

*Why did they think that?
The use and development of
mathematical knowledge
for teaching at the
undergraduate level*

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University of Maine

Thursday, November 30

3:30pm reception (228 JWB)

4:00pm lecture (335 JWB)

Abstract:

When instructors help someone learn mathematics, they use the knowledge they have of mathematics. The work of teaching also involves a variety of other kinds of knowledge, including knowledge of how people may think, productively and unproductively, about particular ideas. During this talk, the audience will have opportunities to engage in some teaching-related tasks and to consider the knowledge doing so requires. I will share information about research done to define kinds of knowledge and to examine the roles it plays in teaching and learning, including my own on-going investigation of college instructors' knowledge of student thinking about ideas in calculus.



Natasha Speer is a faculty member in the Department of Mathematics & Statistics and the Maine Center for Research in STEM Education at the University of Maine. The focus of her work is on the teaching and learning of college-level mathematics. She has a particular interest in the knowledge used by instructors when they facilitate class discussions and utilize active learning approaches to teaching calculus. Her work is also focused on novice college mathematics instructors, and she is involved in a variety of projects to develop and provide teaching-related professional development for mathematics graduate students.



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