

## Preservice Teachers' Beliefs about Numeracy

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### ABSTRACT

Declining Australian numeracy standards have prompted the Australian Government to implement mandatory Literacy and Numeracy Tests for Initial Teacher Education Students (LANTITE). Inspired by Usher and Pajares (2009) this research aims to understand how preservice teachers' experiences in numeracy impact their numeracy self-efficacy. The philosophy of Dewey, coupled with Bandura's Social Cognitive Theory, form a framework for the study. Sequential explanatory mixed methods, using quantitative and qualitative data explore preservice teachers' beliefs about numeracy (aligned to Bandura's model), how their experiences shape their numeracy self-efficacy and identify the qualities that they believe contribute to effective teachers of numeracy. The pilot study consisted of a focus group of teachers who explored effective teachers of numeracy, a survey of preservice teachers at an Australian regional university and four participants, purposefully selected carrying out an interview. The findings of the pilot study which will be addressed in this presentation, reveal insight into preservice teachers' beliefs about numeracy, provide an awareness as to how experiences at school and university that shape preservice teachers' self-efficacy, and highlight discrepancies in the survey and interviews. Fine-tuning was applied to improve the main study. Exploratory factor analysis was used in the pilot survey and confirmatory factor analysis will be used in the main study to verify results of the pilot study and to replicate Usher and Pajares (2009) results in a different context. The main study includes a survey and interviews with preservice teachers from education faculties throughout Australia.