

STUDIES OF THE EARLY MATH STRATEGY: A LONGITUDINAL STUDY OF TEACHER DEVELOPMENT

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Studies of the Early Math Strategy is an examination of a province-wide implementation of a teacher development strategy designed by the Ontario Ministry of Education. This program is designed to increase the elementary teacher's understanding of mathematics and to model and develop effective instructional practices. This paper presents a discussion of the preliminary stages of a large-scale research project aimed at studying this implementation process.

Mathematics education poses substantial challenges for elementary teachers, who often lack the knowledge of mathematics required to effectively implement reform-oriented mathematics programs (Ball, 1990; Ball, Lubienski & Mewborn, 2001). Teachers need a sound understanding of mathematics and of how children learn mathematics to probe student thinking and to recognize the important concepts that are inherent in students' mathematical activity (Ball, 1990; Kahan, Cooper & Bethea, 2003). Recognizing and developing teachers' understanding of mathematics and of how children develop mathematics concepts is essential to improving student learning. The important role of teachers is a message that resonates in the implementation plan of this initiative. The implementation plan aims to develop teacher expertise and to provide opportunities for teachers to connect new understanding with work in their own classrooms.

Our research project gathers both quantitative and qualitative data through questionnaires, interviews, analysis of training, and case studies. It is aimed at understanding the teaching of mathematics, the instructional strategies that teachers use, and the types of professional development and resources they find useful. As this project is in its initial stages, we plan to present a research report that will discuss the research design in further detail and will provide preliminary results of the analysis of the initial questionnaire and training sessions.

References:

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