

# **LEARNING TO LEARN FROM STUDENTS: TEACHER LEARNING IN THE BRITISH COLUMBIA EARLY NUMERACY PROJECT**

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The theme of early numeracy is currently in the forefront in North America, Australia, and Europe. In March of 1999, Britain's Department for Education and Employment introduced the National Numeracy Strategy as a framework for teaching mathematics from Reception (Kindergarten) to Year 6. In Australia the focus on numeracy can be seen through the ongoing Early Numeracy Research Project a large scale, heavily funded project (Clarke et al. 2001). The British Columbia Early Numeracy Project [ENP] compliments these numeracy projects, however, on a much smaller scale.

The British Columbia ENP is an ongoing student assessment and teacher professional development project involving 20 teachers from six school districts across British Columbia, Canada. This project, now in its third year, seeks to learn more about the ways to best assess and support the development of numeracy in the early years of schooling (K - Grade 2). It involves teachers and researchers in the creation and use of performance-based tasks most appropriate for assessing numeracy in young learners, the development and refinement of instructional strategies to support numeracy in school and at home, and the development of reference standards on key assessment items that provide a portrait of young students' mathematical thinking. A further level of the project involves analyzing the possible impact participation in the project has had on teachers' professional growth. Teachers report on a number of factors that have changed their teaching as a result of their participation in the ENP. Some common themes include: becoming more observant in seeing and hearing what children are thinking and doing; expanding ideas about what counts as numeracy; increasing awareness of the importance of asking children to explain their thinking; learning to use assessment to inform instruction; learning what is possible in student thinking; and valuing collaborative participation.

Results of this study are significant in that they provide powerful possibilities stemming from a small scale project in terms of developing professional development structures that consider systematic inquiry and the collaborative analysis of student learning. Digital images of students working on the assessment tasks and sample items will be displayed, together with student responses to the items, and excerpts from teachers' analysis of their practice as a result of participation in the project.

## **Reference**

Clarke, D., Cheeseman, J., Clarke, B., Gervasoni, A., Gronn, D., Horne, M., McDonough, A., Montgomery, P., Rowley G., & Sullivan, P., (2001). Understanding, assessing and developing young children's mathematical thinking: Research as a powerful tool for professional growth. Paper presented at the Annual Conference of the Mathematics Education Research Group of Australia, Sydney.