

Department of Mathematics and Statistics

Colloquium Series



The relationship between technological self-efficacy and mathematical self-efficacy in online learning

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Abstract: As the 2020-2021 academic year began, universities across the United States continued with remote instruction due to the coronavirus pandemic. The novel and unfamiliar situations engendered by online instruction in the Fall 2020 semester could impact a student's perception of their ability to complete mathematical tasks (mathematical self-efficacy) especially in ways that interact with their ability to complete technological tasks (technological self-efficacy). In this talk, we will discuss the experiences and stories of undergraduate students taking synchronous math courses during Fall 2020. Employing narrative analysis and Bandura's (1997) self-efficacy framework, we will show that undergraduate students in synchronous mathematics courses benefited from the ease of access to instructors and materials. However, students also described being more distracted during class time and feeling more pressure during online assessments. These student narratives highlight the importance of taking into account students' perceived workload and self-efficacy, especially when incorporating new technologies into online courses. We will explore other ideas for research as well.

Keywords: Math education, self-efficacy, online classrooms, COVID-19.

$\overline{\mathrm{Wednesday, \ February\ 23,\ 1:05-1:50\ pm}}$

For more info visit the department website for the colloquium

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