Metacognition: The Key to Knowledge Transfer Writing Workshop

Date: Feb 1, 2013 **Time**: 1:30-2:30 **Room**: Allen 117

In attendance: Saundra McGuire, Barbara Heifferon, Dena Marks, and 25 GTAs &

Instructors

I. Opening Remarks:

1. Vicki Davis introduces Saundra McGuire:

a. Saundra received a B.S. from Southern University and Masters from Cornell, where she got interested in learning strategies. There she noticed that students had problems understanding lectures. She started conducting weekly study groups to translate lectures into their language. She received a Ph.D. from the University of Tennessee at Knoxville. In 1999 she came to Baton Rouge to teach Chemistry and serve as Assistant Vice-Chancellor.

II. Topic 1: Metacognition: They Key to Knowledge Transfer in Writing

- 1. Dr. McGuire's presentation
 - a. This topic is near to my heart. I only learned about the topic nine years ago. Before that, I didn't believe in study skills. I thought I was a pretty good teacher. If a student said, I'm making Cs even though I've been studying all day, I would say, you need to focus on concepts. I didn't translate that concept into a language that they would understand. I didn't know how to tell them what they should do.
 - b. At LSU, I watched a mock individual consultation, where I learned that there is a whole body of information and if I could understand it, I could be very helpful to students.
- 2. Metacognition-is about helping students to understand what their role in the learning process is.
 - a. We're missing 50% of the equation if we only know about pedagogical strategies. If students don't understand their role in the process, we're not going to see learning gains.
 - b. If we use these strategies, we are able to teach students how to learn. Using those strategies they were able to become much more successful.
- 3. Knowledge transfer means teaching students to transfer skills from composition classes to the kind of writing they will be doing later on.
- 4. Reflection questions:
 - a. What skills do you want students to transfer?

- i. Responses:
 - 1. Analysis v. summary
 - 2. Evaluating resources
 - 3. Critical thinking
 - 4. Understanding audience
 - 5. Self-reflexive thinking, how their views help them conceive things
- b. How do you teach students these skills?
 - i. No Responses
 - ii. That's harder to verbalize-that's part of the problem. If it's hard for us to verbalize this, it makes it more difficult for them.
- c. How do you teach students to transfer these skills?
 - No responses. GREAT.
- 5. Desired Outcomes for the Presentation
 - a. To understand why so many students have difficulty with writing.
 - i. I used to have a very different attitude toward students. I thought students don't want to be there.
 - ii. When I learned that they are using all the data points that they've learned up until then, it allowed me to interact with students better.
 - b. To share concrete strategies we can use to teach students to improve knowledge transfer.
 - i. Thought at first the strategies were very vague. But they do work.
 - c. To share resources-websites, on the powerpoint
 - d. To learn to view students differently. On the first day of class, students think they're going to get an A. When are they divested of that notion, what does it do to their self-confidence? It plummets. Their self-defense mechanism kicks in. They psychologically withdraw. Then the next paper is going to be worse than the last one. There are things we can tell students that will help them understand that their performance on the first paper has nothing to do with their ability but the strategies that they are using. We can teach them strategies that will make a big difference. Then their confidence comes back.

III. Topic 2: Teaching Strategies

- 1. I used to think there were certain students that were smart enough and others weren't smart enough. I now no longer believe that. I only believe that there are some students who have strategies and others who don't have them.
 - a. I had two students come to the center for academic success who made rapid improvements.
 - i. Travis developed a reading strategy. He had been doing the reading but not getting everything out of reading. When we start to read, our minds start to wander. We're not sure when it starts to wander so we

have to stop reading and re-read. When you re-read, you don't get much further.

- 2. You can prevent that by using these reading strategies:
 - 1. Before you start to read-overview what you are about to read. Look at what's in bold face, italicize print. If brain has overview of what it's about to learn it's easier for it to fit details into big pictures. If you're reading a novel, read the first line of every paragraph.
 - 2. Come up with some questions you want the reading to answer for you. Giving you a purpose, what you want the reading to do for you. Look for that information.
 - 3. Start to read just read one paragraph. Stop and put that information in your own words. Read a 2nd paragraph. Stop put it in your own words. Sounds like it's going to take a long time but it actually takes less time to do the reading. It's faster because you're not re-reading, more focused. You're moving more slowly through the reading but you get to the end point sooner. You're going to read the later material quicker. The mind begins to focus in more. Graduate students can learn to do that too.
 - a. Robert received a 42 on first exam then after I taught him this strategy, he received hundreds on everything else. Most Cornell students were flunking science exams. It was the way they were doing their homework. The problem is they were flipping back to find a sample problem.
 - 4. Metacognition-look at what their past behaviors were. Were we working the problem or was the example working the problem? If you let the example do the work, when you get to the test, you've never done it. The brain can't do problems it has never done before. Before you look at the first problem, study the information as if it's going to be on the test. Work the problem yourself. See if you got the same answer, check the book against yourself. Figuring out where the mistake was-that's where the learning is.
 - a. When students have questions about a text-they should go back to the passage, read the passage, read the question, come up with their own answer in your own words, then go back and check it against he textbook. Are mistakes good or bad?
 - b. Good if you make a mistake at this point. Students learn from those mistakes. Learning is a process.
 - 5. Paradigm shift-when I learned that you are able to significantly improve the quality of speaking and writing. It was after I was here at LSU. I learned that there is a difference between editing and revising. I was revising at the sentence

level when someone told me, if you take this paragraph and put it here, your paper would read smoother. I thought, oh you can do that?

- a. So many students don't know what is in the head of the writing teacher.
- b. You can teach them foundational knowledge like the fact that they can do something that's different than just changing a couple of words.
- c. Metacognition-Look at writing with the idea that there is a better organization structure that would make the writing better
- 6. Why is it that students don't know how to write? Brain track lists some reasons:
 - a. Students don't get enough feedback. I know this is very difficult to read all those papers and give feedback.
 - b. Some teachers don't know how to give targeted feedback. I used to say things like "You need to un-jumble it." We know good writing when we see it.
 - c. Students aren't taught the fundamentals. Teachers often grew up with them. They don't know that they don't have them.
 - d. Writing instructors and students don't speak the same language. When you tell students you want them to think critically and creatively, they might interpret that as thinking negatively. We can frame critical thinking as analytical thinking. We have to get to the point where we can have that conversation with them.
 - e. One fundamental term is text structure-the importance of text structure in producing good writing. You can organize your paper as a list, compare/contrast, problem/solution. There are ways to signal to reader that that's the kind of writing that's happening. If a student understands that there are overarching structures, that is more helpful than saying "this isn't organized." If we want them to think and analyze their own writing, we have to define the terms we use in their language.
 - f. Writing instructors are good writers, it's second nature to them.
 - g. Students are programmed not to think or trust their judgment. It's not their fault. It's the system they grew up in. They take high stakes tests but their performance on test has no relationship to the grade in the course. They don't trust their knowledge or intuition.
 - h. If students turn in 5 paragraph essay, that's understandable. They've only ever been taught the 5 paragraph essay. Make that connection. De-program them so they know how to respond to feedback.
 - i. Writing is so personal. If the paper is all marked up, they might not want to look at it. They don't know how to respond to feedback.
 - j. Help them understand what criticism is so they will be willing to change things.
 - k. Bottom line: we've got to help them make the transition to college writing
 - 7. To close the gap in teaching them how to learn, think, and write, metacognition is the key

- a. Metacognition is the ability to think about your own thinking. Is she just memorizing the information for a quiz or could she teach it?
 - Think about your own thinking. Become aware of yourself as a problem solver. This puts you in a mindset to succeed instead of have a victim mentality.
 - ii. It teaches you to be proactive. What do I need to do to produce the best paper possible?
 - iii. You might Google "how to write an outstanding paper." Find out what the writing tutors know.
 - iv. Monitor and control your mental processing. Accurately judge your level of learning.
- b. Ask reflection question to develop new learning methods
 - i. What's the difference between studying and learning? If you ask students this, they will realize that studying is just memorizing. Learning is being able to understand.
 - ii. Which of these two tasks will produce the best learning 1) 3 weeks from now, you have to make an A on a test or 2) The day before test you're going to conduct review. You will work harder if you're going to teach. You don't want to look stupid.
 - iii. There's a parallel situation in writing. I'm going to submit it to publication. Was I preparing it to turn in to my writing instructor or am I submitting it to a public audience. This makes a shift in the amount of effort they have to put in. Think about how your audience will understand what the main point is and how I'm getting there.
 - iv. Be aware of audience. Most students don't understand what you mean by audience. They think it's the instructor. Have them write a paragraph, discussing who the audience is and what its characteristics are.
- c. Knowledge transformation v. knowledge telling.
 - Mediocre writing is knowledge telling.
 - ii. Outstanding knowledge is knowledge transformation, transports the reader to the setting of the event. I've read that the more specific you are the better. Transportive writing helps you to envision the scene.
 - iii. Help students understand the difference between what they are doing and what they need to do.
- d. Exercise to demonstrate that you can change your facility very quickly.
 - i. Count vowels of all the words in 45 seconds.
 - ii. How many words or phrases do you remember?
 - 1. Average of about 1.
 - iii. Look at the words again. How are they arranged?
 - 1. By numerical order.
 - iv. Now how many words do you remember?
 - 1. Average around 12 out of 15.

- v. We're not any smarter people than we were.
- vi. Two major differences between first and second attempt. We knew how the information was organized and we knew what the task was.
- e. Translate assignments for students. What's in their head about instructions is very different than what you had in mind. Provide modes for mediocre writing and excellent writing so they know what you are looking for.
- f. Bloom's Taxonomy- Actively teaching this to your students is a way of fostering metacognition.
 - i. What's the highest level you had to operate at in high school?
 - ii. Usually they say "comprehension."
 - iii. Tell them they've got to do something different. That helps them to understand what analysis is. We teach a specific cycle.
- g. Teach them a method for learning: 1) preview 2) attend 3) review 4) assess their own learning.
- h. Teach them the stages of the writing process. They've got to plan.
 - i. Pre-write. I never used to pre-write. No one ever told us about prewriting.
 - ii. Draft-develop a thesis statement.
 - iii. Revise-use a reverse outline.
 - iv. Assess and reflect-don't be afraid to move things around.
 - v. Give them a study cycle to follow.
- i. Concept mapping. We have online workshops. Map out your paper: Is it a compare and contrast paper? How are the subtopics similar how are they different?
- j. Persuasive writing or critical analysis. For persuasive, they think they've got to beat you over the head with it until you agree with it. This diagram makes flashbulb go off.
- k. Establish high expectations-They never had high expectations placed on them. Our problem is in helping students to meet those high expectations
- 1. Change your mind-set from the idea that there intelligence is fixed.
 - i. Fixed mind-set: Students are either smart or not smart. Good writers or not. If you don't do well, you're just not good.
 - ii. People with the fixed intelligence mindset want to avoid challenges. They give up easily, believing that effort is fruitless, or that they are not good enough to take criticism. Share with students their all-ornothing mindset.
- m. Use the learning styles diagnostics on our website: www.cas.lsu.edu. If students are visual learners, teach them to use charts and graphs. If they are auditory learners, there is software that will read their paper aloud for them. If they hear what they have written, they will change it.
- n. To Improve Writing
 - i. Have students reflect on their own writing process. Ask what process have you used?

- ii. Don't judge their potential on initial performance. If they fail the first composition, that's the best thing that can happen.
- iii. Have them pretend to teach someone else how to write papers
- iv. Promote active reading techniques
- v. Have them write reflections: come up with a plan to implement your goals.
- o. Visit <u>www.cas.lsu.edu</u> for online workshops.

IV. Questions:

- 1. On assessment: Are there more humanistic methods for assessing writing that can help them? Students wonder: what's the incentive for me to revise based on your feedback?
 - a. The way we do assessment is broken.
 - b. You can conduct peer review
 - i. Have them work in small groups.
 - ii. It enables them to share writing, gives them a public audience, raises the stakes, gives them specific tasks to accomplish.
 - iii. Use Peter Elbow's method of pointing and modeling.
 - iv. What they get the points for is their participation in the peer assessment.
 - v. You have to visit them. Guide on the spot too.
- 2. Importance of post-writing, which is a bit different than reflecting. There are points associated with the post-write. What things have you learned that apply not just to this assignment but not knowing what future projects might be. What skills are you learning now that you think will be applicable in the future? If assessment has scared people, students don't know how to analyze those negative grades.
 - a. Hales-short essay-Talks about hyper and deep attention. The activities that
 we privilege in the English classroom, are not the ones they are best at.
 Maybe there are ways that we can start to think about composing in digital
 spaces that allow them to tackle skills that are important.
 - b. Skills development-Focus on holistic writing. Lots of people don't have the basic skills. Going back to basics is really important. Concept map out a piece of writing, teach them about creating subtopics.
- 3. I teach spoken English and do a lot of public speaking, could you talk more about strategies for public speaking?
 - a. There is foundational knowledge about public speaking that we take for granted.
 - Begin with a dramatic opening, a story or something that will engage their attention.
 - ii. Hillary Clinton says many 'uhs.' There is a simple way to prevent yourself from saying 'uh.' Squelch it in your throat when you hear it coming. You will speak a little more slowly. It makes you sound pensive.

iii. Some people read verbatim off of a powerpoint, that's ineffective.