**Introduction:**For my unit on Edgar Allan Poe my students begin with research that culminates into a timeline and diary of Edgar Allan Poe’s life. We then work as a class and read “The Tell Tale Heart.” I work with them through the reading of this famous short story – stopping and discussing purpose, helping them to make predictions, and checking for understanding. I ask them to re-read lines or even moments within the story and require them to discuss with one another purpose, tone, literary devices, and ties to Poe’s life. Once we are done reading and working through “The Tell Tale Heart,” I give them “Masque of the Red Death.” With this second short story of Poe’s they approach the reading task all on their own. They love tackling it and are confident because I have already created a motivation, modeled for them how to approach and analyze his stories, and how to check for comprehension. I had no idea in my original design of my Poe Unit that I was practicing the very foundations of metacognition.

What I found most amazing about my “lite” research on metacognition and comprehension is that scaffold teaching is already very much a part of my own teaching style – I just didn’t realize that what I was doing was scaffolding, let alone aspects of metacognition. The bottom line is that my research supports the fact that metacognition is a motivational strategy that improves comprehension. Finding out that scaffolding is an intrinsic part of my own teaching style was not only an added bonus but also confirmation of my success as a teacher.

**Literacy’s Goals:**

According to the National Institute of Literacy, which I will refer to as NIL, there are five facets or skills to literacy: decoding, morphology, fluency, vocabulary, and comprehension. Comprehension is the process of the reader’s ability to extract or construct meaning from words once they have been identified. It also requires a reader to build on old information in order to create new meanings or newly “integrated meanings” (NIL 26). According to the NIL, “Good adolescent readers are purposeful, strategic, and critical readers who understand the content presented in various types of texts.” Furthermore, good readers build upon knowledge, experience, vocabulary, language structure, and genre structure to gain understanding of a text. And good readers have a “repertoire” of before, during, and after reading strategies (NIL 27). This “repertoire” of strategies is in fact something I came across in another of the readings for my review (Houtveen 174).

In order for a student to obtain success within literacy they “must develop a critical awareness of how all texts position them as readers and [good readers] must consider such factors as how authors’ backgrounds and cultures influence [the] writing” (NIL 27). If the NIL’s definition of “good comprehension” is centered on purpose, strategy, and criticism, and its definition of a “good reader” is centered on critical awareness to their relationship with the text, awareness of the author’s background and cultural influences, and critical thinking skills in both printed and electronic media – then wouldn’t the ultimate teaching strategy for teaching literature and improving comprehension encompass every single one of these facets?

The answer is yes – metacognitive strategies such as those found in scaffold teaching approaches are strategies that embody all facets of NIL’s definition of “good comprehension” and “good reader.” Furthermore, metacognitive thinking is essential for the twenty-first century student. I find myself agreeing with this statement because of metacognition’s ability to teach adolescents how to think about their thinking. In Bob Wise’s article, Wise explains that “Literacy is, in reality, the cornerstone of student achievement, for any student in any grade” because literacy is the one tool that bridges all subjects – science, math, history, language, reading, and writing. Wise continues to point out how the world is shifting to a global workplace. Students (graduates) are no longer competing against their neighbors, but against well-educated students from all across the globe. The internet has redefined the workplace and so too made literacy even more important. By teaching students how to think about their thinking we are better preparing them for the dynamic, group centered, global work place that they will find themselves. By using metacognitive strategies we are also teaching students how to self reflect and problem solve. Elizabeth G. Sturtevant, a professor of education at George Mason University in Fairfax, VA states that we (educators) must think globally when we think about adolescent literacy. She encourages “our adolescents to think beyond their own locales and develop understandings about people and issues in other parts of the world” (Sturtevant 339). I believe the metacognitive approach is way for us as educators to ensure that all students are reaching their literate potential and therefore entering the global workforce fully armed.

**Metacognition and the Role it Plays in Helping Students Reach Literacy’s Goals\*:**(\*Please note that PP is the last name of the author of “Cognitions about Cognitions: The Theory of Metacognition”)Metacognition is becoming the new buzz word within Wake County Public Schools; however, metacognition is in no way a new term to education. The term was first introduced by John Flavell in the early 1970s. By 1976, Flavell continues to explore metacognition by strategically separating learning (thinking) strategies into cognitive and metacognitive types. According to Flavell, “Cognitive strategies ‘facilitate’ learning and task completion, whereas metacognitive strategies ‘monitor’ the process [of learning and thinking]” (PP 6). Over the next decade, the theories and understandings of metacognitive strategies continue to evolve into strategies that force the reader/learner/thinker to become aware of their own thinking as they read, write, and solve problems. Metacognitive strategies also force teachers to reconstruct their classroom environments to accommodate “flexible and creative strategic learning” (PP 2).

Perhaps the most straightforward definition of metacognition is that it is ‘thinking about thinking’ (Flavell, 1999; Bogdan, 2000; Metcalfe, 2000); however, this definition requires further elaboration, because metacognition also involves knowing how to reflect and [analyze] thought and how to draw conclusions from the analysis, and how to put what has been learned into practice (PP 4).

There are valid reasons for WCPSS new found interest in metacognition. First, Flavell once determined that good schools are “hotbeds of metacognitive development.” Second, direct instruction in metacognitive strategies leads to an increase in learning, and lastly, metacognitive thinking is essential for the twenty-first century student: “[Metacognition] enables the student to successfully cope with new situations, and the challenges of lifelong learning” (PP 16). By learning to cope with new situations, the thinker (student) is forced to know “something about their own and others’ thought processes;” therefore, the student can understand why they are thinking and change their thinking when needed. In essence, metacognition’s popularity is a result of its ability to make a student an active participate in their own education.

Metacognition is important because it helps readers monitor and control their learning. By requiring them to monitor their learning, they are in essence monitoring their comprehension. When and if the reader finds that they do not comprehend the text, then metacognition strategies require them to think critical and creatively about why they do not comprehend the text (Serran 15-16). In conclusion, two different studies that I read – Houtveen’s and van de Grift’s study, and Eliers’s and Pinkley’s study – concluded with the same results: improvement in metacognitive skills leads to better results in comprehension and when metacognitive strategies for comprehending are explicitly taught, comprehension improves.

There is an acknowledgement of fault in Flavell’s original theory of metacognition in that it ignores the importance and need for student motivation. Therefore, newer models of metacognitive strategies include both the thinking processes of Flavell’s definition and new motivational processes: “The traditional cognitive-metacognitive approach has been integrated with the motivational-metacognitive approach to explain the development and success of learning in schoolchildren” (PP 9).

 **The Metacognition and Motivation Connection:**

Motivation is important because adolescent readers (especially middle school students) are “readers in transition” – a phrase coined by Broaddus and Ivey in 2000. In other words, they are still developing reading skills as well as structural analysis skills (Serran 2). Because adolescent readers are in this period of transition they are less motivated intrinsically and need extrinsic motivation in order to be successful readers. Frank B. May’s basic principles for motivating students to read as stated in Guerlene Serran’s study are as follows:

* Attend to the students’ basic needs for security, self-esteem, and belonging
* Teach students at their appropriate skill level
* Provide frequent and positive feedback
* Add novelty to the learning experience

According to May, an improved environment equals improved motivation to learn. And improved motivation leads to a desire to do well. With a desire to do well a student will eventually want to master their literacy. In order to master literacy, metacognitive strategies should be used to improve comprehension (Serran 7).

**Scaffolding:**Houtveen and van de Grift give a detailed description of scaffold teaching and signify it as one of the best metacognitive strategies for improving reading comprehension. In the scaffold model, “teachers move from a situation in which they assume all the responsibility for performing a task while the student assumes none to a situation in which students assume all the responsibility while the teacher assumes none” (Houtveen 177). The benefits to scaffold teaching are that the complexity of the reading task is reduced, structure for problem solving is provided, the topic is clarified, appropriate strategies for the student are modeled, interpersonal skills are fine tuned, and the reader is given a foundation of rules or best practices that they eventually will intrinsically adopt (175). Examples of scaffold teaching techniques are

* Reciprocal teaching
* Action guides
* Modeling and demonstration teaching (either by the teacher or another skilled student)
* Mixed ability grouping

Guerlene Serran furthers the support of Houtveen’s and Grift’s list in her study. Serran reports that in a comparative study of reciprocal teaching, buddy journals, and think aloud learning/teaching strategies, the effectiveness of each strategy used in combination with one another was proven to improve reading comprehension. However, it is important to note that no statistical differences were found in actual test scores – just in the improvement of reading comprehension (1). **Strategies that Marry the Metacognition and Motivation Connection:**Through my review, I learned that I can easily incorporate metacognitive thinking into my teaching by simply activating prior knowledge and by requiring my students to use text layout to make predictions, what Guerlene Serran refers to as teaching effective study skills by teaching students how text are organized. Metacognitive thinking can also be practiced by requiring my students to stop during reading and make frequent predictions and by teaching my students how to read “selectively” by showing them what to read carefully, what to read quickly, what not to read, what to re-read, and so-on. Additional examples of metacognitive teaching are seen in the strategies that draw from, compare, and integrate students’ prior knowledge with material in the text and through the teacher’s periodic monitoring of student understanding of the text. All in all, not only are all these techniques showcasing the metacognitive approach they all work to improving student success, which in turn improves student motivation.

One interesting point to make is that good readers already practice this list of Houtveen’s and Grift’s. Eilers and Pinkley point out in their study that “good readers [are] already using these metacognitive comprehension strategies. [Thus suggesting that] successful readers may intuitively and independently integrate these reading comprehension strategies into their reading abilities” (14). **Incorporating Metacognitive Learning in My Classroom:**

If I was to create a description of what metacognition looks like based on the literature I have reviewed, metacognition in the classroom would take on the following framework:

* Allow students to activate prior knowledge
* Allow students to explore the genre for variations, similarities, and theme
* Allow students to make predictions
* Allow students to read selectively, carefully, and strategically
* Allow students to synthesize and culminate connections to prior knowledge, themselves, and the world around them

Within our Waves of Change Framework in ECI 521 there have been many strategies introduced that follow this framework of metacognitive thinking, and by incorporating any one of them in your classroom you are in essence practicing the framework of metacognition.

For example, in Kyle’s presentation of the Schema Theory he explains that everything we learn is connected and interrelated to what we already know or understand about the world. He explains that in literature characters, plots, and settings are connected to our prior knowledge. We enter a text thinking of people that may remind us of the characters; we enter a text thinking what experiences we may have had that are similar to the plot; and we enter a text reflecting on our own experiences with a similar setting. Because of our prior knowledge we approach literature with expectations. In essence, the Schema Theory is one in which the reader must enter a text with an awareness of their prior knowledge and then explore the text for a culmination and synthesis of their new knowledge with their old. In other words, the Schema Theory has a metacognitive backbone.

Brett’s presentation on Jean Piaget’s Constructivism theory is another example of a theory that incorporates the framework of metacognition. Brett explains that humans generate knowledge and meaning from their experiences. When new information is presented, we simulate, incorporate, or throw out this new knowledge – knowledge being synonymous with experience. Therefore, a reader may change or accommodate their understanding of the world or society after reading a piece that presents information that challenges their prior beliefs. On the other hand, a reader may simply dismiss the new information and disregard it all together; or perhaps a reader will take what they have read and share out their ideas and opinions in order to create conversation. Through conversation the reader is allowing for an accommodation of their new found information into their already existing schemas. Regardless of the route within constructivism, the reader must think about their thinking, the fundamental statement behind metacognition.

Another similarity between metacognition and the ECI 521 Waves of Change framework is with Daniel Pink’s push for creativity in what Leigh Ann explains are his six senses or aptitudes for higher order learning: design, story, symphony, empathy, play, and meaning. The goals of Pink’s six aptitudes are the same as metacognition’s goal. Both strategies for learning wish to produce lifelong learners that are prepared to be successful global citizens. After my review of metacognition and my general introduction to Pink’s six aptitudes, I have come to realize that the best way to motivate a student to learn is to provide not only a safe learning environment, but an environment that fosters creative thinking and simulates a play & learn environment.

**My ALP Essential Question:**

How can a metacognitive study of Lois Lowry's *The Giver* increase student motivation and inspire creativity and ownership of learning?

**What I Intend to do for My ALP on *The Giver*:**

In the past I have created a factory system of learning with *The Giver*. Students read, completed their literature circle jobs, shared out their literature circle jobs, listened to me lecture, discussed, and quizzed. This process would be repeated two other times to get us through the book. As you will probably guess, most students complained and did not enjoy the book.

And I don’t blame them! What a blah unit! After my review of metacognition I have come to realize that there is much more that I could do within the classroom to stimulate student learning and thus student motivation with this novel. Therefore, for my ALP I will use the framework established in this paper on metacognition to design and implement a new unit for the novel, *The Giver*. This new unit will not only encourage creativity, but in turn will foster an increase in student motivation and ownership of learning.

Stage One (Pre-Reading Stage): I will break the class up into heterogeneous groups for which each will be asked to research a topic thematically related to the novel. For example one topic that would be assigned would be “Utopian Society.” The research will involve student synthesizing information, creating visual representations of the topic through Toondo, and cooperative group learning. Students will post their images and research to an interactive class wiki. This research project/ wiki page will then be presented to their peers. The goal of this research unit is to establish a foundation of concepts, ideas, and themes for which students will then be asked to explore within Jonas’s world. This stage will fulfill metacognition’s framework for prior knowledge.

Stage Two (During Reading Stage): Students will work within their same groups and read the novel in three sections. For each section, each group member will take on a literature circle job: discussion director, passage pointer, vocabulary highlighter, or illustrator. Some jobs may have to be repeated for groups that our larger than four. This stage of the unit will fulfill metacognition’s framework for exploration of the genre for variations, similarities, and theme, and the framework’s requirement for predictions and selective, careful, and strategic reading of the novel.

Stage Three (During Reading Stage): Literature circle groups will report out to the class their experience with the novel. I will then use this as a springboard for class discussion. After discussion I will have each group member complete a reflective assessment of their performance – similar to ECI 521’s RAPs. This stage of the unit will fulfill metacognition’s required “thinking about thinking” reflections.

Stage Four: (After Reading Stage) Groups will be asked to return to our class wiki and the topics for which they researched. I will have each group discuss ways in which the topics (not just the ones they researched) have presented themselves within the novel. Each group will be required to post comments or questions demonstrating their connections, insights, and synthesis of the novel’s themes to the various research topics. Stage four of the unit fulfills metacognition’s framework for student synthesis, culmination, and connections to prior knowledge, themselves, and the world around them.

When I present to my ECI 521 class on June 28th I will showcase what I’ve learned about metacognition and layout my new unit’s design. I will also show a wiki sample. Self-created (because all my students are on summer break), the sample will serve as an ideal representation of what I would hope the wiki would showcase about metacognitive learning. I will then set up a meeting with two former students. I will share with them the wiki sample and ask them to share their feelings, thoughts, and opinions of the work that they “could have done.” I am confident that they will uphold the foundations of this paper, and express awe and excitement at the opportunities that the unit presents.

 **Conclusion:**I’ve been teaching for seven years, but have never really sat down to answer or explore the meaning of comprehension and the skills a good reader must display.  If I wish to grow as a teacher and in order for my students to grow as readers, I need to take advantage of this ALP and the opportunity it has given me to explore the scholarship behind metacognition.  We are in a crisis of literacy in our nation. According to the NIL, approximately 8.7 million fourth through twelfth grade students struggle with the reading and writing task they are given in school. Furthermore, difficulties with reading and writing figure prominently in the decision for students to drop out of school. Another reading within this literature review pointed out that about six million middle and high school students read below grade level (Wise). And that the United States high school graduation rate ranks near the bottom among developed nations belonging to the OECD (Wise).

With 69% of 8th graders and 65% of 12th graders reading below proficient as measured by the National Assessment of Educational Progress, we must work smarter and not harder (Wise). And the smart way to improve reading comprehension is by utilizing metacognition’s framework. Not only does metacognition improve reading comprehension, but it also better prepares our students for the competition within the global work force. Modern day employees not only want workers with 21st century technology skills, but also workers that are cooperative problem solvers who think about thinking and produce innovative and creative masterpieces, ideas, and services.

Works Cited

Eilers, Linda H., and Christine Pinkley. "Metacognitive Strategies Help Students to Comprehend All Text." *Reading Improvement* 43.1 (2006): 13-29. *ERIC*. EBSCO. Web. 14 June 2010.

Houtveen, A. A. M., and W. J. C. M. van de Grift. "Effects of Metacognitive Strategy Instruction and Instruction Time on Reading Comprehension." *School Effectiveness and School Improvement* 18.2 (2007): 173-190. *ERIC*. EBSCO. Web. 14 June 2010.

National Inst. for Literacy, Washington, DC., and Bethesda, MD. National Inst. of Child Health and Human Development (NIH). "What Content-Area Teachers Should Know about Adolescent Literacy." *National Institute for Literacy* (2007): *ERIC*. EBSCO. Web. 8 June 2010.

PP, Noushad. "Cognitions about Cognitions: The Theory of Metacognition." *Online Submission* (2008): *ERIC*. EBSCO. Web. 8 June 2010.

Serran, Guerlene. "Improving Reading Comprehension: A Comparative Study of Metacognitive Strategies." (2002). *ERIC*. EBSCO. Web. 15 June 2010.

Sturtevant, Elizabeth G., and David W. Moore. "Understanding the Local and Global in Adolescent Literacy: An Interview with Elizabeth G. Sturtevant." *Journal of Adolescent & Adult Literacy* 53.4 (2009): 337-339. ERIC. EBSCO. Web. 8 June 2010.

Wise, Bob. "Adolescent Literacy: The Cornerstone of Student Success." Journal of Adolescent & Adult Literacy 52.5 (2009): 369-375. ERIC. EBSCO. Web. 14 June 2010.