

Science Literacy, Course Design, and Course Assessment

2nd ACS Science Reform Workshop

September 18, 2004

Millsaps College

Facilitators for the September 18, 2004, Science Reform Workshop are Dr. Jeanette Norden, a faculty member of the Vanderbilt University College of Arts and Sciences and the Vanderbilt Medical School, and Dr. Linda Nilson, founding director of Clemson University's Office of Teaching Effectiveness and Innovation and author of *Teaching at Its Best: A Research-Based Resource for College Instructors* (2nd edition, Anker Press, 2003).

Whether Dr. Norden is teaching undergraduates or medical students, people from the community or fellow colleagues, her enthusiasm and passion for her work are very evident. Summarizing the underlying philosophy that guides her active engagement teaching style, Jeanette says, "I believe that the goal is to stimulate both the intellectual as well as personal development of students. Towards this end, I have attempted to incorporate within [my] courses elements which I believe promote cognitive and intellectual development. Cognitive and intellectual development is stimulated by presenting complex material in a straightforward manner with genuine enthusiasm, by constantly integrating the material throughout the course, by teaching the relevance of the material the student is expected to master, and by stimulating the use of reasoning skills in the student. Personal and interpersonal growth is stimulated by discussions, readings, and the exposure of students to real life connections with and examples of the topics/ideas being studied."

Jeanette was the first recipient of the Vanderbilt University Endowed Chair of Teaching Excellence (1994-97) and the first recipient of the American Medical Women's Association *Gender Equity Award* in 1997. In 2000, she was the recipient of the Robert J. Glaser Award, a national teaching award from Alpha Omega Alpha honor society of the American Medical Association. Before devoting herself full-time to teaching in 1997, Dr. Norden was a scientist for 20 years and she served as a reviewer for numerous journals and science related agencies. She has been invited to make research and teaching presentations across the U.S., as well as in the U.K. and Australia, and is well published. Most recently, she taught neuroscience to medical students in Nepal.

An experienced instructional and faculty developer, Dr. Linda Nilson came to Clemson University from Vanderbilt University where she directed their Center for Teaching. Before this, Linda directed the Teaching Development Program at the University of California, Riverside, and designed and taught a very popular graduate seminar on college teaching. She is a former chair of the Southern Regional Faculty and Instructional Development Consortium and is very active on a national level in the Professional and Organizational Development (POD) Network in Higher Education, in Canada's Society for Teaching and Learning in Higher Education, and the International Consortium for Educational Development.

In addition to managing the Clemson's University's Office of Teaching Effectiveness and its staff, Nilson holds individual consultations with faculty, consults on instructional and assessment issues, and conducts faculty development workshops across the country and internationally. Her workshop repertoire includes a wide range of teaching related topics, such as designing courses around student learning objectives/outcomes, a sense-based approach to learning styles, getting your students to do the readings, interactive lecturing, cooperative/collaborative learning, best (and worst) teaching practices, designing a graphic

syllabus, reducing student incivility, teaching with laptops, student peer feedback instruments, holistic grading, critical thinking, enhancing student thinking skills, peer assessment of teaching for promotion and tenure, and assessing teaching effectiveness.