1035-S1-1114 Stan Yoshinobu* (syoshinobu@csudh.edu), 32 Twain Street, Irvine, CA 92617. The IBL Workshop: A Model for Training Faculty to Teach Using Inquiry-Based Learning.

In the summers of 2006 and 2007, 38 mathematicians attended one of the Inquiry-Based Learning Workshops (IBL Workshop). The IBL Workshop is a professional development program for mathematics faculty, with the goal of training them to implement inquiry-based learning methods in an upper division mathematics course.

One of the core components of the workshop is a video lesson study of an actual IBL course. Video data provides a rich experience for participants, since they can see how students and faculty behave and interact in a problem-solving environment.

Inquiry-based mathematics courses focus on the discovery of proofs of theorems without the aid of textbooks or other outside resources. Problem solving is the heart of such courses, and these courses require more sophisticated teaching methods compared to the lecture method.

This talk will focus on two main ideas. The first idea is the overall design of the workshop. The second idea is how each component of the workshop addresses critical barriers to instructor change. These barriers go beyond pedagogy, and must be dealt with at a fundamental level. (Received September 18, 2007)