

FACILITATING THE DEVELOPMENT OF ELEMENTARY PROSPECTIVE TEACHERS'  
PEDAGOGICAL CONTENT KNOWLEDGE: A CASE STUDY OF A MATHEMATICS  
TEACHER EDUCATOR'S ACTIONS AND PURPOSES

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ABSTRACT

Prospective mathematics teachers (PTs) need to develop pedagogical content knowledge (PCK) to improve the teaching and learning of mathematics. Therefore, mathematics teacher educators (MTEs) need to help PTs develop PCK (Marks, 1990; Mason, 2008). Yet, we know very little about the practices of MTEs, especially in relation to developing PCK as these practices are not widely researched or disseminated (e.g., Floden & Philipp, 2003).

In this study, I investigated the actions and purposes that a reflective MTE used to develop PTs' PCK in an elementary mathematics content/methods course. I present a classification of descriptive categories of the 34 identified actions and 10 core purposes based on the four components of PCK (i.e., knowledge of instructional strategies, knowledge of curriculum, knowledge of student understanding, knowledge of assessment) conceptualized by Magnusson, Krajcik, and Borko (1999). Findings from this study contribute to the literature on practices of teacher educators and will ultimately inform the design and implementation of teacher preparation programs.