

SWAP SESSION NEWSLETTER

None of us is as smart as all of us. -Roy Disney

As defined in Charles Bonwell's book, Active Learning, Creating Excitement in the Classroom, active learning involves students doing things and thinking about what they are doing. This includes reading, writing, discussion, and problem solving. Active learning is not a spectator sport!

Dr. Ann Stalheim-Smith, University Teaching Scholar Chair, moderated the first Swap Session. She began the session with the above definition and provided the following five examples of active learning:

1. Two to three times during lecture, provide students two minutes to consolidate notes, catch up in note-taking, or talk to a neighbor about a point of confusion.
2. The One-Minute Paper: Ask students to answer the following questions in the middle of or the end of the lecture. A) What is the most important thing you learned today? B) What question remains uppermost in your mind? (or what was the muddiest point of my lecture today?)
3. Ask students to turn to their neighbor and discuss a question relating to the lecture topic.
4. Put students into "buzz groups" (groups of 3-4) to discuss a problem and arrive at a solution. Then have them share their ideas with the whole class.
5. Use problem-solving from case studies. (Vet. Med. uses this approach.)

Ideas about active learning were presented by the following panel members:

- *Larry Scharmann, Secondary Education
- *Larry Weaver, Physics
- *Janice Swanson, Animal Sciences and Industry

Larry Scharmann provided a framework for active learning. In modeling methods of teaching in his course, he works with three families of instructional strategies:

1. information processing/ dissemination
2. inquiry
3. social/ personal

He starts his course with information processing/dissemination which involves a lecture and question/answer combination, the lowest level of active learning. As the semester progresses, so do the levels of active learning and the students' engagement with him and with each other.

Dr. Scharmann emphasizes the importance of

- 1) incorporating active learning into lecture from the beginning so that students are used to participation;
- 2) using a variety of teaching methods; and
- 3) considering four important milieus in the instructional environment: needs of the learner, needs of the instructor, subject matter, and social interactions.

Larry Weaver started his discussion of active learning by pointing out reasons that students are engaged in learning. These reasons include:

1. interest in the topic
2. interest in the social implications of the topic
3. interest in which material will be covered on the test
4. in the case of science courses involving demonstrations, students are engaged because of perceived danger to the instructor!

Dr. Weaver uses a strategy called "Class Talk". Using his computer at the front of the room, he asks a question in the form of a problem for the students to solve in 1-3 minutes. The students, working together in groups of three or four, arrive at an answer to the problem and send the answer to him via a lap top computer.

Dr. Weaver says he receives answers from a high percentage of students (90-100%). He also mentioned that when he did this activity without the use of computers that the level of response was lower. His real concern is if the students are having a better experience in learning Physics.

Janice Swanson of Animal Sciences and Industry has as the primary goal of her course to teach students how to think and make good assessments of information. She has learned that it is difficult to lecture and teach students about contemporary issues and found a better approach to be active learning.

Most of the learning is student-driven, and she plays the role of facilitator as the students work their way through "thought problems".

The course she teaches consists of three main objectives/ activities:

1. Learning how to appreciate other viewpoints and how to work together.
 2. Acquiring research skills through a library workshop. Here, students pick issues and develop a briefing paper.
 3. Teaming up with the University of Nebraska and experiencing the process of trying a piece of legislation. This is followed up with a formal hearing and a debriefing period.
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QUESTIONS ASKED OF THE PANEL DURING THE DISCUSSION PERIOD:

1. *What experiences with active learning have you had teaching classes of differing sizes?*

Janice Swanson said it is more difficult to integrate active learning with a larger group. She expanded the time of her Friday class and called it a lab. During this time, the students participate in short case studies and a mini congressional hearing.

2. *To what extent do you require students to get together outside of class to do active learning activities?*

Janice Swanson stated that she does provide class time, but they do a lot outside as well. She said that students do a good job of coordinating their schedules so that they are able to accomplish such tasks as library research, networking, and lobbying as a group.

Larry Scharmann said it is important to have a component that occurs in class so you can monitor the progress of the students. It is also important for students to be responsible for work outside of class. A combination of both is ideal.

Larry Weaver said that he encourages students to work together on homework assignments.

OTHER IDEAS AND POINTS ABOUT ACTIVE LEARNING PRESENTED DURING THE SESSION INCLUDE:

*We should adapt active learning ideas and not adopt them.

*A professor from the College of Architecture takes roll during the third week of class. He uses every third name to form groups. As groups, students are given a packet of readings, video, and lecture material. They must concur on the two most important points made and present these ideas. He also shows 10 minutes of music videos at the beginning of his classes. He provided an example of how he incorporates these into his lecture. For example, one day he showed a video of Yanni performing at the Acropolis and then lectured about Greek architecture. He emphasized the importance of knowing your audience.

*At the end of the semester, ask students to write the 5 most important benefits of the course. One professor who had done this activity said that the number one answer for 3 years was getting to know other students in the class.

*A professor of women's studies gave an idea that she uses during a unit on class and classism. She distributes chairs in the classroom according to the distribution of wealth in our country. This results in a few students having most of the chairs and a lot of students sitting on the floor. Great discussion results from this activity.

*Active learning increases psychomotor, affective, and attitudinal learning.



ANNOUNCEMENTS:

1. A reference list for Active Learning was provided at the Swap Session. This list can be found on the web page.
2. Starred items on the reference list can be found on reserve in Hale Library under University Teaching Scholar Chair, Dr. Ann Stalheim-Smith.
3. Web page address: <http://www.ksu.edu/biology/scholar>
4. Date of the next Swap Session: November 17 at 3:30 p.m in the Hemisphere Room (5th floor of Hale Library).
5. Upcoming events include:
 - *A workshop on active learning given by Charles Bonwell. The date for the workshop is January 14, 8:30- 11:30 a.m.
 - * A conference on undergraduate science education- January 12-13.
For more information about this conference:
<http://www.phys.ksu.edu/perg/future>