

SWAP SESSION NEWSLETTER

No. 6

4-10-98

Topic- Blurring Boundaries between Academics and Student Life Outside the Classroom

Ideas were presented by Dr. Pat Terenzini, Professor and Interim Director, The Center for the Study of Higher Education, Pennsylvania State University.

Dr. Terenzini began by talking about what we know about student learning. He made the following points:

1. It is maximized when students are active participants in the teaching-learning process.
2. Learning is neither time- nor place-bound. (However, the way we organize our curriculum and course sequence suggests that we don't believe the evidence on this.) Learning is going on all the time.

In one study, an analysis was conducted of students' reported experiences during their first year of college and the effects of those experiences. The effects of three main experiences (formal curriculum and course taking, classroom settings, and students' out-of-class experiences) on reading abilities and critical thinking skills were studied. The researchers found that the experiences students reported taking place outside the classroom contributed to approximately the same degree to the development of critical thinking skills as did the experiences students had in formal educational settings. There are things going on in students' lives outside of class that contribute to the achievement of goals that most institutions have as cherished parts of their educational mission.

3. Learning occurs best in the context of a compelling "presenting problem", when students have a chance to apply what they know in a real-life setting.
4. Learning is social and interactive. From research on collaborative learning, not only do students share what they are learning and reinforce it among themselves, but they also help one another learn by tutoring one another. They are emotionally supportive of one another and develop friendship networks. Some evidence suggests that collaborative arrangements may encourage a sense of civic responsibility or civic participation. Students in groups seem to develop some sense of responsibility for the learning of other members of the group as well as their own.

Next, Dr. Terenzini talked about several approaches that promote learning. Key points include the following:

1. Effective teaching emphasizes application and experience. Hands-on experiences are more effective at teaching a variety of skills than more traditional approaches to instruction.

The most dramatic evidence of this comes from a study that he and others are doing now as part of an evaluation of a coalition of seven engineering colleges from around the country. They are looking at course level effects, and have developed a set of items in the form of a questionnaire that students complete at the end of a course. The ECSEL Coalition is trying to change the way engineering education is delivered. They are trying to involve more design, hands-on, and group problem-solving that deals with unstructured, open-ended problems rather than more formal textbook questions that have a known answer. They asked students to tell them about the kinds of activities going on in their classes, and they contrasted reports of ECSEL courses versus reports from engineering students who were taking courses that were being taught in a more conventional manner. Most of the items tried to tap the extent to which there were collaborative activities going on where students were working on teams and asking questions of the instructor. They also asked how much the students felt they had learned as a result of taking that particular course, whether it was an ECSEL or a non-ECSEL course.

The outcomes had to do with things like the development of communication skills, problem-solving skills, doing engineering design, and working in groups. The evidence from 480 students of 25 different courses are dramatic. In the ECSEL courses where there was an emphasis on collaborative, interactive, problem-solving, the amount that students reported learning in regards to their communication and problem solving skills was consistently on the order of 15-35 percentile points higher. Those effects persisted even when they controlled for a variety of differences in students' characteristics such as SAT scores, high school grades, parents' formal education and socio-economic status.

2. Learning is promoted when there is faculty modeling of the learning process.

3. Effective teaching emphasizes linking established concepts to new situations.

4. An approach that promotes learning is to emphasize interpersonal collaboration. When alumni are asked what kinds of skills they need on the job and how well their institution prepared them, the ability to work in groups is the most frequently cited skill that colleges and universities have failed to help students develop. These skills are being learned on the job instead.

5. **Effective teaching emphasizes rich and frequent feedback on performance from faculty and peers.** Students in the ECSEL courses were about 20 percentile points more likely to report receiving more frequent and detailed feedback from instructors and peers in collaborative settings.

6. **The approaches are part of a curriculum that promotes cross-disciplinary skills publicly held to be important.**

Dr. Terenzini provided the following question for the audience to discuss in small groups:

How can students' out-of-class experiences be enlisted in support of the education goals of our institutions? or How can course goals be advanced or complimented and reinforced through students' out-of-class activities?

He gave the following example:

At Penn State, there is a 2-3 acre lawn area next to the engineering school. Students survey it again and again and again. Contrast this with another engineering school where students in survey class practice their skills in helping the community survey public parks by laying out boundaries and fencing for landscaping purposes. Survey skills are applied in a real-life setting in a way that benefits the students' learning and the community.

SOME RESPONSES/ REACTIONS FROM THE GROUP INCLUDE:

* In some professional schools, clubs form the basis of out-of-class learning.

* In a class on fluency disorders, the professor sends students out in pairs, one student as a mild, moderate, or severe stutterer, the other as an observer. The observer watches the stutterer's perceptions or reactions to how they are treated by others. They then discuss their experiences in class.

* In an economics class, the professor uses real issues in the newspapers to prompt students to do analyses and write letters of response.

* In a class where students discuss marriage and kinship structures, they are asked to interview someone with as few preconceptions as possible and then report back to the class and discuss the experience.

* If one is going to make connections to students' outside experiences, one has to know what those are. One has to know the students. How much time do we provide for students to talk about those experiences?

* Students in residence halls have a desire to make connections with the faculty. Students in halls who have asked faculty to visit have found it to be very rewarding.

* We have to help students to reflect upon their learning and to become critical thinkers.

* UFM internships and field experiences allow students to get practical experiences. For example, education students help to plan educational curriculum.

* Job shadowing days are excellent experiences for students who may not be aware of a typical day of someone who works in the profession they are studying.

* The student affairs office could work with faculty on meaningful curricular development.

* It is a challenge to communicate to students that some meaningful learning is not that which is covered on an exam.

* Many more students are working, and so they have to make choices and have to prioritize. We need to help students manage time and demands more effectively.

* Just as students have to set priorities, so must faculty. We must plan according to these valued experiences and allow time for them.



ANNOUNCEMENTS:

1. The final Swap Session of the year will be on **Monday**, April 27, at 3:30 pm in the **Big 12 Room of the Union**. Would you like the Swap Sessions and workshops to continue? If so, join our discussion on how we might do this.

Topic: **Faculty Support for Teaching and Learning**

If you cannot attend the meeting, contact Dr. Ann Stalheim-Smith about your ideas: E-mail: stalheim@ksu.edu Phone: 539-6918

2. Web page address: <http://www.ksu.edu/biology/scholar>