

1056-Q1-1549

Stephen D. Szydlik* (szydliks@uwosh.edu), Mathematics Department, UW-Oshkosh, 800 Algoma Blvd., Oshkosh, WI 54901. *Beliefs of Liberal Arts Mathematics Students Regarding the Nature of Mathematics*. Preliminary report.

The research literature suggests that student beliefs about the nature of mathematics tend to be very different from those of mathematicians. While mathematics professionals broadly view mathematics as a coherent and logical discipline, novice students often see the subject as a body of facts and procedures that are at best loosely connected. This latter perspective leads to an “impoverished” mathematics, a view that success in math consists of mastering a corpus of mathematical facts and procedures (Schoenfeld, 1992). While research on the mathematical beliefs of prospective teachers is extensive, the views of lower-level collegiate mathematics students have been much less studied. In the SoTL research presented in this talk, we investigate the mathematical beliefs of liberal arts students regarding the nature of mathematics. We also attempt to measure whether those beliefs and attitudes are meaningfully changed during a semester-long, problem-based mathematics course. (Received September 22, 2009)