SVSU Saginaw Valley State University

In the Loop

November, 2015

Helping Students with Analysis

The Office of Adjunct Faculty Support Programs

Adjunct Faculty
Academic Calendar

November:

13 Last day to withdrawal with a "WP" or "WF" grade

25-29 Thanksgiving Recess

Workshops

(Register at: *svsu.edu/workshops*)

November:

13 Workshop – Great Lecturing by Design
SE 203
12:30 p.m.

13 Faculty Seminar
SE 201
4:30 p.m.

18 Vet-Friendly Classroom
C 116
2:00 p.m.

For more workshops available in November, please visit: svsu.edu/workshops

The Winners of the *Guess the Number of Candy Corn in the Head* Contest were:

Jenny Eisen
Kirker Kranz
Janelle Lake
They had fun and each won a prize!

Most faculty expect their students to practice higher-order thinking in their class work. Such practice involves analytical thinking and critical thinking. Unknowingly, many faculty lump these two forms of thinking together. Although they share some of the same characteristics, however, they are not one in the same. According to Johnson (2013), in order for students to think critically, they must first think analytically. To clarify...to analyze is to break an observation apart to uncover its fundamental elements. To criticize is to evaluate or make a judgement of some observation on the basis of its virtues or failings. If you were to review Bloom's Taxonomy, you would find that Bloom felt that being able to think critically was far more difficult that being able to think analytically. This difference is reflected in his taxonomy. In essence, he felt that in order to think critically one must first find an understanding of what one is criticizing. So in order to criticize, one must first analyze...take the observation apart, break it down to its basic parts, evaluate how it works, what it does, how it should be classified, etc. Once that task is completed, critical thinking can be accomplished through questioning the reasons why something works, finding the limitations of the observation, judging it, etc.

This became an issue as a result of a focus group held in the Writing Center with our freshman students from Nepal. Apparently, these students reported that in many of their classes, they were being asked to analyze and they are not prepared to do so. The question then becomes, do our other students actually know how to analyze and then employ the critical thinking necessary to come to some conclusions?

It is, therefore, necessary for faculty to consider designing learning activities that help our students practice analysis and then move to critical thinking. According to a paper from the University College London, it is helpful to have students create a "question bank" which encourages them toward better analysis. This bank should consist of a set of questions which can be applied to ideas, theories, arguments, etc. to help students pick apart what they are learning and to later think deeply about the topic. Examples of some questions for their bank are: Why? What are the parts to this topic/observation? How does it work? Does this match what I already know? Does it fit in with what other people have said on the subject? In essence, you want your students to be able to have a thorough understanding of any topic/observation before being able to critique it.

References:

Johnson, B. (2013, May 20). Teaching Students to Dig Deeper. Edutopia. Accessed from: http://www.edutopia.org/blog/teaching-students-dig-deeper-ben-johnson

University College London. (n.d.). *Critical and Analytical Thinking*. Accessed from: https://www.ucl.ac.uk/transition/study-skills-sources/critical_and_analytical_thinking.pdf.

Teaching-Centered vs. Learning-Centered Paradigms

Today, there are many smart educators who suggest that colleges and universities need to consider a paradigm shift. This shift involves moving from the Teaching-Centered Paradigm to the Learning-Centered Paradigm. Teacher-Centered classrooms are those where the instructor is the primary information giver and the primary evaluator. Courses which employ Learner-Centered practices are those where the instructor's role is to facilitate and coach and where the students and the instructor learn together. The following table provides some comparisons between the two paradigms:

Comparison of Teaching-Centered and Learning-Centered Paradigms **(Learner-Centered Assessment on College Campuses by Huba and Freed 2000)**	
Teaching-Centered Paradigm	***Learning-Centered Paradigm***
Knowledge is transmitted from professor to students	Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problems solving and so on
Students passively receive information	Students are actively involved
Emphasis is on acquisition of knowledge outside the context in which it will be used	Emphasis in on using and communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts
Professor's role is to be primary information giver and primary evaluator	Professor's role is to coach and facilitate Professor and students evaluate learning together
Teaching and assessment are separate	Teaching and assessment are intertwined
Assessment is used to monitor learning	Assessment is used to promote and diagnose learning
Emphasis is on the right answer	Emphasis in on generating better questions and learning from mistakes
Desired learning is assessed indirectly through the use of objectively scored tests	Desired learning is assessed directly through papers, projects, performances, portfolios and the like
Focus is on single discipline	Approach is compatible with interdisciplinary investigation
Class culture is competitive and individualistic	Class culture is cooperative, collaborative and supportive
Only students are viewed as learners	Professor and students learn together

Why is it important to transform our classroom practices? In the Learner-Centered environment students learn how to use a discipline to solve problems and master learning objectives. In the Teacher-Centered environment material is covered…though not necessarily mastered. The pedagogy is different too. In the Learner-Centered environment students learn by doing. They engage with the material and practice the discipline. In the Teacher-Centered environment faculty cover the material through lecture where information and learning are based on the delivery of information. If we are to understand how learning occurs, thinking about creating neural pathways that perpetuate and ensure life-long learning, it becomes important to think about how we as instructors can facilitate this learning. If, as in the Teacher-Centered classroom, the faculty role is that of the *sage on the stage*, students are not the focus of the teaching. However, if as in the Learning-Centered environment, the faculty role is that of a designer of the learning environment, and the student becomes the focus of the teaching and has a greater chance of mastery and life-long learning.

Reference:
Huba, M.E. & Freed, J.E. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning.* Needham Heights, MA: Allyn & Bacon (p. 108}.