

1077-N5-1205

Padraig M. McLoughlin* (mclough1@kutztown.edu), 265 Lytle Hall, Department of Mathematics, Kutztown University of Pennsylvania, Kutztown, PA 19530. *A Proemial Proposition on Teaching Real Analysis: Instruct Via a "Strong" Modified Moore Method.*

The author argues analysis of the reals & real functions is an essential part of the mathematics canon. The paper's thesis is that learning requires *doing*; we learn best by inquiring, and so proposed is a programme of use a 'strong' modified Moore method (SMMM) under the rubric of inquiry-based learning (IBL) for teaching undergraduate Real Analysis (RA). An authentic RA course needs to exercise students' imagination to create meaningful results & hone their abilities.

We explain what a 'strong' modified Moore method is as opposed to other IBL methods and argue why we opine it is a Scrivens best practice. Pedagogical and practical justification are submitted; the course model and content is detailed (what is effective, why, & what practices or material was accentuated, modified, or deleted); and, the successes or lack thereof are discussed.

It is forwarded that the SMMM establishes an authentic scholarly environment, motivates learning, and assists in forging meaningful student study. We end with evidence illustrating that students (math majors and math education majors) who experience such a RA course find further exploration of math more facile; have a deep understanding the material that was investigated; and seem to have much post-RA success. (Received September 22, 2011)