

1046-S1-2070

Jialing Dai* (jdai@pacific.edu), 3601 Pacific Ave, Stockton, CA 95211. *Semi Inquiry-Based Learning in Undergraduate Real Analysis*. Preliminary report.

In this talk, I will share my experience in teaching undergraduate real analysis I at the University of the Pacific. Real Analysis I is the first semester real analysis. It is one of the most difficult math courses required for math majors. To help students overcome their fear and build up confidence, I decided to try something slightly different: Have students work in groups and present their work in class. In addition, students are also required to carefully write up problems presented. There are four components in the write-up: (a) Identify the hypothesis and the conclusion, whenever it is appropriate. (b) State any definitions/theorems/results are used in the solution. (c) Describe the thinking process of how they approach and solve the problem, and finally (d) clearly write up the solution. At the beginning of the course, this seems difficult and intimidating to some students, but gradually students start gaining confidence and become eager to present problems and lead the discussion. The learning outcomes seem quite positive although I have no statistical data to support it. Students claimed they have learned a lot and they really understood the mathematics. I will show some sample students' work in the talk. (Received September 17, 2008)