

# I I C E H A W A I I

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## The Mathematics and Science Backgrounds of Elementary Preservice Teachers (66861)

Session Information: Higher Education

Session Chair: Katherine Baker

Saturday, January 7, 2023 (12:10)

Session: Session 2

Room: 323A

Presentation Type: Oral Presentation

One of the more common ways to enhance K-8 students' STEM backgrounds is through engaging lessons taught by their teachers who should have strong academic trainings in STEM content. We provide mathematics and science backgrounds of preservice teachers across three years of data collection at a large university. The preservice teachers' self-reported science and mathematics university preparation greatly varied. In relation to the science content courses taken at the college level, preservice teachers could respond with more than one course; out of the 212 preservice teachers, there were 365 science content courses taken. The science content courses taken at the university level included: biology (49.6% (n = 181)), chemistry (16.4%, n = 60), physics (11% (n = 40)), other science (19.2% (n = 70)) and no science at the university level (3.8% (n = 14)). Other science courses included sustainability, geography, geology, astronomy, environmental science, psychology, forensics, and others. In relation to mathematics course taken at the college level, 89% (n = 212) took College Algebra, 27% (n = 58) took Precalculus, 9% (n = 19) took Brief Calculus, 6% (n = 12) took Calculus for the Life Sciences or Calculus for Engineers, and 4% (n = 9) took Calculus with Analytic Geometry. Implications for research and practice will be discussed.

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### About the Presenter(s)

Dr Terri L. Kurz is a University Associate Professor/Senior Lecturer at Arizona State University, United States