

Monday Seminar Presentation

12 October 14.15-15.30 , B2-004 (note room change!)

The Development of Pedagogical Content Knowledge about Early Algebra: A Comparative Study

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Abstract: Findings from an ongoing design research study that explores the development of early pedagogical content knowledge (PCK) in prospective elementary and secondary teachers (UCSB undergraduates) will be presented. An instructional sequence of activities designed to strengthen prospective teacher's own mathematical understanding as well as foster their ability to understand children's mathematics was analyzed. Results indicate that individual and collective mathematical practices and norms that emerge in the two classrooms and the differences between them serve to enhance and constrain prospective teachers developing PCK. The instructional sequence is based on collaborative work with Cathy Fosnot (CCNY) and Maarten Dolk (Freudenthal Institute) and much of the presentation will focus on it as well as our joint work on the emergence of early algebra in grades K-6. The comparative study is in collaboration with Sarah Hough, Kyunghee Moon, and Monica Guzman at UCSB.