

# Washington State University College of Education

## Kathleen M. Nitta

Will defend the dissertation

**Date: June 27, 2018**

**Time: 10:30 A.M.**

**Location: Spokane - SCRS 222**

**Vancouver - VUB 311**

Faculty, students and the general public are encouraged to attend.

### **The Development of Novice Teachers' Capacity to Elicit and Respond to Student Thinking in an Elementary Mathematics Methods Course**

Chair: Janet Frost

Preparing teachers to enact practice that is responsive to the demands of contemporary classrooms requires a re-examination of traditional approaches to teacher education. Practice-based approaches to professional learning have shown promise in supporting novices' learning of practices central to the work of teaching. Recent scholarship in teacher education has explored pedagogies that function to develop novices' knowledge and skill to enact core teaching practices. Many of these investigations have explored pedagogies that include representations and approximations of practice. This study investigates how novices' knowledge and skill of eliciting and responding to student thinking is developed through engagement in instructional activities that use representations and approximations of practice in a cycle of learning.

Participants in the collective case study were novice teachers enrolled in a mathematics methods course that included a situated field experience in an elementary school. Data collection included course assignments, discourse scripts (composed hypothetical teacher-student discussions), video capture of lesson enactment, and novices' reflective annotations of lesson enactment.

In this study I found that novices' knowledge and skill of eliciting and responding to student thinking was developed as they engaged in the representations and approximations of practice featured in the activities of the learning cycle. However, the novices' level of achievement varied. Therefore, the implications for teacher educators are that practice-based pedagogies are a worthwhile approach for preparing teachers to enact a core practice, but the instructors need to be attentive to the differentiation of activities in order to support novices' learning. The findings of the study highlight the need to explore the progression of skill development for a teaching practice, including what might those progressions look like and why they happen in a particular way.