. Miller (2002) discussed synthesis and the ripple effect with her colleague Ellin Keene,

> ...you told the kids that synthesis is like throwing a rock into a pond: first there's the splash, and then the water ripples out, making little waves that get bigger and bigger... You said that as you read, your thinking evolves as you encounter new information, and the meaning gets bigger and bigger, just like the ripples in the pond. (p. 159)

With the help of her students, she was able to create a graphic organizer with which students could describe the process of synthesis as it related to their text. Further into the chapter, Miller quotes several of her own students in their versions of what synthesis means to them,

> Synthesis is like inferring, only super-sized!
>
> If you don't ever change your mind, you're not really synthesizing.
>
> Synthesizing is like putting a puzzle together. You have to sort out your thinking and put it in the right place. (Miller, 2002, p. 168)

This teacher researcher had her own moment of synthesis as weeks and weeks of wrapping her brain around this concept and exploring ways to explicitly instruct primary children in this strategy led to an "Aha!" moment as she read through this chapter in Miller's book. This then led to the creation of an anchor lesson and subsequent record sheet (Appendix A).

Harvey and Goudvis (2000) also argue that it is not enough for a reader to understand these strategies, "they must know when, why, and how to use [them]" (p. 16). So, the next logical question would be how to teach a strategy in a way that the students *would* know when, why and how to use it. They suggest the gradual release of responsibility approach (2000). This approach has roots in Vygotsky's "Zone of Proximal

Development" which is the range of what a child can do alone to solve a given problem and their problem solving potential under the guidance of an expert (Wood and Wood, 1996). In an attempt to maximize that zone, the teacher begins by demonstrating, or "modeling" the strategy and the mental processes involved. Another term for this is a "think aloud" where the instructor shares the thoughts she has while she reads, especially in regard to the strategy being taught. This is often referred to the "I do it" phase of the gradual release approach (Shanahan, 2006) and is the first step in scaffolding (Wood et al., 1976) the instruction. As stated by Michael Pressley in the text, *What Research Has to Say About Reading Instruction*,

> The metacognitively sophisticated teacher also should know that comprehension skill does not develop very well on its own, but that the comprehension strategies used by good comprehenders can be taught, beginning with teacher explanations and modeling of the strategies followed by scaffolded student practice of comprehension strategies during reading. (Pressley, 2002, p. 306)

The next step in the gradual release of responsibility model is shared reading. Margaret Mooney composed a brief overview of shared reading in 1994 for the *Teaching PreK-8* periodical. In the article she refers to Don Holdaway encouraging teachers in the 1960s to find ways to replicate the bedtime story in their classrooms—that is the essence of shared reading. Mooney (1994) states that, "when an adult and a child or group of children spend unhurried and uninterrupted time viewing, reading and sharing a book together; the unspoken messages about reading and about books are as important, and perhaps longer lasting, than any part of the actual content" (p. 71). She explains that the

first reading of a book should be as uninterrupted as possible (perhaps even before the teacher modeling of the intended strategy). But with subsequent rereadings (including a modeling of the strategy) the teacher will be able to stop more frequently because the children are now "in the know" (p. 72) and are able to anticipate plot twists and story language and participate knowledgeably in discussions. Mooney concludes her summary by advising that the main objective of shared reading is enjoyment of a text, the language of which the students have playfully explored and savored (Mooney, 1994). Shared reading is often referred to as the "We do it" phase of the gradual release approach, where the teacher continues to model a strategy, but also invites students further into the discussion and demonstration, enjoying the text together.

The third rung on the gradual release ladder is that of guided practice. Within the context of the teaching of reading, this generally takes the form of "guided reading" in which a flexible group of four to six students with similar needs meet with the teacher to practice the given strategy. Irene Fountas and Gay Su Pinnell describe guided reading as an instructional method in which a teacher works with small, flexible groups of children who are able to read similar levels of text as the teacher supports each reader's development at increasing levels of difficulty (1996). Generally the teacher selects an appropriately leveled text for the group within their instructional level, gives a brief overview of the book, reminding the students of the strategy to be practiced and perhaps further modeling of the strategy to this smaller captive audience, and then gives each student his own copy of the book. The students usually read the text independently (quite often "whisper reading" so the teacher can listen in to the reader) while the teacher circulates among the group, asking questions, affirming the student's efforts, and

"guiding" the students as they apply the strategy and often recording anecdotal notes for later reflection. Closure of the lesson is then provided by pulling the group together and discussing the text as well as the given strategy. Guided reading is a step between the "We do it" and the "You do it" phases of the gradual release method.

Finally, the students apply the strategy independently through their own reading and responses. Harvey and Goudvis (2000) note that receiving feedback from the teacher and other students is an important aspect of independent practice. Independent reading with regular teacher-student conferences, book clubs, literature circles, as well as traditional written responses which address the specific strategies, would be examples of independent practice. The authors also make note that students need to apply the strategy to different genres or formats and increasingly more difficult texts (Harvey & Goudvis, 2000).

Several research studies support reading strategy instruction using the gradual release of responsibility approach, albeit many differ in naming it. The National Reading Research Center has labeled the approach as transactional strategies instruction (TSI). This group specifically found that students receiving TSI out-performed non-TSI students in strategic processing, acquiring information, and showed greater gains on standardized comprehension tests. TSI students went from a mean score of 0.80 on the standardized comprehension assessment in the fall to a mean score of 4.20 in the spring. Non-TSI showed only a moderate gain, going from a 0.66 mean score in the fall to a 1.21 mean score in the spring (National Reading Research Center, Brown, Beard El-Dinary, Pressley, & Coy-Ogan, 1995).

In 2005, Van Keer and Verhaeghe reported on a British research project in which 454 fifth graders received either traditional reading comprehension instruction, usually involving reading a text, discussing it as a whole class activity, and answering prescribed questions, or explicit reading strategies instruction involving a gradual release beginning with shared, whole-class explicit instruction lessons and progressing to peer tutoring activities. A key finding of this report was that the fifth grade students receiving explicit strategy instruction outperformed their traditional instruction counterparts on both the post-test (effect sizes ranging from 0.32 to 0.39 standard deviation) and the retention test (effect size = 0.47 SD). Post-test scores of the fifth graders receiving explicit strategy instruction showed that they performed significantly better than the control group receiving traditional comprehension instruction which included teacher led whole class activities, comprehension check questions after reading, and teacher evaluation of the answers to the comprehension questions with possibly a class discussion of correct answers. Six month retention test scores of the fifth grade group that was also trained in cross-age tutoring of second graders showed a significant effect of 0.60 SD, thus proving that the fifth grade students that acted as tutors for second graders continued growing even after the experimental conditions ended (Van Keer and Verhaeghe, 2005).

Likewise, Jitendra, Hoppes, and Xin (2000) described a method similar to the gradual release of responsibility in their study of main idea comprehension for students with learning problems. Specifically, students in their experimental group received main idea instruction which included modeling and demonstrating of the strategy and small group guided and, eventually, independent practice, whereas students in the control group received traditional reading instruction emphasizing decoding and comprehension

activities. The researchers found in this study that this gradual release of the main idea strategy enhanced the performance of students with reading disabilities with a pretest mean score of 10.06 on the researcher-created main idea comprehension assessment and a mean posttest score of 16.94. In comparison, the control group had a mean score of 8.47 and a posttest score of 6.20, actually decreasing their score (Jitendra, Hoppes, and Xin, 2000).

In their practical summary of the National Reading Panel Report, Learning Point Associates note this gradual release of responsibility as being effective and "with practice, it results in students being able to use the strategy, to explain it, and ultimately, to improve reading comprehension" (p. 32). This teacher researcher has limited experience with this approach, gradually adding and refining one piece of the method at a time for the last five years as the primary teachers at this elementary school have become more knowledgeable and comfortable with these methods. Logically, this method lends itself to developing any reading strategy, especially one as complex as synthesis. And so this teacher researcher employed the gradual release of responsibility approach in an attempt to improve students' abilities to synthesize and get the heart of the author's message in appropriately leveled texts.

Finally, if one holds a Christian world view and believes as Knight in his book *Philosophy and Education: An Introduction in Christian Perspective* (1998) that the "essence of Christian education is to enable students to think and act reflectively for themselves, rather than just to respond to the word or will of an authority figure," (p. 230) then the gradual release model would seem a perfect fit into a Christian educator's repertoire of instructional methods. Beginning with the modeling phase of this approach,

the aim of this approach is to gradually release and enable the students to think and act independently and reflectively, scaffolding their instruction within their zone of proximal development for Christian discipleship.

Methods

This quasi-experimental study takes place in a small rural school in the Midwest. The subjects in this study include fourteen of the seventeen second grade students in this teacher researcher's classroom. Three students were not included in the study. One is a special education student on Individual Education Plan (IEP) for reading and written language and according to IEP data is reading a full grade level below her peers. The second is another student on an IEP for reading, written language, and speech difficulties and according to IEP data is also a full grade level below his peers. The third is an English Language Learner (ELL) with only one year of English language acquisition. Data for this study was not available for these students.

Another student on an IEP for communication and social skills related to Asperger's Syndrome was included in the study. The student receives help from a classroom paraprofessional for approximately two-thirds of the day, but was able to fully participate in the study. Also, two students received Title I Reading instruction and according to 2006 ITBS results, read slightly below grade level. The remaining students were all regular education students reading at or above grade level as measured by DRA2 testing results from the fall of 2006.

All of the subjects were between seven and eight years old and came from a variety of socio-economic backgrounds. One was an English language learner and three

came from low socio-economic homes as anonymously reported by free and reduced lunch count report. The majority were middle class Caucasian students. From previous homework assignments given over the first 34 weeks of school, it could be deduced that approximately two-thirds of the students had strong parental support and educational involvement.

The chosen assessment instrument was the Diagnostic Reading Assessment 2 (DRA2). The DRA2 is an existing assessment tool created by Joetta M. Beaver and published by Celebration Press of the Pearson Learning Group. According to the accompanying teacher guide, the original DRA test was developed, field-tested, and revised with classroom teachers and Joetta Beaver in the Upper Arlington City School District of Ohio between 1988 and 1996. Since its conception, the DRA has gone through multiple field-tests and revisions. In 2005, the assessment underwent major revisions and was renamed DRA2 to signify the new fiction and nonfiction text options and improved and more uniform assessments (Beaver, 2006). Reliability studies have been conducted and are available for viewing from the Pearson Learning Group's Research website, http://www.pearsonlearning.com/content/File/DRA/DRA2_TM_Interim_Report.pdf. The DRA2 is a widely renowned assessment and used by many elementary schools to assess beyond word recognition and basic recall comprehension.

This teacher researcher had previously administered the DRA2 test to all fourteen subjects twice in the 34 weeks of school, once in October of 2006 and once in December of 2006. Data from the testing in December on the interpretation score (referred to as the "pretest" for the purpose of this study), in which students are asked, "What do you think

the author is trying to tell you in this story?" (Beaver, 2006), is listed for each student in Table 1 and clearly demonstrated the need for explicit synthesis strategy instruction.

Table 1
December Pretest DRA2 Levels and Interpretation Scores

STUDENT	DRA2 TEXT LEVEL	INTERPRETATION SCORE
1	24	2
2	20	3
3	20	1
4	20	2
5*	20	2
6	20	2
7	24	3
8	30	4
9	28	3
10*	18	1
11	20	2
12	20	2
13	20	2
14 (IEP)	24	3

*Students receiving Title I Reading support

Interpretation Score Legend
1=frustration
2=instructional
3=independent
4=advanced.

The average interpretation score for the December pretest was 2.46, within the instructional level as defined by Beaver (2006). The average DRA2 level was 20, which according to testing materials is grade level for winter of the second grade year.

The teacher researcher specifically addressed synthesizing and interpreting the author's message through the gradual release of responsibility approach during the months of January and February, 2007. An anchor lesson was presented in early January in which the teacher researcher compared the concept of synthesizing to putting together a puzzle one piece at a time, adjusting thinking as the picture began to take form, and having an "Aha!" moment when one realizes what the puzzle represents similar to figuring out the message of a book (see Appendix A). Subsequent lessons contained specific children's literature that lent itself to synthesizing the author's message were presented using modeled, shared and guided reading components of the gradual release of

responsibility instructional approach (Table 2). Students were also asked to apply this strategy during independent reading, completing a graphic organizer introduced during modeled, shared, and guided reading to demonstrate their understanding (see Appendix A). Furthermore, a previously introduced instructional technique called finding "The Golden Sentence" (Hansen, 2006) in which students search for a sentence that summarizes the essence of the story and then support their choice was utilized. Sentences were scribed on chart paper and referred to throughout the unit. (Appendix A).

Table 2 Children's Literature Used for Synthesizing Lessons
You are Special by Max Lucado
Because I Love You by Max Lucado
Punchinello and the Most Marvelous Gift by Max Lucado
The Wednesday Surprise by Eve Bunting
Princess Pooh by Kathleen Muldoon
The Bremen Town Musicians by The Brothers Grimm
Best Wishes, Ed by James Stevenson
The Magic Fish by Freya Littledale
The Three Questions by John Muth
Zen Shorts by John Muth
Did I Ever Tell You How Lucky You Are? by Dr. Seuss
Oh, the Places You'll Go! by Dr. Seuss
Horton Hears a Who by Dr. Seuss
How the Grinch Stole Christmas by Dr. Seuss
The Lorax by Dr. Seuss
Yertle the Turtle and Other Stories by Dr. Seuss
I'm Sorry by Mercer Mayer
The Berenstain Bears' Report Card Trouble by Stan and Jan Berenstain
The Hundred Dresses by Eleanor Estes
The Lion and the Mouse and Other Aesop's Fables by Doris Orgel
The Children's Book of Virtues by William Bennett

Students were also introduced to the concept of four levels of reading (Appendix A). Adapted with permission from David Perkins work in the book *Smart Schools: Better Thinking and Learning for Every Child*, this teacher created chart served as a visual for students as the teacher researcher sought to develop the reflective reading skills necessary to synthesize. Harvey and Goudvis (2000) made reference to these levels of

metacognitive knowledge known as tacit, aware, strategic, and reflective. *Tacit readers* "lack awareness of how they think when they read," (Harvey and Goudvis, 2000, p. 17). This teacher researcher coined the term "Rabbit Readers" for these readers as they may very well be reading the words correctly, they are doing so without much thinking involved and are aiming at simply getting through the text. *Aware readers* realize when they are not making meaning, but can not utilize strategies to fix the problem (Harvey and Goudvis, 2000). This teacher researcher labeled aware readers as "Turtle Readers" as they read slowly enough to attempt to go beyond decoding, but get stuck when meaning breaks down and are unaware of strategies or how to best utilize the strategies. Next, *strategic readers* are able to monitor their own reading and utilize strategies when meaning breaks down (Harvey and Goudvis, 2000). This teacher researcher fashioned these readers as "Fox Readers" as they are quick to apply a strategy when meaning breaks down. And finally, *reflective readers* are strategic, but also able to reflect on their reading processes and use strategies in a flexible manner (Harvey and Goudvis, 2000). This teacher researcher has referred to these readers as "Owl Readers" as they are wise enough to know exactly what strategy they need to employ to repair meaning and are able to reflect upon the effectiveness of that strategy. Since the introduction of these terms, students continuously referred to themselves as "fox" or "owl" readers as well as admitting to "rabbit" or "turtle" reading occasionally. These terms also carried over into content area discussions, especially during story problem solving in mathematics as they learned to be fox and owl readers of content material as well.

Finally, other comprehension strategies were interspersed within this instructional unit in an attempt to spiral instruction, continually reviewing previously taught

comprehension strategies and searching for ways in which they connected to the synthesis strategy. Determining important ideas, creating sensory images, questioning, and making inferences were reviewed during this eight week period.

Results

In March of 2007, the teacher researcher retested the fourteen subjects using the DRA2 at the same levels as recorded in December, but with alternate texts in order to control that variable. Scores from the interpretation component of that test were compared to the December pretest scores for growth. Twelve of the fourteen subjects scored within the independent or advanced range. One student moved from frustration level to instructional, and the other student remained in the frustration level. Eleven of the fourteen subjects improved their scores by at least one level. The average interpretation score of the March DRA2 post-test was 3.00, an increase of 0.54 points over the December average.

Table 3 DRA2 Posttest Levels and Interpretation Scores

STUDENT	DRA2 TEXT LEVEL	PRETEST INTERPRETATION SCORE	POSTTEST INTERPRETATION SCORE	CHANGE
1	24	2	3	+1
2	20	3	4	+1
3	20	1	2	+1
4	20	2	3	+1
5*	20	2	4	+2
6	20	2	4	+2
7	24	3	3	+0
8	30	4	4	+0
9	28	3	4	+1
10*	18	1	1	+0
11	20	2	3	+1
12	20	2	3	+1
13	20	2	3	+1
14 (IEP)	24	3	4	+1
*Students receiving Title I Reading support				

Interpretation Score Legend
1=frustration
2=instructional
3=independent
4=advanced.

Discussion

To summarize this data, the gradual release of responsibility method in explicitly teaching primary-aged students to synthesize the author's message was effective in this teacher researcher's second grade classroom. In the beginning of the study, only five students were at the independent or advanced levels of interpreting the author's message of the given text. After eight weeks of explicit synthesis strategy instruction with other strategy review lessons interspersed within those weeks, twelve of the fourteen regular education students were at the instructional or advanced levels. One student improved from the frustration to instructional level, while one student remained at frustration. Albeit, the student did not appear "frustrated" by any means, but rather apathetic toward school and, according to her limited reading response journal entries, much more interested in and her appearance and horror movies. This teacher researcher spent a great deal of time attempting to find material of interest to this student and was somewhat successful after calling her parents in for a problem solving conference in March during which, the results of this study were enlightening and presented a concrete example of the progress of this student in comparison to her peers.

In order to score in the "advanced" level of the interpretation aspect of the DRA2, a student not only had to identify the author's message, but also provide specific text-based support for their answers. This teacher researcher was pleased that six of the second grade subjects were able to do so. This became a teaching point for the class for the remainder of the school year as well.

Limitations

This study was limited by several factors. The first of which was the nature of the class. As stated, four of the seventeen students had special needs. The teacher researcher had to exert considerable planning and effort in the inclusion of these students in the gradual release of responsibility approach, including these students in conversations and activities to ensure that they remained active learners throughout the school year, effort that may have been better utilized in attending to the needs of the student that remained at the frustration level.

Also, although noticeably diverse in the immediate context of the classroom, in comparison to other public schools across the nation, this group of seventeen students was quite homogenous and typical of small town, middle class, rural American schools. Transferability of this study will be limited.

Another limitation was the time frame of this experiment. Given two months to improve such a difficult strategy to master was optimistic. However, with generous amounts of modeling, shared and guided practice focused on this one strategy, improvement was made. Also, the teacher researcher was aware that as Van Keer and Verhaeghe (2005) found, the effects of this study could very well disappear without any revisitation to the strategy throughout the remainder of the school year. A cyclical return to this strategy and other comprehension strategies presented throughout the school year was important.

Next, this study is of course limited by the unknown potential growth of the students had they not been participants in this study. Undoubtedly, two months of plain

maturity and increased reading abilities through traditional basal instruction would have produced similar results in an unknown number of subjects. The lack of a control group accentuates this limitation.

A fourth limitation to this study was the expertise of the teacher researcher. Duffy points out in his study of four teachers over a five year staff development program, that although the four subjects participated monthly in specific strategy development training, progress was not easily accomplished (Duffy, 1993). Penny Fidler (2002), a researcher with the Los Angeles Unified School District, studied the effect of teacher expertise in relation to class size and found that, "teacher expertise and status (credentials), as well as certain classroom techniques, improve student achievement" (p. 29). With eleven years of classroom teaching, several hours of graduate course work, a curriculum specialist position, and multiple observations of expert teachers, the teacher researcher would appear quite experienced. Yet feelings of inadequacy and anxiety continually surface as challenges present themselves with these precious, irreplaceable seven and eight year old image bearers. At what point does one become an "expert" in the field of education?

The teacher researcher has also spent the first 34 weeks of school developing personal relationships with each of the seventeen subjects with varying levels of success. Indeed, transferability of this study will be limited by the reader's own expertise and relationships with her own students.

Finally, this study is limited in that the assessment instrument utilized only fictional texts. Any future studies may want to examine how well students are able to synthesize the author's message in nonfiction texts.

Conclusion

Synthesis is a difficult strategy that may never be completely mastered. Multiple genres each present their own unique challenges to comprehension and combined with a plethora of individual areas of expertise presented in each distinctive reader, complete "mastery" is unattainable. Yet, in an attempt to develop active, strategic, and reflective readers and Christian disciples in this information-rich age, educators must continue to rigorously expect students to move beyond basic recall and bland summarizations and on to synthesizing what the author is trying to say through the text and identifying what that message means to the reader. Using the gradual release method allows students to learn in the most natural of methods. Just as they learned to walk by watching that skill be modeled extensively, sharing steps with a caring and patient expert, being guided in strolls around the coffee table, and, finally, cruising down the sidewalk independently, the gradual release method provides a "bridge" between what the students are currently capable of independently, and their potential new learning with guidance (Wood and Wood, 1996). This teacher researcher will continue to employ the gradual release method in instructing students of all ages in the critical strategy of synthesis.

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Appendix A

Resources Used

Figure 1 What Kind of Reader Are You Chart

What kind of reader are you?

	**TACIT**	Readers who don't THINK about what they are reading and quite often don't make sense. They read a story once just to get done.
	**AWARE**	Readers that pay attention enough to know when something doesn't make sense, but they don't always know how to fix the problem. They read the story once to get done and to simply remember some things that might be on a test.
	**STRATEGIC**	Readers that actively monitor their reading and can use MANY strategies to fix mistakes and to dig deeper in order to get inside the story. They read to a story two or three times to remember and UNDERSTAND the story.
	**REFLECTIVE**	Readers that are active, strategic, and flexible. They can adapt their reading to meet their own needs for what they need from the text. They read a story once, twice, or **MULTIPLE** times depending on what they need. Quite often their thinking changes with each rereading.

Figure 2 Synthesizing Graphic Organizer

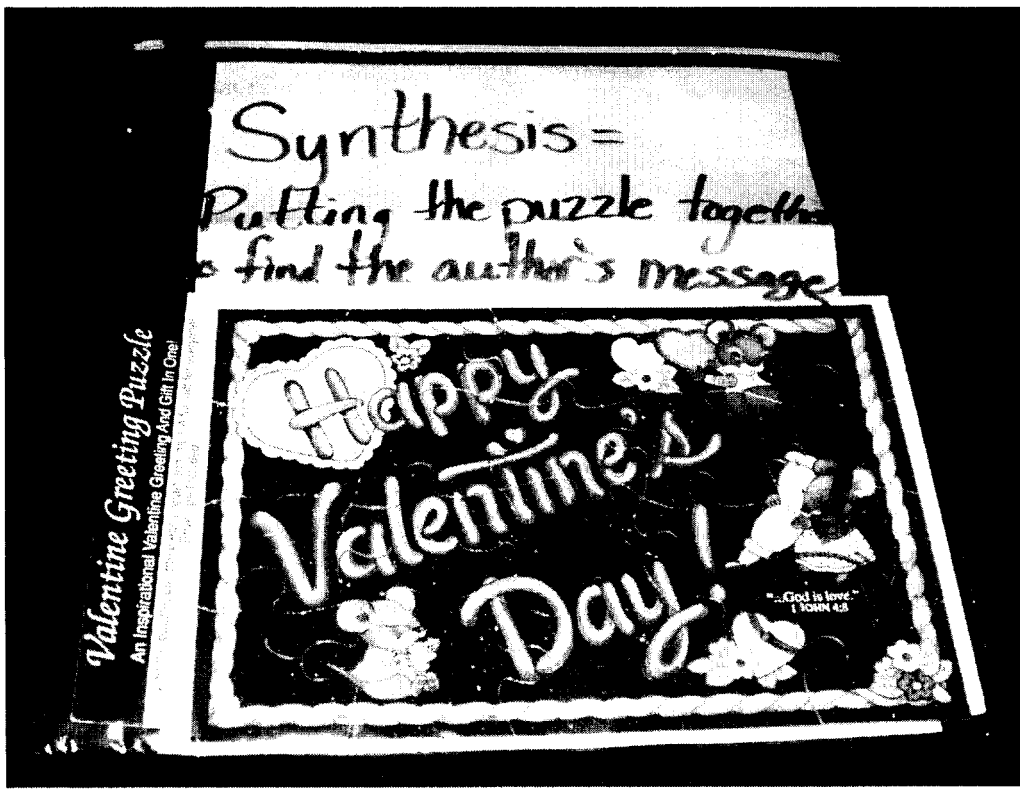
Name _____ Date _____

Synthesizing _____

Taking the words of the story and making a "SUPER-SIZED" inference about what it's REALLY all about!

I'm thinking it's about...	Now I'm thinking it's about...
NOW I'm thinking it's about...	OH! NOW I GET IT! I think it's REALLY about...

Figure 3 Synthesis Anchor Lesson Visual



Appendix B

Participant Permission Form

January 9, 2007

Dear parents,

I am in the process of completing my master's degree through Dordt College in Sioux Center and I am currently constructing an action research project to fulfill the requirements of the final thesis project of the program. In this project, I will be using what's called the gradual release of responsibility approach to learning to demonstrate and instruct the students in using the "synthesis" strategy in reading. Much like we currently use in our classroom, I will be modeling how to summarize and synthesis the author's message from a story, and then we'll practice this strategy during shared and guided reading experiences and then apply the strategy independently. From the DRA testing I've done in October and again in December, I know this to be a common weakness that needs to be addressed as a class. I will be retesting the children in late February, early March to determine growth in their abilities to interpret the author's message from the given text.

Basically, I chose this project because I want my students to be able to figure out the lesson of a story. The DRA test calls this "interpretation" of the author's message.

Throughout my work, **I will not refer to the children by name in my written reports,** only by a randomly assigned number, or by a "pseudonym" or fake name. Please feel free to call or email if you have any questions or concerns.

Thank you!

Mrs. T. G.

712-752-8480
mtegrootenhuis@moc-fv.k12.ia.us

Appendix C

Copyright Permission

Dear Michelle Te Grootenhuis,

Thank you for your note. It's always wonderful to hear that some of one's ideas have been useful! (By the way, the four levels were cooked up by me and my colleague Robert Swartz.)

I looked over the chart. The graphics add a lot of liveliness to it and the adaptation to reading seems to me to be perfectly appropriate. I don't think I have any suggestions at this point. I also don't think that there is any issue of permission here, since you have adapted, not copied the work -- and anyhow it's all for the good of education! Anyhow, you are most welcome to use these ideas! It's wonderful to be doing this kind of thing with second graders. Some people think that metacognition and other kinds of thinking development are not for very young children. Years of experience tells me this is wrong -- young children can do a great deal if they are just given the opportunity and support.

Sincerely,
Dave Perkins

"Scott and Michelle TeGrootenhuis" <tgfarms@c-i-service.com> writes:

Hello Mr. Perkins,

I was reading about your work in the book *Strategies That Work* by Stephanie Harvey and Anne Goudvis. They mention on page 17 of that book your work with the four levels of metacognitive knowledge. I became so enchanted with those levels as I processed that over and over in my head (notice my metacognition? J) that I just had to create a visual to share with my 2nd grade readers.

I guess I'd like to ask your permission to take a snippet of your research which appeared in the Harvey/Goudvis book and turn it into something my 7 and 8 year old students can understand. (Please see the attached.) Any further comments or suggestions for the visual would also be much appreciated.

Thank you for your consideration,
Michelle Te Grootenhuis
a.k.a. "Mrs. T.G." J

This message sent from the home of
Scott and Michelle TG
712.752.8641
www.mrstg.com

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