

1078-97-85

Brendan J Foreman* (bforeman@jcu.edu), Department of Mathematics and Computer Science, 20700 N. Park Boulevard, University Heights, OH 44118. *A Deweyan approach to teaching mathematics to early childhood education majors*. Preliminary report.

In this talk, I will describe my experiences as a mathematics professor in designing and implementing a mathematics course for early childhood education majors which incorporates the development of mathematical understanding by young children with a deep exploration of what mathematics is and how advanced mathematical concepts have developed from these foundations. Based in structure around the course of human mathematical learning, this course covers all of the “usual suspects” of courses of this type (e.g., the structure of the real number system), while exploring how these concepts emerge from and interact with young learners. This approach is fundamentally Deweyan in its emphasis on experience and community-based learning. Time permitting, I will explain several of my efforts to determine the effectiveness of this approach to teaching the material versus more traditional approaches. (Received November 22, 2011)