1056-P5-622 Stan T Yoshinobu* (styoshin@calpoly.edu), 1675 Southwood Drive, San Luis Obispo, CA 93401. A Theoretical Framework for Designing Professional Development Workshops for Mathematics Faculty.

A growing body of evidence exists that suggests student-centered teaching methods are more effective at teaching students to learn mathematics in deep and profound ways. Mathematics faculty at colleges and universities often have few opportunities to learn about and to use student-centered teaching methods, such as Inquiry-Based Learning. Although teaching is one of the primary jobs for faculty, "on-the-job" training programs are often short, targeted to a wide audience, and do not adequately address critical obstacles to instructor change.

It is argued that the quality of the training faculty experience can significantly impact the learning experiences for undergraduates. Thus professional development plays a significant role in undergraduate Mathematics Education research and in pragmatic educational policy.

In this talk a theoretical framework is presented that specifically targets key obstacles to instructor change. Results from workshops designed using this framework will be discussed, as well as possible adaptations of the framework and further directions of work. (Received September 14, 2009)