What are Non-traditional Teaching & Learning Techniques and Why Use Them?

Pamela Harris, Retired Nutrition Faculty and Ralph Johnson, Architecture Professor
Montana State University-Bozeman

Since fall semester 2001 Harris and Johnson have provided faculty development workshops at Montana State University entitled "Developing a Mentorship Program for Non-traditional Teaching and Learning Techniques." Forty MSU faculty representing all seven colleges have completed 15-20 hours of continuing education to assist them in understanding and implementing a broad variety of non-traditional teaching and learning techniques. In 2002 Harris and Johnson presented a workshop on this model at the International Conference on Problem-Based Learning in Higher Education in Baltimore, Maryland. In addition they have received national and international recognition for their insightful teaching strategies and methodologies which provide and support an enhanced teaching and learning environment in higher education.

In the late 1980's national attention began to focus on the quality and outcomes of university classroom teaching. Paralleling this emphasis has been a growing body of pedagogy centered on non-traditional teaching and learning techniques. These include “Active Learning” (Ebert-May et al. 1997, Tanenbaum et al. 1998), “Collaborative Learning” (Tanenbaum et al. 1998), “Cooperative Learning” (Johnson and Johnson www.clcrc.com, Herried 1998, Lancaster and Strand 2001), Problem-Based Learning” (Edens 2000, Major and Palmer 2001), and “Small Group Teaching” (Rubin and Herbert 1998, Potthast 1999). Collectively these teaching techniques emphasize:

1. Self-directed student learning,
2. Cooperative learning in small student groups,
3. Teachers as facilitators or guides,
4. Problems, critical questions, and case studies as the organizing focus and stimulus for learning,
5. Problems, critical questions and case studies forming the basis for a comprehensive understanding of the subject matter,
6. Acquisition of critical thinking, speaking and writing skills.
It is Harris and Johnson’s thesis that no single technique is universally applicable in the classroom. First, faculty must identify their teaching and learning goals and objectives for each course. Then the appropriate non-traditional strategies may be selected, developed and implemented. Included in implementation must be carefully selected or designed assessment tools linked to the specific goals and objectives of the course.

The body of research and evaluation investigating these teaching methods has revealed higher achievement and productivity (Potthast 1999, Alexander 2000, Herreid 1998, Lake 2001) relative to traditional teaching models of lecture-based individualistic learning. According to the literature and Harris and Johnson’s experiences students can be expected to:

1. Acquire enhanced problem-solving skills,
2. Develop self-directed learning skills,
3. Develop the ability to find and use appropriate resources,
4. Develop critical thinking skills,
5. Develop a measurable knowledge base,
6. Demonstrate increased performance,
7. Enhance social and ethical skills through team work,
8. Achieve greater psychological health and higher self-esteem,
9. Become more self-motivated,
10. Develop oral and written communication skills,
11. Develop proactive thinking,
12. Develop academic skills in congruence with workplace skills.

The complete references listed above and additional readings can be accessed at the following website: http://www.lib.montana.edu/~alijk/fdw/readinglist3.html. These will provide an introduction and overview of the various types of non-traditional teaching and learning techniques; examples of methodologies that have been utilized in the classroom; and assessment analysis as well as measured outcomes.