From the President's Pen



I am continually amazed by both the pervasiveness of mathematics in daily life and the inability of most to see that pervasiveness.

One of my favorite quotations is "We only see what we know." The more we know, the more we see. I love it when a mathematics connection is pointed out and someone says, "I didn't see that before." Many teachers have told me, "You have changed the way I look at things because you always seem to see math, and now I am starting to look for it."

There is a great children's book by Jon Scieszka and Lane Smith (1995) called *Math Curse*. Reading this book to a class often launches a conversation about where mathematics can be found in the world. Students begin to see math in literature and around the school, and parents have told me that their children are on the lookout for math around the house so they can bring a math story to share with the class. This awareness and interest quickly leads to sharing real math problems for the class to investigate and solve.

Principles and Standards for School Mathematics (NCTM 2000) and Alberta's mathematics programs of study include the process standard of connections. Fully understanding and using this standard as an integral part of mathematics teaching and learning remain challenges for teachers, students and parents. Mathematics taught within a context has a clear connection to the students' world. Mathematics taught in isolation begs the question "Why are we learning this, anyway?"

Principles and Standards for School Mathematics (NCTM 2000) introduced a slightly different perspective from that of Curriculum and Evaluation Standards for School Mathematics (NCTM 1989), the document on which our curriculum is based. The recent document asks that students from Kindergarten to Grade 12 be able to make mathematics connections in three ways:

- 1. Recognizing and using connections between mathematical ideas
- 2. Understanding how mathematical ideas interconnect and build on one another to produce a coherent whole
- 3. Recognizing and applying mathematics in contexts outside mathematics

The document contains great ideas for bringing this process to life in K-12 math classes.

Do not take it for granted that everyone sees the mathematics in a situation. You may be surprised at how invisible it is to many people.

References

National Council of Teachers of Mathematics (NCTM). Curriculum and Evaluation Standards for School Mathematics. Reston, Va.: NCTM, 1989.

——. Principles and Standards for School Mathematics. Reston, Va.: NCTM, 2000. Available online at www.standards.nctm.org/document/index.htm.

Scieszka, J., and L. Smith. Math Curse. New York: Viking, 1995.

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