

New Pedagogies in Higher Education

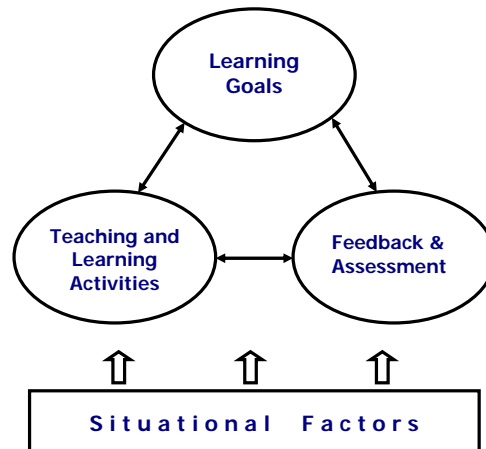
When faculty members decide to try new ways of teaching, they sometimes ask what ideas about new pedagogies in higher education already exist. These are some notes that were developed for participants at an AAC&U institute (2008) in response to that question.

For each of the seven sets of new pedagogies described below, a few select references are provided.

1. Course Design

All teachers have to make decisions before the course starts, about how they plan or intend for the course to unfold and happen. This is the course design process. Most people model themselves after teachers they have had, and then use a “list of topics” approach to designing their courses. That drives learning but generally a low-level kind of learning.

To make their courses truly *learning-centered*, teachers need to learn new and more powerful ways of systematically and intentionally designing their courses. One model for doing this is shown in the following diagram:



This model, called Integrated Course Design, suggests the following process for designing courses:

- Begin the process by gathering information on “Situational Factors”, e.g., thoughts and feelings the students have about the subject, external expectations or requirements, etc. Then use this information when making the three big decisions of the course:
- Learning goals: WHAT you want students to learn
- Teaching & Learning Activities: What the students will have to do, to achieve the learning goals

- Feedback and Assessment: What the students will have to do, that will tell you how well they learned what you wanted them to learn.
- Finally, the learning goals, activities, and assessment have to be integrated, i.e., they have to support and reflect each other. (Note: In many (most?) courses, they are not integrated.)

Generally, courses are designed by the person who teaches it, but faculty also should consider consulting with campus experts, such as experts on teaching critical thinking or information literacy. Sometimes, the course may be designed by a team and then taught, either by a member of the design team or by someone else. Either way, these decisions will need to be addressed.

In addition, the national assessment movement has encouraged faculty to think beyond their classes to the programs that their classes serve. This requires moving from thinking about “my classes” to thinking about “our curricula” and the need to systematically align course learning goals with program learning goals so students have a cohesive learning experience. Program learning goals are systematically structured into courses so that they are introduced, developed, practiced, and mastered as students progress through the curriculum.

One nice feature of this model is that it automatically leads professors into issues and an awareness of the need to learn more about the other kinds of new pedagogy described above, e.g., learning goals, active learning, educative assessment, teaching strategies, etc.

Resources:

- Diamond, R.M. 1998. Designing and Assessing Courses and Curricula: A Practical Guide. Rev. ed. San Francisco: Jossey-Bass.
- Fink, L.D. 2003. Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses. Jossey-Bass.

2. Significant Learning Goals

Most college courses are focused on various topics that form the content of the course, supplemented in some cases by having students apply that content to a series of problems. In addition, courses often include focus on developing students’ core skills, such as writing, speaking, collaborating, critical thinking, and information literacy.

To make their courses truly learning-centered, professors need to learn how to formulate *high quality learning goals* that include *but go well beyond content*. There are a number of taxonomies that can help professors respond to this challenge.

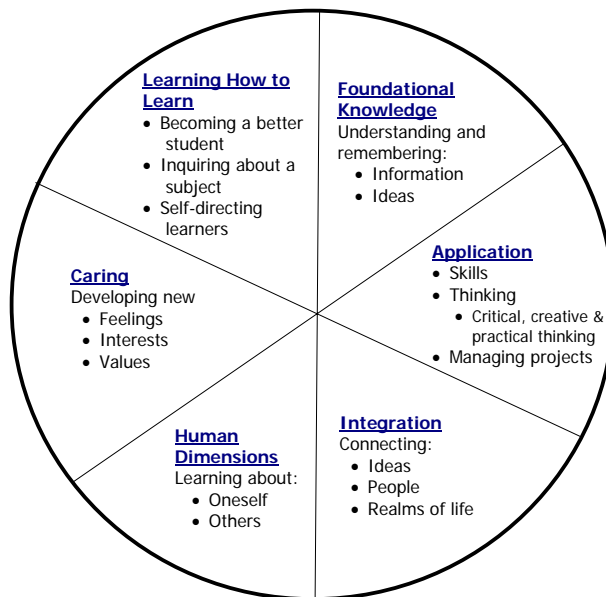
Bloom's Taxonomy: The older taxonomy was formulated by Benjamin Bloom and his colleagues in the 1950s <<http://www.officeport.com/edu/blooms.htm>>. It offers six categories of learning that can be used both to formulate learning goals and to guide assessment of those goals. Generally, these six categories have been seen as being hierarchical, i.e., students need to learn the lower levels before learning the higher levels. His categories are:

1. Knowledge (meaning "understand and remember")
2. Comprehension
3. Application
4. Analysis
5. Synthesis
6. Evaluation

Of course, many have made suggestions to improve Bloom's taxonomy, such as the "New Bloom's Taxonomy" <http://www.apa.org/ed/new_blooms.html>.

Fink's Taxonomy of Significant Learning: A more recent taxonomy has been created by L. Dee Fink and presented in his book *Creating Significant Learning Experiences* (Jossey-Bass, 2003). Like Bloom's, this taxonomy has six categories; unlike Bloom's, it is not hierarchical but interactive.

The following diagram shows the categories and some specific kinds of learning in each category:



Resources:

- Bloom, B.S., ed. 1956. *Taxonomy of Educational Objectives. The Classification of Educational Goals. Handbook I: Cognitive Domain*. New York: David McKay.
- L.D. Fink. 2003. "A Taxonomy of Significant Learning," Chapter 2 in, *Creating Significant Learning Experiences*. Jossey-Bass.

- AAC&U. 2007. "Essential Learning Outcomes" in College Learning for the New Global Century. Published by the Association of American Colleges & Universities.

3. Active Learning/Small Groups

Some books were published in the early 90s that crystallized the concept of active learning as a good thing to do. The basic notion is that, in addition to getting information and ideas about a topic (e.g., from lectures, readings), students need to DO something and REFLECT on the meaning of those ideas and actions. Some common ways in which the "doing" happens are: case studies, simulations, role play, hearing people's stories, etc.

Following on the heels of this concept, the notion of "social constructivism" has provided a rationale for using small groups extensively and as an important way of promoting more active learning in a course. This can happen in a variety of ways:

- Think-pair-share activities
- Cooperative and collaborative learning
- Inquiry-guided learning
- Project-based learning
- Problem-based learning
- Team-based learning

Note: The earlier activities on this list can often be inserted into an existing course structure. The last four items on the list above call for changing the whole structure of the course to promote a particular kind of small group activity.

Resources:

- Bonwell, C. and Eison, J. 1991. Active Learning. ASHE-ERIC Higher Education Reports, #1.
- Millis, B. and Cottell, P. 1998. Cooperative Learning for Higher Education Faculty. Oryx.
- Duch, B., Groh, S. & Allen, D. 2002. The Power of Problem-Based Learning. Stylus.
- Lee, V., ed. 2004. Teaching & Learning Through Inquiry. Stylus
- Michaelsen, L., Knight, A., & Fink, L.D. 2004. Team-Based Learning: A Transformative Use of Small Groups. Stylus.

4. Service Learning

Service learning is a powerful, authentic learning experience that definitely has the ability to promote multiple kinds of significant kinds of learning, especially learning about oneself, others, and value changes.

However, in order to be “service learning” and not just “community service,” students have to reflect on and talk about how their service experiences and observations inform their understanding of the subject they are studying.

Resources:

- Zlotkowski, E. 1998. Successful Service Learning Programs. Anker.
- Service Learning in the Disciplines. A set of 21 books on how to use service learning in different disciplines. Whole series organized by Ed Zlotkowski (1997-2006). Now published by Stylus.

5. Reflective Writing

This is also an outgrowth of the active learning movement. Reflective writing prompts students to pull back from the act of learning and reflect on the *process of learning*. Common ways of doing this include:

- Minute papers: 1-3 sentences
- Learning journals: 1-4 paragraphs
- Learning portfolios: an extended reflective statement, usually with materials in appendix that support or illustrate the content of the statement.

Learning portfolios can be structured in a variety of ways. One way of doing this is to prompt students to address the following questions:

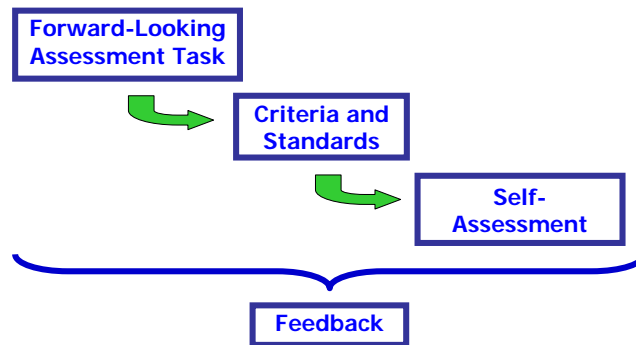
- II. WHAT did you learn in this course or program?
- III. HOW did you learn that, i.e., what helped you learn, what didn't help you learn?
- IV. What is the VALUE of what you learned, for you?
- V. WHAT ELSE do you want to learn, and how would you learn that?

Resources:

- Zubizarreta, J. 2009. Learning Portfolios: Reflective Practices for Improving Student Learning, 2nd edition. Jossey-Bass.

6. Assessment/Rubrics

At some point, professors have to decide how they are going to assess student learning. Rather than “auditing” student learning (i.e., after teaching a topic, assessing to see if students “got it”), professors need to consider “educative assessment,” i.e., an assessment process that enhances or furthers student learning. The following diagram suggests one way this could be done:



This diagram says, in essence, that the process of assessing student learning has to start with identifying the right kind of task, and that this task should be real-life, authentic, or “forward-looking” (looking forward beyond the course to what students can actually do with this knowledge after the course is over). Then the teacher has to create a good rubric (criteria and standards) to differentiate excellent from mediocre from poor work, and give the students opportunities for assessing the quality of their own work themselves – with feedback from the professor all along the way.

Resources:

- Angelo, T. & Cross, P. 1993. Classroom Assessment Techniques, 2nd ed. Jossey-Bass.
- Stevens, D. D. & Levi, A. J. 2005. Introduction to Rubrics. Stylus.
- Walvoord, B. and Anderson, V. 1998. Effective Grading. Jossey-Bass.
- Wiggins, G. 1998. Educative Assessment: Designing Assessments to Inform and Improve Student Performance. San Francisco: Jossey-Bass.

7. Research/Assessment of Teaching

Many professors are finding that they can take their innate interest in doing research and focus it on questions about teaching and learning, using their own classrooms as sources of empirical inquiry.

Classroom Assessment Techniques (CAT): A book by this title outlined 50+ specific techniques that professors can use to gather information about student learning, about their own teaching, and about student reaction to their courses.

Scholarship of Teaching & Learning: In the last decade or so, the scholarship of teaching & learning has become an increasingly valuable way for professors to formally share with colleagues what they have learned about teaching and learning. On many campuses, this kind of research “counts” as a legitimate form of scholarly work. Indiana University, Bloomington’s website <<http://www.libraries.iub.edu/index.php?pageId=3213>> identifies journals focusing on teaching and learning in many academic disciplines.

Resources:

- Angelo, T. & Cross, P. 1993. Classroom Assessment Techniques, 2nd ed. Jossey-Bass.
- McKinney, K. & Cross, K.P. 2007. Enhancing Learning Through the Scholarship of Teaching and Learning: The Challenges and Joys of Juggling. Jossey-Bass.

Compendia of Ideas on Good Teaching

There are three books and two websites that have collected numerous ideas on good teaching in addition to those listed above.

- Davis, Barbara. 2009. Tools for Teaching, 2nd edition. Jossey-Bass.
- McKeachie, W. J. and Svinicki, M. 2005. Teaching Tips, 12th ed. Houghton Mifflin.
- Nilson, Linda B. 2007. Teaching at Its Best, 2nd edition. Jossey-Bass.
- www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk.teachtip/teachtip.htm
- www.ou.edu/idp/tips

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For a session at the AAC&U Greater Expectations Institute, Snowbird, UT, June 2008