

**ZMATH 2004b.00922**

**McDonough, Andrea; Clarke, Barbara; Clarke, Doug M.**

**Understanding, assessing and developing children's mathematical thinking: the power of a one-to-one interview for preservice teachers in providing insights into appropriate pedagogical practices.**

Int. J. Educ. Res. 37, No. 2, 211-226 (2002).

At Australian Catholic University and Monash University, preservice mathematics teachers are required to conduct and analyse one-to-one mathematics assessment interviews with primary-aged children. The assessment tool is drawn from the Early Numeracy Research Project, where it was used with over 11,000 children in Victorian schools. The interview assesses content from Number, Measurement and Geometry, in an interactive, hands-on format, with children's responses and strategies determining the path through the interview protocol. Follow-up discussion in class enabled preservice teachers to explore appropriate pedagogies that build upon what had been learned from the interviews. The research described in this chapter sought to investigate the effectiveness of this process. Interviews and written questionnaires were the data sources. Analysis of the data suggested that teachers were more aware of the kinds of strategies that children use including their variety and relative level of sophistication, and that the interview and subsequent discussion stimulated preservice teachers to reflect upon appropriate classroom experiences for young mathematics learners.

*Classification:* B50 C72

doi:10.1016/S0883-0355(02)00061-7