1106-G5-2446 **John C Mayer*** (jcmayer@uab.edu). *Inquiry-Based Learning on the Way to Calculus.* Preliminary report.

Studies that we did at UAB in 2010, 2011, and 2013 point, in different ways, to the potential for IBL class meetings in pre-calculus courses to improve the chances of students to perform satisfactorily in Calculus I. The studies in 2010-11 were quasi-experimental studies of incorporating IBL/Group Learning sessions in Basic Algebra (a remedial course), reported at the Conferences on Research in Undergraduate Mathematics Education the subsequent years. The 2010-11 studies led to a change in how we teach Basic Algebra from 2012 onward. The 2013 study was a statistical study of success of students in Calculus I in the period 2006-2012 based upon the first mathematics course taken at UAB. The 2013 study pin-pointed where we could get the most "bang for the buck" in subsequent student success in Calculus, if we made an appropriate change in instruction. Of course, the study does not imply what type of change is appropriate. I will outline a two-pronged approach (one quasi-experimental, one statistical) to help resolve this issue. (Received September 16, 2014)