An Aspirational Approach to the Mathematical Preparation of Teachers

Dr. Beth Burroughs
Dept. of Mathematical Sciences
Montana State University

The undergraduate preparation of prospective secondary mathematics teachers requires attention to their fluent understanding of the mathematical content they are to teach alongside an understanding of how to interact with other human beings and their mathematical work. How can we prepare teachers in mathematics content coursework to apply their mathematical understandings to the human context of teaching? This question is at the heart of An Aspirational Approach to the Mathematical Preparation of Teachers, newly published by the Mathematical Association of America as part of the MAA Notes series. The book provides nine lessons, aligning with courses in single variable calculus, introduction to statistics, discrete mathematics or introduction to proof, and abstract algebra, that include teaching applications. Teaching applications are mathematical tasks that attend to the dual goals of developing an understanding of mathematics content and practices and an understanding of some of the additional complexity involved when human beings learn mathematics. This talk will focus on ways that including human characters in tasks can provide opportunities for undergraduates to develop mathematical understanding that can be applied to their teaching. This work is joint with James A. M. Álvarez and Humboldt State alum Elizabeth Arnold.

Apr. 4, 2024
THURSDAY

FOR MORE INFO GO TO HTTPS://MATH.HUMBOLDT.EDU/GET-INVOLVED/MATHEMATICS-COLLOQUIUM

WE CORDIALLY INVITE YOU TO THE PRE-COLLOQUIUM TEA IN BSS#312 AT 3:30 PM