PRISM Institute
February 25, 2005

"**Classroom and Diagnostic Assessments"**
Pamela Kraus

Description:

In the afternoon workshop we will continue the work begun in the morning focusing on student-centered classrooms, the roles of assessments to deepen student understanding, and designing questions to diagnose learning. Participants will be immersed in a learning experience that models how good assessments drive instruction and are critical for knowing what students know. After the "lesson", participants will have the opportunity to reflect upon the roles of assessment in instructional design before continuing to work on their instructional improvement research projects.

Tentative Agenda:

1:00 pm Introduction/Goals
1:15 Elicitation Questions
2:00 Guided-Inquiry Lesson
3:00 Break
3:15 Diagnostic Assessments
4:00 pm Application individual projects

Pamela A. Kraus
FACET Innovations
Co-Founder/Research Scientist

As a research scientist at FACET Innovations, Pamela Kraus is currently working on the Diagnoser Project and related professional development research projects. In collaboration with resource teachers from across the state of Washington, she is helping conduct the research and organize the facet clusters in the physical sciences. In addition, she works closely with classroom teachers as they implement these diagnostic assessment tools back in their schools and districts. As co-PI of an NSF applied research grant, Pam is currently investigating the teacher and system factors that impact the implementation of a diagnostic learning environment.

Dr. Kraus earned her Ph.D. in physics at the University of Washington in 1997. Her dissertation was titled *Promoting Active Learning in Lecture-Based Courses: Demonstrations, Tutorials and Interactive Tutorial Lectures*. Pam began her interest in science education research as a middle and high school science teacher. Following her graduate studies she joined the Pacific Science Center managing a NSF Local Systemic Change grant. At the conclusion of the grant, she teamed up with Jim Minstrell to work on the Diagnoser Tools and related projects.

Relevant Web Sites

The Diagnoser Project--www.diagnoser.com (Free to login as a new teacher)
FACET Innovations--www.facetinnovations.com
Physics Education Group--www.phys.washington.edu/groups/peg/

Publications

Minstrell, J. A. & Kraus, P. A. (2005). Guided Inquiry in the Science Classroom. In M. S. Donovan & J. D. Bransford (Eds.), *How Students Learn: History, Mathematics, and Science in the Classroom*. Washington DC: National Academies Press.

Kraus, P. A. & Minstrell, J. (2002). *Designing Diagnostic Assessments.* Paper presented at the Physics Education Research Conference, Boise, ID.

Minstrell, J. & Kraus, P. A. (2001). The Teaching and Learning of Physics. In J. Brophy (Ed.), *Subject-specific instructional methods and activities* (Vol. 8, pp. 215-238). Oxford: Elsevier Science.