

Everyday Mathematics® Success Stories

The University of Chicago School Mathematics Project



Northshore District Partners with University to Improve Mathematics Education

The Northshore School District is located in the Seattle-Everett metropolitan area and serves the suburban communities of Bothell, Woodinville, and Kenmore, Washington. A total of 20,000 students attend Northshore's 20 elementary schools, 6 junior high schools, and 3 high schools.

In the mid-1990s, the Northshore School District decided to investigate the adoption of a new math series for the elementary grades. "We had an old, old basal program and needed to provide a new curriculum that addressed state standards and research-based instructional strategies," recalls Nancy Young, Assistant Director of Elementary Education for the district. "At the same time, much information concerning the teaching of elementary math was being disseminated, including the NCTM Standards and research on reform-based programs."

As a first step in the adoption process, a committee of teachers, parents, and administrators began by reviewing Washington State's Essential Academic Learning Requirements (EALRs), as well as the NCTM Standards. The decision was then made to pilot *Everyday Mathematics*, from the University of Chicago School Mathematics Project.

The pilot was evaluated in close cooperation with the University of Washington's Department of Applied Mathematics. The Northshore School District and the university have enjoyed a long-term partnership, with the goal of more rigorous mathematics content at the elementary and junior high school levels. Graduate students from the university collected and analyzed the data from the pilot.

Everyday Mathematics was chosen for district-wide adoption based both on

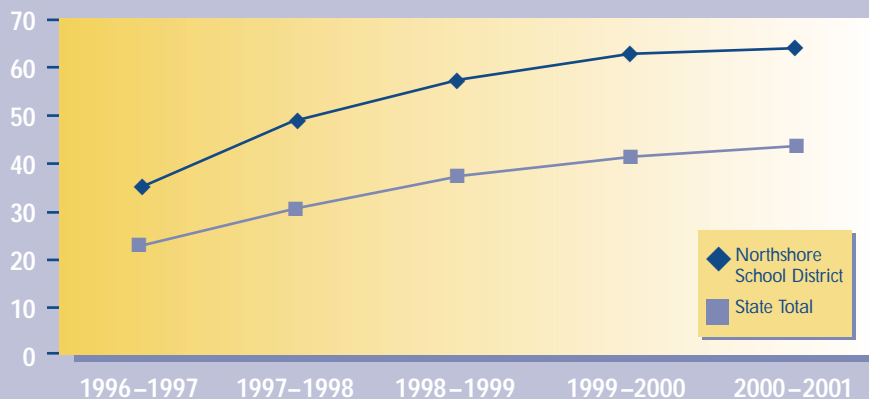
this study and the recommendation of the pilot teachers. In the fall of 1997, the Northshore School District fully implemented *Everyday Mathematics* in Grades K–6.

Professional Development Meets Evolving Needs

Northshore School District has supported the implementation and use of *Everyday Mathematics* with a full complement of professional development activities. When the program was newly adopted, teacher education centered on the philosophy and design of *Everyday Mathematics*.

"*Everyday Mathematics* is very different from the basal program we had used in the past, particularly as far as the breadth of the program is concerned," explains Young. "Our professional development at that time focused on the structure of the program.

Northshore School District WASL Mathematics: Grade 4
Percentage of Students Meeting or Exceeding Standards



Since the adoption of *Everyday Mathematics*, the percentage of Northshore students meeting or exceeding the mathematics standards at Grade 4 has climbed 30 percentage points, from 34.7% in 1996–1997 to 64.2% in 2000–2001.

“For example, *Everyday Mathematics* contains in-depth study of content strands, such as geometry, that were only lightly addressed in the basal program. Another difference with *Everyday Mathematics* is the spiral, meaning that more than one math concept is addressed in a lesson or unit and also that previous content will be revisited.”

With one year of *Everyday Mathematics* under their belts, the Northshore School District moved to a new professional development model, seeking to refine the use of the program in the classroom. Teachers on Special Assignment (TOSAs) supported teachers with classroom observations, team teaching, and in-service training. Math Resource Specialists offered proactive training, often utilizing e-mail messages to give teachers tips on pacing and on upcoming lesson plans.

“The challenge of any professional development is to support teachers so that they feel competent and confident teaching mathematics.”

Nancy Young
Assistant Director
of Elementary Education

Most recently, professional development in the Northshore School District has occurred in partnership with the University of Washington in a National Science Foundation (NSF) funded program called Expanding the Community of Mathematics Learners. A dynamic model of professional development, Developing Mathematical Ideas (DMI), is part of this program.

DMI presents a series of modules on topics such as number sense and data, and it encourages teachers to apply these new ideas directly in their classrooms. Teachers then review their experiences and share their most successful strategies in an ongoing series of seminars. Connections to *Everyday Mathematics* are included in DMI training as well.

Changing Student Attitudes Towards Math

Everyday Mathematics makes a difference in how students perceive math. “Students really enjoy and are engaged in math,” reports Young. “They are challenged in a positive way and more actively involved in math. Kids are more willing to dive in and persevere with math. *Everyday Mathematics* also allows students to find new areas for success compared to a traditional basal. For example, students who have problems with fact memorization can find other areas of strength, such as geometry or probability.”

As Northshore students have been in *Everyday Mathematics* for longer periods of time, teachers comment that they are seeing greater retention of skills and knowledge among the students at all grade levels. Grade 7 math teachers in the junior high schools also note that students now have a much greater mathematics foundation, having used *Everyday Mathematics* in elementary school. “With the old basal, teachers were supplementing so much that we had an inconsistent curriculum, and our graduating sixth graders had a wide spectrum of skills and

experiences. Our students now have a consistent mathematics experience based on a robust curriculum.”

With *Everyday Mathematics*, “It’s great to see young children think deductively, intuitively, and to be successful with mathematics,” concludes Young.

Raising Student Achievement on the WASL

The Washington Assessment of Student Learning (WASL) is a standards-referenced test that measures student performance on the state’s rigorous academic standards in mathematics, reading, and other core subjects. The WASL requires the application of basic skills to problem-solving tasks and real-world situations. Both multiple-choice and short-answer questions appear on the WASL. Elementary mathematics is assessed at Grade 4.

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For additional information on SRA/McGraw-Hill’s *Everyday Mathematics* program, please contact us toll-free at 1-888-SRA-4543 and visit our Web site at www.sra4kids.com.

Meeting All Expectations