

Using Open-ended Questions in Primary Math – Summary Vanier Public School

This project began with four Grades 1-3 teachers who were interested in exploring the use of open-ended questions as described by Marian Small in Good Questions: Great Ways to Differentiate Mathematics Instruction (Small, 2009). Together we wanted to develop our understanding of the big ideas in math (Small, 2009) and use those big ideas to present learning opportunities that would allow students to explore numbers, and that would allow us to assess their understanding of number concepts in order to inform instruction. Over four months, the students had several opportunities to work on questions that allowed for a variety of responses.

Each teacher is submitting a sample of an open-ended question that was presented to the students, stating the big idea the question was addressing, prior knowledge needed, a description of the activity, how the students were expected to demonstrate their knowledge, the teacher's reflection, and samples of student work. As well, we have included a list of other problems that were posed. It is our hope that primary teachers who are interested in using open-ended questions will find these samples helpful as they create learning opportunities for their students.