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## **SOAR to Success Reciprocal Teaching Strategies and Their Effect on Reading Comprehension**

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### *Abstract*

This qualitative research study was conducted to determine if teaching reciprocal teaching strategies affected the comprehension of struggling readers in a fourth-grade Title 1 reading program. Participants included five fourth-grade students who were observed in a pull-out reading intervention class using *SOAR to Success* reciprocal teaching strategies. Data was collected between February 23, 2004 and May 7, 2004. Over this ten-week period, the teacher modeled the reciprocal teaching strategies of predicting, questioning, clarifying, and summarizing and gradually released responsibility to the students to help improve their comprehension of text. As a result, students used strategies to help them understand text and to monitor their understanding of text, and they applied these strategies in other content areas.

### **Introduction**

My interest in the area of reading comprehension stems from my personal and professional experiences. As an elementary and high school student, I struggled to comprehend text. My comprehension scores on standardized tests were consistently below the national average. I remember reading sections of text and asking myself over and over what I had just read. It wasn't until my parents forced me to take a study skills class to prepare for college that I was taught strategies to understand text. There, I finally obtained comprehension strategies to read text, break it apart, and apply what I had learned to other areas.

When I became a reading specialist in 2000, my memories of not comprehending text returned. A third of my students simply could not understand what they were reading. In trying to find ways to help them, I was introduced to the book *Mosaic of Thought* by Ellin Oliver Keene and Susan Zimmerman (1997). The authors tell how teachers can systematically teach thinking strategies to young children in order to help them better understand text. Keene and Zimmerman observe that proficient readers comprehend text by activating prior knowledge, determining important ideas, creating visual and

sensory images from text, asking questions, drawing inferences, synthesizing, and using fix-up strategies (p. 22-23). I began teaching my struggling readers the suggested strategies and was pleased with the progress they made in the area of reading comprehension.

But when the No Child Left Behind Act (2002) took effect, my school district scrambled to adopt a scientifically-based reading program, which the law required. Federal Program Directors chose David Cooper's (2001) *SOAR to Success* program for the intermediate elementary grades. Cooper created his reading comprehension program based on Annemarie Palinscar's reciprocal teaching strategies of predicting, clarifying, questioning, and summarizing. His program was designed to accelerate reading progress through the use of sequenced authentic literature, the four reciprocal teaching strategies, and graphic organizers. Cooper himself field-tested the program in over thirteen states across the United States and found that the use of reciprocal teaching strategies resulted in large gains in reading comprehension in a short period of time.

As I began to reflect on my struggling readers and this new program, I feared the program would put restraints on my teaching. I had to teach *this* program, teach a formatted lesson every day (see Appendix A), and use specific books at specific times. I especially questioned whether this program would be beneficial to those readers who could decode but could not comprehend what they were reading. I realized this program did offer learning strategies such as those that had helped me to comprehend text as a young learner. My pondering led me to question:

*Does the teaching of the SOAR to Success reciprocal teaching strategies (clarify, predict, question, and summarize) help to improve reading comprehension in five fourth-grade Title 1 students at Orchards Elementary?*

### **Literature Review**

Understanding how meaning is constructed from print is essential if teachers are to improve the comprehension of their students. Decoding is not comprehending. Certainly all good readers can recall a time when they were able to decode words but didn't understand what the words said. Maybe they were trying to read a legal document, like a lease or a tax form. Perhaps they were trying to understand a set of directions that looked and sounded like English but when it came to assembling the parts seemed more like Greek. Decoding is just the beginning. In order to construct meaning, readers also need to employ reading strategies. (Tovani, 2002, p.17)

Reading comprehension has been an area of debate for many decades. The question asked over and over is: What is comprehension and how do we as

teachers know if it is occurring for a student? Gunning (1996) defines comprehension as the main purpose of reading:

In fact, without it, there is no reading, since reading is the process of constructing meaning from print. Comprehension is a constructive, interactive process involving three factors – the reader, the text, and the context in which the text is read. (p. 199)

How do teachers know this interaction is taking place between the student and the print? We can't jump inside a student's mind and see what is happening. We can, however, model strategies and gradually release them to our students to use and experiment with in order for them to make their own meaning experience. Teaching reading strategies allows our students to use what they need to make their own understanding of text. Muth (1989) supported this view in stating:

The use of a reading strategy helps a reader experience the sense of a text and learn what it means to make sense of text. A reading strategy is a means for cultivating this experience, but it is not a means for directly teaching the experience. What is directly taught is the use of the strategy. The effective use of strategies over time helps the student learn to experience the sense of text. (p. 245)

Other literature confirms the teaching of strategies for improving reading comprehension. Debbie Miller, in *Reading with Meaning* (2002), urges teaching a few strategies of great consequence, in depth, over a long period of time. This is also confirmed by Pearson, Dole, Duffy, and Roehler (1992) who suggested that successful readers of all ages routinely use comprehension strategies to construct meaning and teachers need to teach strategies over long periods of time using well-written literature. Harvey and Goudvis (2000) describe many methods for teaching comprehension strategies, arguing that teachers must model strategies first and then gradually release responsibility to the students.

David Cooper (2001) also used research around strategy instruction when he developed the *SOAR to Success* program. His program uses authentic literature, graphic organizers, and reciprocal teaching strategies in a fast-paced lesson. He argued that effective strategy instruction is scaffolded, which allows students to gradually increase their abilities to work independently (Cooper et. al, 2001, p. T5). His program centers around reciprocal teaching. Reciprocal teaching, designed to enhance reading comprehension skills, involves a dialogue among teachers and students regarding the text being read (Palinscar, Brown & Martin, 1987). It requires teaching in small groups, with the teacher and students take turns modeling various reading strategies for the group (Smith & Warwick, 1997), the four *SOAR* strategies including:

1. *Predicting* - Students tell what may happen next or what they may learn using clues from the pictures, clues from the words, and clues from what they know or have read.
2. *Clarifying* - Students are confused about how to say a word, a word meaning, or an idea and clear up confusion by chunking word sounds, rereading, reading on, looking at pictures for support, summarizing confusing ideas, and using the dictionary for word meaning clarification.
3. *Questioning* - Students ask questions of others or themselves about something that can be answered by thinking about the text.
4. *Summarizing* - Students tell what they have read using their own words telling the important parts. (Cooper, Boschken, McWilliams, & Pistochni, 2001)

Research on reciprocal teaching confirms that it is, in fact, a valuable strategy to use to improve the comprehension of students in reading (Palinscar, Brown, & Martin, 1987). Studies have shown that its use improves comprehension in a short amount of time (Lublimer, 2002; Cooper, 1997). One example is from the Highland Park School District in Michigan, where the goal for all of the district's elementary schools was to develop staff proficiency in reciprocal teaching. All elementary teachers were trained by Palinscar herself for three weeks, then incorporated the strategies into their classrooms for an entire year. The outcome for the district was that, instead of their typical 2-3 percent gains on state tests, the students posted gains that exceeded 25 percent in some tested areas. In addition, where many Michigan school districts experienced a decline in fourth grade scores, Highland Park doubled theirs from 14.4 to 28.8 percent in just one year (Carter, 1997).

In addition, reciprocal teaching has been an effective strategy technique with bilingual students, (Padron, 1992). Because of its scaffolded nature and dialogue between students, it offers both strong teacher modeling and offers bilingual students the opportunity to hear English in a meaningful text.

Current research around comprehension stresses one thing in particular: The need for teachers to provide students with strategies to improve comprehension is essential. Educators need to provide strategies to improve comprehension, Graves states in the forward of *Mosaic of Thought* (1997):

Educators and the public are in a frenzy over how to boost reading comprehension scores. In some school systems children fill out comprehension sheets, again and again. In others they struggle diligently through thick workbooks in an effort to improve their SAT scores. Neither approach teaches students to use strategies that will, in fact, help them understand texts better. Worse, neither approach develops the love of

reading, the very engine that invites the student into a lifetime of reading.  
(p. ix)

## Methods

Data were collected from February 23, 2004 to May 7, 2004 from students in a fourth-grade reading intervention class. The goal was to examine whether teaching the reciprocal teaching strategies of predicting, clarifying, questioning, and summarizing helped improve reading comprehension.

### Site Description and Access

Orchards Elementary School is located at the northern end of the Evergreen School District in Vancouver, Washington. The school had been identified as an at-risk school by the federal government because 59.6% of its students were eligible for free and reduced lunch, the highest in the district. This qualified the school for the most Title 1 services in the district. Since low SES has long correlated with low test scores, including reading tests, the district assigned to the school two primary and two intermediate reading specialists and a full-time aide. As a full-time reading specialist, I was able to work with a majority of fourth-grade students using the *SOAR to Success* reading intervention program.

My research took place in a Title 1 building where students were identified as below grade-level readers and served in a pull-out reading program. The five students who were studied were pulled out from their regular classroom to attend the *SOAR to Success* reading program for 45 minutes a day, five days a week. Parental permission was needed before students could be taken into the program.

Prior to beginning my research, I submitted an application to the Institutional Review Board of Washington State University, as required by the federal government, and I requested permission from the school, as well as from the involved students and parents. In order to maintain confidentiality, pseudonyms have been used in reporting about students.

### Instructional Plan

The instructional plan for *SOAR to Success* called for a fast-paced 30-40 minute daily lesson using authentic literature, reciprocal teaching, graphic organizers, and scaffolded support to accelerate student's reading growth (Cooper, 2001). The reading time was broken down into five components with a rationale that supports each component (see Appendix B). I studied the reading and reciprocal teaching component.

## Research Participants

The primary research participants of this research study were five of the 28 fourth-grade students who qualified for Title 1 reading assistance at Orchards Elementary School. Classroom teachers referred students who scored below grade level on their beginning-of-the-year reading assessments. Students who qualified or received special education services did not qualify for Title 1. The decision to include English as a Second Language (ESL) students was made on an individual student basis by the school's ESL teacher, classroom teacher, and myself. Students who seemed to have control of the English language and could function in a group dialogue were accepted into my Title 1 groups. ESL students with low English proficiency received only ESL service, to become eligible for Title 1 service when their understanding of the English Language had advanced. My five primary research participants were selected from my first reading group of the day because they were the first from whom I had received written consent. They included four girls and one boy. Three of the girls were considered ESL.

My secondary participants included my group's primary classroom teachers. This included two fourth-grade teachers. The purpose was to gain insight into each student's comprehension and use of strategies over time and across contexts.

### *Data Collection*

To collect data, I used a qualitative approach. I used an observation checklist (see Appendix C) to record student use of strategies over time. Students' use of the four strategies were observed and recorded daily for a period lasting just over three months using both the check-list and a teacher reflection journal. Pre-tests and post-tests were administered to primary participants. In addition, interviews were conducted with both primary and secondary participants. Student writing on strategy use was also collected and finally, test comparisons were made of scores on the *PM Benchmark* test from the beginning, middle, and end of the year.

### Documents and Artifacts

I collected scores from the *PM Benchmark* tests I had given in the fall, winter, and spring to each of my students. In addition, I collected the student's post-it note recordings of predictions, questions, and summaries from three different books. I also reviewed old chart paper from group discussions of three books where I had recorded my students modeling their use of the clarifying strategy. Finally, I reviewed and copied sections from their *SOAR* student guides where they had been required to reflect and respond as to what strategies helped them with the books we had read.

## Observations

Before I began my research, I developed an observation checklist to record my students' use of each one of the strategies. During our reciprocal teaching sessions each day, I used the checklist to indicate the level of internalization evident for each student. They were given a – if they were not using the strategy, a √ if they were beginning to consistently use and master the strategy, and a + if they consistently used and had mastered the strategy. At the end of my study, I gave them an overall -, √, or + to reflect their overall internalization of each strategy over time.

In addition to the checklist, I also reflected about my observations in a teacher reflection journal (see Appendix D). This allowed me the opportunity to begin to analyze what I was seeing from each child, record student quotes, and consider what was working well and what was not. This was very helpful when analyzing my data, but I realized I had more comments on some students than others. I had remembered things that I had wanted to reflect on but, because my day was so busy, I simply did not always have the time to record details after each lesson. This journal, in conjunction with other methods, did play a vital role in helping me assert my research findings.

## Pre- and Post-Tests

I developed a Reading Comprehension Attitude Pre-Test (see Appendix E) to administer to my students. Its purpose was to let me know how they felt about themselves as readers and what they did when they did not understand text. I gave the same test as a Post-Test (see Appendix F) at the end of my study to see if attitudes and strategy use had changed over time.

## Interviews

One interview (see Appendix G) was conducted with each of my primary participants in the middle of my study and lasted approximately fifteen minutes. The purpose of the interview was to determine whether students could monitor their comprehension to see what they did when they didn't understand text, and to determine whether they were using or needing more help with the reciprocal teaching strategies.

One semi-structured interview was also conducted with each of my two secondary participants (see Appendix H). They were interviewed at the end of the study to gain more insight into how students from their classrooms used the SOAR strategies and whether they saw increases or deficits in student comprehension of text.

## *Data Analysis*

When I began thinking about how to analyze my data, I was overwhelmed. I began wondering why I had chosen all four strategies to study instead of just one. I had collected so much data that I had to think of a way to visually look at each student over time. Consequently, for a first phase of analysis, I developed a Data Analysis Sheet (see Appendix I) for each student I was studying.

On each student's sheet, I recorded pre-test and post-test scores and other information that pertained to my research question. Next, I summarized student interviews and added dialogue excerpts. From observation data, I next analyzed and added comments about each student's strategy use over time. I reviewed my teacher reflection journal and found observations that pertained to each strategy and typed them next to the corresponding strategy on the Data Analysis Sheet. I then reviewed student documents such as post-it notes, chart paper with evidence of student's clarifying and student guides, and added themes into each student's Data Analysis Sheet. I also recorded *PM Benchmark Scores* from the fall, winter, and spring along with the student's level of growth. Finally, from teacher interviews, I entered any dialogue that pertained to individual students.

In phase two, after I completing a Data Analysis Sheet for each student, I highlighted each strategy on a sheet in a different color. After highlighting them all, I then compared the Data Analysis Sheets side-by-side to look for themes. I created tables and graphs based on strategy use (see Table 2) and assessment scores (see Table 1). After I analyzed each student's Data Analysis Sheet in depth, I recorded themes and examined student work samples, quotes from interviews, and observation notes that supported those themes, triangulation that helped me refine each of my themes from at least three data sources.

## **Data Presentation and Research Findings**

After analyzing my data, the first thing I determined was that all of my students made growth in the area of comprehension. A student's instructional reading comprehension score is considered 80% on an appropriately leveled text in which students can read with 90% accuracy or better. Instructional level refers to the reading level at which a child should be taught, with support from a teacher. A student comprehension score higher or lower than 80% signifies that the reading level was either too easy or too difficult. In the spring, students needed to score an 80% on a level 28 to be considered reading at grade level. While some students were still reading below grade level, all students improved by at least three reading levels (see Table 1). Two students, Elizabeth and Alexa, reached grade level by the end of my study.

Table 1: Students' comprehension growth

	Fall reading level/ comprehension score	Winter reading level/ comprehension score	Spring reading level/ comprehension score	Level of Growth
Travis	24/70%	26/90%	27/80%	+3
Elizabeth	25/71.5%	25/80%	28/80%	+3
Nicole	22/90%	24/80%	26/80%	+4
Marcia	22/90%	24/80%	27/80%	+5
Alexa	22/100%	24/80%	29/80%	+7

Since factors such as classroom reading instruction and at-home reading can attribute to higher comprehension scores, I needed to analyze each student's use of the reciprocal teaching strategies to determine whether they contributed to comprehension growth. The data for each focal student will be presented in terms of the student's use of each strategy, self-monitoring of comprehension, and use of strategies in other areas.

#### Travis

While three students had been in my reading program all year, Travis entered two months later than the others. He stated that he knew when he did not understand what he was reading because it would be confusing. Most of his comments about trying to understand confusing text revolved around clarifying. In pre- and post-testing, he said he always clarified words, meanings, and ideas, yet he indicated to me that he still needed help with the *clarify* strategy because words were hard for him to figure out.

As I looked deeper into his use of clarifying over time, I found confirming evidence of his statements. In his student guide, he mainly chose clarify as the strategy that helped him the most, but he could not explain why. Over time, Travis consistently put highlighting tape on words, meanings, and ideas he found confusing, but he typically stopped there, rarely going back to reread or to read on in an attempt to dispel his confusion. After one observation, I noted:

Travis had clarifying tape in his book today, but I am still unsure whether he is going back to try to figure his words, ideas, and meanings out. When I asked him if he has tried to figure out his words, meanings, and ideas that are confusing, he said, "No." (observation, April 15, 2004)

This sent up a red flag, since most of his talk was generally about decoding words instead of thinking about what he was reading. In our interview

and on his pre- and post-tests, Travis indicated that he always used the *predict* strategy. My observations did not confirm this. I had observed that he consistently based his predictions on book titles and pictures. My observation checklist also showed that he did not use evidence from the text to support his predictions. When asked what evidence he had to support his predictions, he generally commented, "I don't know." He rarely selected prediction in his student guide as a strategy he used.

Travis did comment on his pre- and post-tests that he sometimes used the strategy *summarize*. He chose it sometimes in his student guide as well. My observations also showed that he used the strategy some of the time. My checklist showed that Travis could summarize well in fiction text, pulling out the important details and put them into his own words and recognizing when he had given an unimportant detail. When it came to nonfiction text, however, Travis really struggled, rarely able to pull out important details and unable to distinguish between what was important and what was not. As time went on, Travis did begin to summarize consistently, but he had not mastered the strategy by the end of my study.

Travis did master the strategy of *questioning*. This was his strong area. He used the strategy consistently and well, asking implicit, explicit, and "I wonder" questions. In the beginning of my study, he always asked explicit questions but, by the end, he had really developed asking deeper questions. He also wrote about how questioning helped him in his student guide (see Figure 1). Travis's questioning evolved, which was evident in his comparisons of questions over time (see Figure 2).

Figure 1: Travis's student guide response, February 4

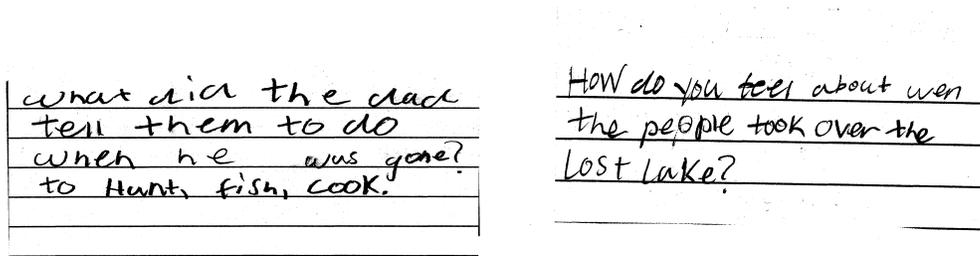
Name at least one place where you used this strategy or modeled it for someone else Write the page number(s)

I Question on page 27 when do the pups hear and see?

How did this strategy help you?

So other people find out info + at any.

Figure 2: Travis's questions on October 3 and on May 4



By the end of my study, Travis also began to stop and monitor his comprehension through questioning. This showed that he had thought about the text. From an observation, I noted the following:

As Travis was reading today he stopped and pulled out his KWL (What I Know, Want to Know, and Learned) chart he had been working on. He had noticed that one of his questions had been answered during his reading and said, "Mrs. Shira, guess what! One of my questions has been answered." This was my first sign that he was reading for meaning. (observation, March 31, 2004)

According to his classroom teacher, however, Travis was not consistently using the strategies outside of my classroom. His teacher commented that he had made growth but not as much as she had hoped.

#### Elizabeth

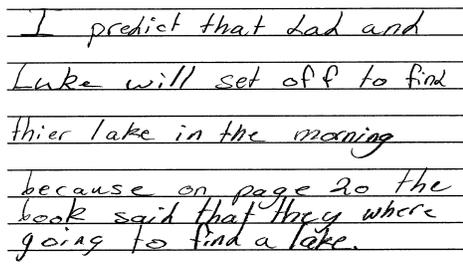
Elizabeth also came into my group two months after the other students, but was reading at a higher level than the other students. Her progress appeared less dramatic because she had less improvement than the others to meet grade level. She stated early on that she knew when she did not understand what she read because it was usually hard for her to focus on the part she did not understand.

By the end of my study, she had mastered the use of *clarify*, *question*, and *predict* and was beginning to master *summarize*. This was evident in many data types. In her pre-test and interview, she shared that she used all the strategies most of the time but still needed help with summarize. This was evident in both her student guide and my observations although, over time, she consistently clarified words, meanings, and ideas that were confusing. By the end of the study, she was aware when she needed to clarify, could model it for the group, and always took action to clear up her confusion by rereading, reading on, or using the dictionary.

Elizabeth also grew in the area of questioning. In the beginning, she always asked explicit questions but, as time progressed, her questions started to include implicit and “I wonder” questions that called for thinking beyond the text. Her predicting also evolved over time. In the beginning, she always used the title and pictures to predict but never used evidence from the text to support her predictions. As time progressed, she began to use evidence from the text to make sound predictions. This showed in both her predictions (see Figure 3) and in my observations, as evidenced by the following:

Elizabeth is starting to explain her predictions. She uses evidence from the text to support her predictions. In the past two weeks, she has been picking up on patterns in the book on which to base her predictions. (observation, March 4, 2004)

Figure 3: Elizabeth’s prediction, April 4



I predict that Dad and  
Luke will set off to find  
their lake in the morning  
because on page 20 the  
book said that they were  
going to find a lake.

Elizabeth consistently used all the other strategies well and always wrote about them in her student guide except one: she rarely wrote about *summarize* and indicated was difficult for her. This made sense since she said in her interview that she needed more help with it. She was aware that she did not use the strategy frequently but, as time progressed, she really started to understand how to summarize.

As Elizabeth began to master each strategy, she began to use them to monitor her comprehension. She began to stop during her reading to use the dictionary for clarification. She would also stop after she read a page to summarize and, when she was confused, she would question her thinking. Her classroom teacher also observed her growth in reading and use of strategies such as *clarify* in other subject areas.

#### Nicole

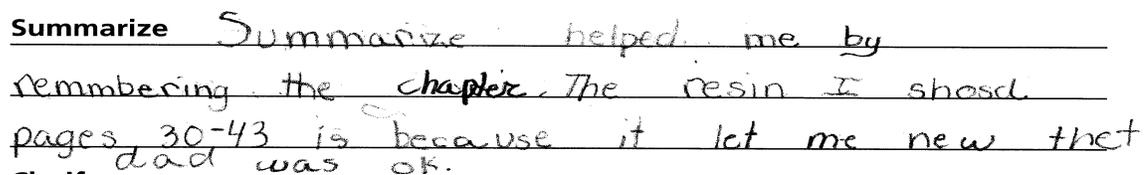
Nicole, one of three ESL students, had been in my group since the beginning of the year. She made tremendous growth and jumped four reading levels. She also made tremendous progress in her use of the strategies over time. Her pre-test indicated that she used all the strategies but that some were easier for her than others. She indicated that she clarified words, meanings, and

ideas that were confusing, and this was evident in her student guide as well as from observations. She indicated frequently in her student guide that the *clarify* strategy was the one she used the most. In our interview, she also commented she used the clarify strategy when she did not understand what she was reading. She commented, “My favorite part about reading is clarifying a word I do not know, because then I learn what it means” (personal communication, February 27, 2004). Clarify is the one strategy she mastered by the end of my study.

Nicole was on her way to mastering the other three strategies as well. Her *predicting* began to evolve over time. She used background knowledge, patterns from the text, and evidence from the text to support her predictions. She still struggled with predicting in nonfiction text due to the fact she had to clarify so much vocabulary because of language issues. In addition, her *questioning* strategy also evolved. In the beginning, she always asked explicit questions but, as time progressed, my observation checklist and Nicole’s student guide indicated she was asking more implicit and two-part questions. She consistently asked questions that were always about important information or required other students to think beyond the text.

At the end of my study, Nicole was working toward mastering the *summarize* strategy. She knew summarizing was an important strategy and commented that it had helped her become a better reader because she was better at it now. She chose it frequently in her student guide as a strategy that helps her read, but my observations indicated she still needed support (see Figure 4).

Figure 4: Nicole’s student guide response, February 4



Summarize Summarize helped me by remembering the chapter. The resin I showed pages 30-43 is because it let me know that ... dad was ok.

I noticed she could pull out details from text but continued to have some difficulty knowing whether she had forgotten something important. She indicated in a discussion that, although the strategy was hard for her, it had helped her the most in remembering what she had read. Nicole also began to monitor her comprehension as time progressed. I observed the following:

Nicole stopped during her reading today and said, “One of my questions got answered”. Later on in the lesson, she stopped again and said, “Oh we answered another question on our KWL chart.” (observation, April 30, 2004)

Nicole's teacher indicated that she, too, had noticed Nicole using the strategies. During our interview, she commented, "Nicole uses the strategies in all areas. I see her clarifying for meaning a lot in other subject areas. I really believe a lot of her difficulties lie with ESL issues. She just needs the opportunity to develop her vocabulary. I have definitely seen growth in her this year" (personal communication, April 20, 2004).

Marcia

Marcia had been in my group since the beginning of the year and was one of three ESL students in the group. When asked what the hardest part of reading was she commented, "The hardest part is the hard words and paragraphs I don't understand" (personal communication, February 27, 2004). She was very aware when she did not understand text and knew what she needed to do to correct it but did not take the initiative.

Marcia started out the year with very little drive. Her teacher commented, "Marcia can apply herself, but it depends on if she takes her learning seriously and if she is confident" (personal communication, April 20, 2010). This also was evident in Marcia's use of the strategies. In pre-testing, she stated she always clarified, which she consistently did. She would put tape on the words, meanings, and ideas that were confusing but would stop at that point. When asked why she did not try to clear up her confusion, she simply stated, "I don't want to" (personal communication, February 27, 2004).

As time passed and she began to learn and feel more confident with the strategies, she worked harder at using them. She also began to write about each strategy in her student guide. She stated in our interview that she needed help with *summarize* and admitted, "I don't do it a lot. I am trying to get the hang of it" (personal communication, February 27, 2004).

Her confidence with each strategy correlated with her growth. Marcia advanced five reading levels and was on her way to mastering the strategies of *predict*, *question*, and *clarify* at the end of the study. Ironically, Marcia became very confident in the one strategy with which she had the most difficulty, *summarizing*. Her summaries started out as retellings with an abundance of information. As time went on, however, they began to slim down, retaining important details and then moving on to important information only. By the end of the study, observations indicated she had mastered the summarize strategy.

As Marcia learned each strategy she also began to monitor her comprehension using the strategy. I observed the following:

Marcia stopped and asked me a question today during her reading. This is evidence to me that she is beginning to become aware of patterns in the text and when things do not make sense to her. (observation, March 19, 2004)

Marcia also began to use the strategies she learned outside of my room. Her teacher observed beginning use of the SOAR strategies in Marcia's regular room as well. This was corroborated in a group discussion about the strategies they used in the books they read outside my classroom when Marcia related, "I watched a movie with my friend and told her what predicting meant. We predicted through the whole movie, and it was fun" (observation, March 22, 2004).

### Alexa

Alexa also was an ESL student, one who had been in the group since the beginning of the year. She made tremendous growth, advancing seven reading levels across the year. Alexa was the only focal student who mastered use of all four strategies by the end of my study. In pre-test and interview, Alexa indicated she used all of the strategies except *summarize*. She said she always used the other strategies to help her understand what she reads. This was evident in Alexa's student guide as well as my observations. In her student guide she chose *clarify*, *predict*, and *question* equally as strategies she used during her reading and as strategies that helped her understand what she had read.

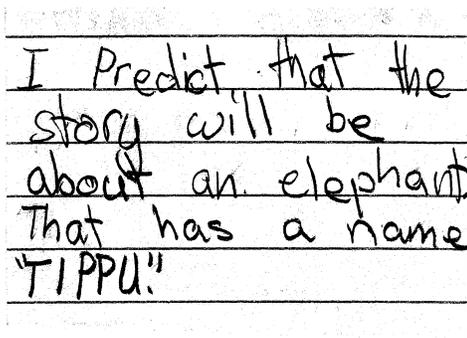
She rarely chose *summarize* until the end of my study. In our interview she stated, "I need more help with summarize because I don't use it." My observations indicated that, in the beginning of the program, her summaries had too many details. As time progressed, she began to become aware of details that were not important. She even stopped during her summarizing to correct herself. I observed the following:

During one of our summaries on the book *Wagon Wheels*, Alexa gave a detail about a baby crying. She stopped and said, "Wait, that is not important." She is actually becoming aware of when something is not important and does not lend itself to remembering the important parts of the book. (observation, March 4, 2004)

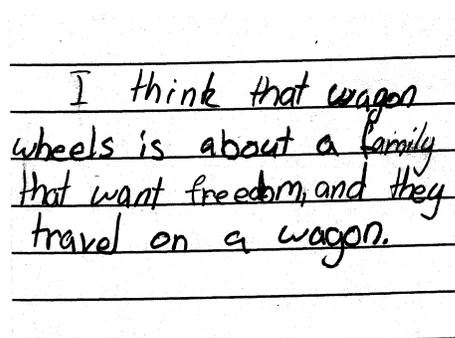
Alexa also grew in the use of the *prediction* strategy. In the beginning, her predictions were always to the point but lacking much detail. An example occurred with the book *Tippu*. The book had an elephant on the cover in a grassy plain along with the title *Tippu*. Her prediction was very thin with no thinking beyond the picture and title (see Figure 5). As time progressed, she began to use evidence from the text and her background knowledge of subject matter to support her predictions (see Figure 6).

Alexa also improved in her use of the *question* strategy. Her questions in the beginning were questions such as: Where did the men take the animals? These questions are what I called *skinny questions* or ones that do not hold a lot of meaning in the text. In later books, she started asking two-part questions such as: What did Dad do to make the dugout feel like home and why? Eventually,

Figure 5: Alexa's predictions, November 3 and February 4



I Predict that the story will be about an elephant That has a name "TIPPU."



I think that wagon wheels is about a family that want freedom, and they travel on a wagon.

she moved to implicit questions such as: Why do you think a visiting dog needs to be a special dog?

As Alexa began to master each strategy, she began to use them to monitor her comprehension. There were many instances where she displayed this during group time, including:

During the book, *Falcons Nest on Skyscrapers*, Alexa stopped me and said, "Mrs. Shira, I think the eggs are going to break because the eggshells are too thin from the DDT." She had read about how DDT was causing the peregrine falcons to become extinct because their eggs were not hatching. She used clues from the text to make predictions that they were too thin from the DDT and would break when the mother sat on them.

At the end of our reading today, Alexa stopped again and stated, "Mrs. Shira, I don't understand. Why they are tagging the birds?" We talked about how this was a good question to ask for clarification during her reading. I told her she should ask someone in the group during questioning time. (observation, April 30, 2004)

I could confirm Alexa's use of all the strategies after my interview with her classroom teacher, who said that Alexa was not only using all the strategies but also using them in other content areas:

Alexa seems like she has got it. I can tell she is using the strategies based on the way she answers questions. I can tell because of her vocabulary. She uses clarify strategies in context to figure out words she would ask me before. It shows me she has taken control. (personal communication, April 20, 2004)

## Assertions

My original research question was: *Does the teaching of the SOAR to Success reciprocal teaching strategies (clarify, predict, question, and summarize) help to improve reading comprehension in five fourth grade Title 1 students at Orchards Elementary?* My data led me to the following three assertions.

*Assertion 1:* Because I taught a combination of comprehension strategies at once, my students mastered those strategies that best helped them comprehend text, whether it was one strategy or a combination, and used them over time to improve their reading comprehension. Students who mastered all of the strategies and used them simultaneously made more growth than students who did not master and use all of the strategies simultaneously.

Table 2 shows how teaching *clarify, predict, question, and summarize* offered my students several strategies to self-improve their comprehension. Teaching all four strategies enabled students who were only ready to master one strategy the opportunity but gave others the opportunity when ready to use all four to make maximum growth.

*Table 2:* Student use of strategies over time

Student use of strategies over time					
	<i>Clarify</i>	<i>Predict</i>	<i>Question</i>	<i>Summarize</i>	<i>Level of Growth</i>
Travis	-	-	+	√	+3
Elizabeth	+	+	+	√	+3
Nicole	+	√	+	√	+4
Marcia	√	√	√	+	+5
Alexa	+	+	+	+	+7

+ = mastered, √ = mastered most of the time, - = not yet mastered

Table 2 also shows how students who mastered more strategies made more growth. Alexa for example, was using all four strategies consistently at the end of my study. She also made the most growth. Travis, on the other hand, made the least amount of growth but he was only using two of the four strategies

consistently. As students began to use the four strategies simultaneously, they began to make more growth.

I hoped that their growth in reading comprehension was also increasing their love for reading, corresponding to the findings of Muth (1989), who states that satisfaction derives from the reader's capacity to make sense of the text as a whole:

As teachers and students learn to use a strategy effectively they learn to make reasoned and insightful predictions to ask questions probing the central content of the text, and to bring up relevant personal experiences. Over time, a strategy approach to reading comprehension will produce results but we should not compromise the experience of making sense of text to isolating the use of one strategy. (p. 256)

*Assertion 2:* As my students began to master a strategy, they used that strategy to stop during their reading and monitor comprehension, signifying that they were consciously aware text was confusing and needed clarification or that they were comprehending what they were reading.

*Monitoring* is defined as being aware of or checking one's cognitive processes. In reading comprehension, the reader monitors his or her understanding of the text (Gunning, 2000). Data indicated that, as my students began to master the use of a strategy, they began to monitor their comprehension. Travis, Nicole, and Elizabeth began to do it with *questioning*, while Marcia and Alexa monitored their comprehension more by *predicting*. My observations also showed that students talked about what they were reading, demonstrating *meta-cognitive processing*. This, in turn, enabled students to be aware of which strategies they needed to clear up confusion so that they could comprehend text.

*Assertion 3:* As some of my students felt comfortable with and began to master specific strategies, they began to use them outside a small group setting to comprehend other subjects and content.

From group discussions and teacher interviews, it was evident some students began to take some of the strategies they had learned in my class back to their regular classrooms to use in other subject areas to help them better comprehend difficult text, ideas, and concepts. In addition, students were able to verbalize how they used certain strategies at home and in their daily reading. It became clear to me after my interviews with the student's classroom teachers that the strategies of *predict*, *clarify*, *question*, and *summarize* could and were being used in other content areas to aid students in the area of comprehension. My finding confirmed that of Gunning (2000):

Ultimately, students should be able to apply the comprehension and strategy lessons they have learned. Research suggests that this does happen: students who were trained in the use of strategies were apparently able to apply them to their social studies and science reading. (p. 241)

### Reflections and Next Steps

As a teacher, I believe very strongly in the importance of teaching students strategies to improve their understanding of text. If not for my parents forcing me to take a study skills class in high school, I do not think I would have become a teacher. The strategies I learned in that class fifteen years ago allowed me to succeed in college. After reflecting on the *SOAR to Success* program as a whole and looking at the tremendous growth my students have made, I feel that teaching students the strategies of *clarify*, *predict*, *question*, and *summarize* are beneficial for improving students reading comprehension, offering students a variety of strategies to choose from whenever they deem necessary.

My research has also led me to become a researcher-in-practice. I am asking myself many *what if* questions and discovering areas I want to research in depth next year in order to improve my teaching even more. Some questions I would like to explore further include:

- Will students whose classroom teachers use the *clarify*, *predict*, *question*, and *summarize* techniques in their reading instruction make more gains in the area of comprehension than students whose classroom teachers do not?
- Do ESL students benefit from and make more gains in the *SOAR to Success* program than English-speaking students, due to the modeling and rich conversation that takes place on a daily basis?
- Can struggling readers who have learned the strategies of *clarify*, *predict*, *question*, and *summarize* take them back to their regular classroom and become leaders by teaching and modeling the strategies for other students?
- Do students who are in the program from the beginning of the year make more growth than students who enter the program mid-year?

Finally, the most important part of my research study is what I have learned from my students. Tovani (2002) said it well in the following quote,

Teaching isn't as predictable as it once was. Every day I know children are going to surprise me with their thinking, teach me to see and understand things in new ways, motivate me to think deeply about my teaching, and help me make thoughtful decisions about where to go next and why. (p. 10)

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