

SCHOOL OF EDUCATION & PROFESSIONAL STUDIES

Disciplined Inquiry in Education Seminar Series

February 25, 2026/Noon-1:00 p.m.

Literacy Center Balcony

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Pre-service Teacher Perceptions of Conceptual Reasoning in Elementary Mathematics: A Discourse Analysis

Abstract. The presenters welcome you to their presentation where they will be sharing their initial findings of their discourse analysis. The main purpose of their research is to analyze the discourse of pre-service teachers as they examine a series of mathematic questions that require conceptual reasoning. Through the use of pre- and post- surveys, and the use of video recording student discussions, the presenters will be discussing how pre-service teacher's view their own self-efficacy and confidence in making connections, exploring patterns, and relationships in mathematics, as well as, teaching conceptual reasoning to elementary aged students. The presenters will also explore how the pre-service teachers observed in this study approach elementary-level mathematic problems that require conceptual understanding and reasoning of number systems and patterns; and how their thoughts about teaching conceptual reasoning to elementary students evolve after participating in a conceptual math activity.

