Hybrid Inquiry Based Learning (HIBL) is a modified version of the Inquiry Based Learning model (IBL). It integrates the traditional teaching approach with the Inquiry Based Learning approach. In this talk, I will present how I used HIBL to teach a Math for Liberal Arts course to elementary teachers. A practical realistic implementation of the HIBL in classroom settings will be presented. A description of the HIBL approach, how students were engaged and how they responded, the challenges, the assessment methods, and students’ achievement will be discussed. (Received September 22, 2012)