

## DG9 THE MESSY WORK OF STUDYING PROFESSIONAL DEVELOPMENT: THE CONVERSATION CONTINUES

Fran Arbaugh

University of Missouri

Catherine A. Brown

Indiana University

Rebecca McGraw

University of Arizona

On November 5, 2002, President Bush signed into law the *Education Sciences Reform Act of 2002* establishing a new organization, the Institute of Education Sciences (IES) in the U.S. Department of Education. The establishment of the IES is part of an ongoing effort by the U. S. President and Congress that they argue will advance the field of education research by making it more rigorous in support of “evidence-based education”. Phrases like “scientifically valid research”, “scientifically based research standards” and “scientific research” are found frequently now in requests for proposals (RFPs) published by federal agencies, in recent legislation, and in *Scientific Research in Education*, published by the National Research Council in 2002. In this discussion group, participants will analyze summaries of several of these documents for information about research questions and research designs. Participants will then discuss the implications of these for research on professional development. For example, there is currently a great deal of interest in adapting Lesson Study, a form of professional development used in Japanese elementary schools, to the United States. What research questions can and should be asked about this effort? What research designs are most likely to result in answers to these questions that are scientifically valid, according to current federal standards?

At the 2002 PME-NA meeting in Georgia, the same organizers began a PME-NA-based discussion group to address issues surrounding research on professional development for teachers of mathematics. Approximately 70 people attended that discussion group, which met twice during the conference, and the topics discussed were determined by the participants using a technique known as “Open Space Technology”. Participants selected such topics as: “How to do truly collaborative research in teacher professional development”; “The ethics of doing longitudinal research on professional development”; “What do we already know about doing research on professional development and how can we share it?” The 2003 PME-NA discussion group continues the work of the 2002 group. We will structure the session to encourage productive conversations that we anticipate will be continued long after the meeting. The organizers will provide summaries of relevant documents and will use the same techniques as in the 2002 PME-NA sessions to facilitate a process by which participants form small groups for discussion and then return to a large group format for sharing and further discussion. The session will be framed by the essential question, “What implications does the current emphasis on ‘scientifically valid research’ have for the messy work of studying the professional development of teachers of mathematics?” Participants will propose related questions or issues for discussion in small groups, a schedule of these discussions will be formed. As small groups meet, they are expected to record the important points of the group’s work for sharing with the entire discussion group.