Reading Comprehension: Strategies for Elementary and Secondary School Students

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Reading may be one of the single most important skills that a person can possibly acquire. It is generally taught at a very young age, beginning before kindergarten. The National Reading Panel has stated that there are five specific practices that teachers should be using when teaching children to read or when helping them improve their reading skills. These practices are phonemic awareness, instruction in phonics, guided oral reading practice with feedback, vocabulary instruction, and comprehension strategy instruction (Prado \& Plourde, 2005). Of these five practices, the most important may be reading comprehension. Reading comprehension requires the reader to actually know and understand what they are reading. If persons have excellent decoding skills, but are not fully able to understand what they are reading, then they are simply word calling and not truly reading.

Reading comprehension is not a single step or easily acquired skill. It is a very complex process that teachers find difficult to teach. Comprehension is a process that involves thinking, teaching, past experiences, and knowledge (Prado \& Plourde, 2005). The foundation of reading comprehension is word identification and decoding. As individuals get better at these skills and are able to read words, they have to move into learning the actual meanings of the words they are reading. Knowing and understanding what is being read is the key to comprehension. Comprehension is the "interaction among word identification, prior knowledge, comprehension strategies, and engagement" (Prado \& Plourde, 2005, p. 33). Without all of these skills, one cannot comprehend properly and, therefore, not read properly. Students who have disabilities are more at
risk than others for developing reading and or comprehension problems. Students with disabilities often do not pick up techniques or reading skills as quickly as their peers who do not have disabilities. Therefore, students with disabilities greatly benefit from having strategies that they understand and that they know how to employ in certain situations. Typically developing students can often develop and use their own strategies, but those with disabilities struggle with this process.

The purpose of this paper is to discuss several strategies that can be used for elementary and secondary school students who have disabilities but would also benefit those without disabilities as well.

## Causes and Problems

There are multiple reasons why some students have difficulty with reading comprehension. Some students have difficulties because they have not truly mastered reading fluently. When a student who is struggling to read words and focuses so hard on just saying the words correctly, they are not focusing on what they are reading. All of their cognitive ability is being put into properly calling out the correct words and little effort it put into the meaning of what is being read. This is especially true for students who have disabilities (Woolley, 2010).

Students who have cognitive disabilities, working memory problems, and difficulties with making inferences are also likely to have comprehension difficulties. An example of a student would be a student with autism. This student's cognitive abilities
may make reading comprehension a difficult task (Jitendra \& Gajria, 2010).

Poor reading comprehension may also be related to a lack of prior experiences or a lower socio-economic environment. (Jitendra \& Gajria 2011). To be able to properly comprehend what is being read, students are often required to make connections with what is being read to their own lives and experiences. If a student has not had many experiences or comes from a background that is very different from what is being read in the story, understanding is going to be a very difficult task. This component of reading comprehension is often called activating prior knowledge. Some students simply do not have this prior knowledge. Some students do have this knowledge but they lack the skills needed to activate it.

Vocabulary is also an important component to reading comprehension. Some researchers believe that vocabulary is the strongest component of proper reading comprehension and studies have shown that students who have a large working vocabulary receive better grades than students who do not (Stahl \& Fairbanks, 1986). Students should be able to know the meanings of $90 \%-95 \%$ of the words in a text to be able to gather meaning from the text ( Yildirim, Yildiz, \& Ates, 2011). If a child is reading, and does not understand what two or three of the words mean, then they may be able to gather some meaning out of the text to understand it. However, if a child is reading does not understand what the majority of the words mean then it is going to be very difficult for them to understand what they are reading. Individuals who have comprehension problems generally have a more limited vocabulary than those who do
not have comprehension problems ( Yildirim et al., 2011).

Reading strategies are tools that teachers use to help students learn to read and comprehend what they are reading. There are hundreds reading strategies available to help students with their comprehension at different levels and with different types of text (Prado \& Plourde, 2005). One problem with strategy use is that it is often not taught explicitly enough or it is taught incorrectly. When teaching a student a strategy, the strategy has to be taught with detailed and explicit instruction. The student has to be shown how to use the strategy through modeling, have supported practice, and independent practice with feedback. The strategy may also have to be generalized to other settings. It is being found that some students with reading or comprehension difficulties are either not taught strategies at all or they do not know how to use them properly. Many students with disabilities are taught strategies but they do not know how to recall that strategies when they are engaged in reading (Jitendra \& Gajria, 2011).

## Comprehension Strategies for Primary Grade Students

Reading comprehension is a process that involves memory, thinking abstractly, visualization, and understanding vocabulary as well as knowing how to properly decode (Ness, 2010). Explicitly teaching students strategies can help them do all of these things better and become more independent readers. Reading comprehension strategies also encourage students to become more responsible for their own learning, once the student has mastered the strategy. Also, research has shown that when students receive proper reading comprehension strategy instruction and then use these strategies, not only does
their comprehension decrease but so does their vocabulary, decoding, problem solving, team work skills, and self-esteem (Ness, 2010).

There are hundreds of strategies that claim to help students improve their reading comprehension. Four of these general strategies are visualization, summarization, making inferences, and making connections to one's own life and experiences (Moore \& Lo, 2008). Visualization involves students creating mental pictures in their mind while they are reading, or stopping at certain points in a reading selection to make these visualizations. Visualization is taught by teacher's modeling this strategy explicitly and by having students practice with supports. Students can even draw or create pictures of their visualizations until they have learned to simply visualize in their own minds.

Summarization is teaching students how to summarize what they have read to themselves. Teachers model this by reading a passage, stopping at certain points then explaining aloud what they have read. This is done again through modeling and much guided practice. Students can practice by reading a passage and then telling a partner or a teacher what they have just read (Prado \& Plourde, 2005).

Making inferences is taught by a teacher reading a passage aloud to a class that has some of the details missing. The story's context can guide the students to the details that are missing. The teacher again models and guides the students to ask themselves appropriate questions to try to fill in the important details. There are graphic organizers that ask certain questions that students can use as a guide after reading a selection. They can use these questions until they are able to formulate their own questions (Prado
\& Plourde, 2005).

Teaching students to make connections to their reading is done in a similar way. The teacher reads a passage aloud, stops at a certain point, then says how they can relate what they have read to their own life. The teacher does this often, then gets the students involved by asking questions. All four of these strategies are sometimes combined to create one larger strategy once they have all been taught and mastered separately (Prado \& Plourde, 2005).

One of these strategies is called Rainbow Dots (Moore \& Lo, 2008). This strategy uses colors and manipulative objects to help students monitor their use of each of these strategies. It also lets teachers know which strategy each student is using and when. Each of the four strategies, visualization, summarization, making inferences, and making connections, are assigned a colored sticker. As students read they have a sheet of colored dot stickers. Each time they use a strategy (i.e., summarization, making inferences, visualization, making connections), they are to place the appropriate dot next to the selection they read when they used this strategy (Moore \& Lo, 2008). For example, if visualization is assigned a red dot and summarization is assigned a green dot, and a student visualized a boy swimming during a particular passage, then the student would place a red dot next to the passage. By doing this, the teacher can then go back and ask the student about the strategy they used to make sure it is being used correctly.

Graphic organizers are another popular strategy that can be used for most genres and can be adapted in many ways. They are commonly used for reading
comprehension and there are many different types. Graphic organizers for reading comprehension are generally systems that help students organize what they are reading. Commonly used graphic organizers in the primary grades are for problems and solutions, cause and effect, comparing and contrasting, and sequential order (Jitendra \& Gajria, 2008).

A type of graphic organizer that is extremely common in primary grades is the story map. A story map organizes story-grammar elements in a visual way (Stagliano \& Boon, 2009). Each story-grammar element has a heading on a piece of paper that cues the students to fill in each element as they read a passage or selection. Generally, story elements include setting, events, characters, problems and solution. Story maps can have other elements, depending on the grade level of the student and the passage being read. Story maps encourage students to read for the information that is most important in the story as well as help them remember it. Baumann and Bergeron (1993) reported that students who received story map instruction outperformed students who did not receive story map instruction on comprehension tests (as cited by Stagliano \& Boon, 2009).

Using manipulatives is also a strategy that help increase reading comprehension, especially for students in the lower primary grades. Using manipulative objects helps making a story more concrete. This can be done through the use of puppets who act out the story or through simple objects such as picture cards that show settings or character feeling (Woolley, 2010). This also helps students move into the visualization strategy as
well.

A strategy that is used for students who have average decoding skills but struggle with comprehension is the RAP strategy. This strategy can be used for students at any grade level but is most commonly used in the primary grades and with older students who have learning or cognitive disabilities. RAP is an acronym that stands for read, ask and put. During reading, students are taught to read just one paragraph. At the end of the paragraph, they ask themselves questions about what they read, the main idea, and details about the paragraph. They then summarize the information by putting it into their own words. Once the strategy has been taught, students can use it independently (Hagaman, Luschen \& Reid, 2010).

Teaching reading strategies to students in the primary grades is very important. Students learn most of what they need to be successful in school during their primary grade years. Once students have reached their secondary years, it is expected that they already know how to read and comprehend. Much of the information they need to know is in textbooks that may be difficult to read and understand. If students enter secondary grades already knowing how to properly employ strategies that will help them organize and comprehend the information in a textbook, they are more likely to be more successful and more time can be spent on the student learning the content (Ness, 2011).

## Comprehension Strategies for Secondary Students

Reading comprehension is important for secondary students because they are
focusing less on learning skills like reading and writing, but more on actual content. These students need to be able to generalize all of the reading and writing skills they should already know to be able to be successful in the content areas. However, some students do not properly understand the strategies they were taught or they were never taught strategies at all. Secondary age students can learn strategies that can help them be successful. They are also still able to use the strategies they learned and used in the primary grades. Some of the strategies that secondary students learn are the same strategies they used previously, but they may be used in a different way (Jitendra \& Gajria, 2011).

Graphic organizers are still used in the secondary grades; they just may be used in a different way. Some of the graphic organizers may be specific to content or a certain textbook. They also often have more writing and less graphics. Graphic organizers for secondary students may be broken down in a way that organizes a textbook chapter or section. It may have a place for headings and vocabulary words that students can identify at a later time if they are unfamiliar with the words. Graphic organizers like these are similar to study guides, which are very popular in secondary school content areas (Jitendra \& Gajria, 2011) Study guides generally create an outline of a chapter or certain reading selection. They are set up so that students are guided to the information that is most important. They may also require students to identify important vocabulary words, answer short questions, or summarize certain pieces of text. Study guides can be used during or after reading. A study by Lovitt in 1988 showed that students who used a study
guide out performed students who did not use a study guide in a science classroom (as cited by Jitendra \& Gajria, 2011).

Acronyms are often used in reading comprehension strategies. An acronym that has been found to be successful with secondary students is the TELLS strategy (Ridge \& Skinner, 2010). TELLS stands for Title, Examine, Look, Look, and Setting. Each word is a sequential step that is used in the strategy process. The first step is title. Students are taught to look at the title of the selection and generate clues or guess what the material is going to be about. The second step is examine. During this step, students skim the passage and look for clues about the content. During the third step, students are supposed to look for important words that may be repeated often. This step is important because it may activate a student's prior knowledge. When students look again, they are looking for words that they do not know the meaning of and are supposed to write these words down, and then find their meaning. This is because if a student does not know the meaning of the words, it will be extremely difficult for them to understand the content. Finally, during the final step, setting, students are to read the passage again and look for information related to setting. This can be places, dates, descriptions, or time periods. This step may also engage a student's prior knowledge. When using TELLS, students essentially read the passage at least three times, thus giving them a greater chance at comprehending the material (Ridge, Skinner, 2010). This method is particularly useful when reading textbooks.

A second acronym that is used on the secondary level is the Art of Reading

Program (McCallum, Krohn, Skinner, Hilton, Hopkins, Waller \& Polite, 2010). ART stands for ask, read, tell. This is a simple strategy that is easy for students with disabilities to understand. It involves activities before, during, and after reading that help students enhance their comprehension. During the Ask step, students are taught to read the selection's title and ask themselves questions about the title. Some teachers require students to write these questions down. This allows teachers to see that the student is actually using the strategy properly and students can them come back and try to answer the questions later. When focusing on the second step, read, students actually read the selection and stop at the end of each paragraph. At the end they are to ask themselves if what they are reading makes sense before continuing on. During this step they are to also underline any unknown words to look up or figure out their meanings from context clues. The third stage is tell. When students are finished reading, they are to tell themselves what they read. Some teachers have the students write down a summary, tell a partner, or tell the teacher themselves what they have read. At this time, students can also go back and answer the questions that they had asked themselves during the ask step. The Art of Reading Program has been found to be most effective at the secondary level when used in conjunction with a peer discussion strategy in which students examine the questions they posed to each other and discuss what they have read (McCallum et al., 2010).

PLAN is another strategy that is especially helpful for secondary students when trying to comprehend what they are reading in textbooks (Educational Research, 2008).

When using PLAN, students use a concept map that the teacher has created specifically for the reading selection. It has some information about the selection already filled in and identifies other information that they student needs to get from the text. The first step is predict, students make predictions about the text based on the title, heading, subtitles, and graphics. The second step is locate. Students are required to locate the information requested on the concept map as well as identify the information already given to them on the map. The third step is add. During this step, students must add additional information to the map that is not already on it. The final step is note, in which students have to make additional notes on their map and identify whether or not their original predictions were correct (Educational Research,2008).

## Discussion

Reading comprehension strategies have been researched and found consistently to improve and enhance a student's reading comprehension. If a student is struggling to understand what he or she is reading, then a reading comprehension strategy may help them. There are many strategies available for different types of students and for different types of content.

When teaching reading strategies, it is important to make sure that the student truly understands the strategy before letting them use the strategy independently. Strategies need to be taught explicitly through demonstration, modeling, prompting, guided practice, and independent practice with feedback. When a student has mastered a strategy it is important to continually check with the student to make sure they are still
using it correctly. It is also important for a teacher to not teach a student too many strategies. If a student is trying to learn too many strategies, then they will become confused. This is especially true for students with disabilities. When a student is learning too many strategies, they also may have difficulties distinguishing the appropriate time to use strategy.

Because reading is one of the most important skills a person may ever acquire, it is important that students know what they are reading. If teaching reading strategies will help students understand and gain meaningful information from what they are reading, then that is what teachers should do. Teaching students reading strategies will not just help students be more successful in school but it will also help them be more successful in general if they are consequently better able to understand text.

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