# Everyday Mathematics® Stories

The University of Chicago School Mathematics Project



## **Success on Many Measures: Abington School District**

The Abington School District is an economically and racially diverse district located in the suburbs of Philadelphia. The district encompasses some of the richest and poorest census tracks in Montgomery County, with 11% of the district's students qualifying for free or reduced-price lunches. Abington School District itself is relatively small, with 7,500 students in seven elementary schools, one junior high school, and one senior high school.

The success of the Abington School
District is demonstrated by its
consistently high scores on the
Pennsylvania state assessment, as well
as by the commitment of teachers and
staff to mathematics education and
enrichment for the students in the
district. Teachers and staff lead and
mentor students in a wide range of
mathematical competitions and activities,
including Mathfax, the Mathematics

Olympiad for Elementary Schools, Pennsylvania Mathematics League competitions, and more at the middle and high school levels. There is real energy and excitement for mathematics in the Abington School District.

#### Early Adopter of Everyday Mathematics

Dr. Ann Bacon, acting director of

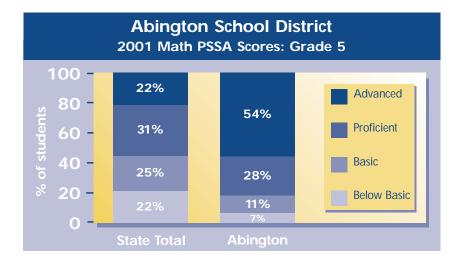
curriculum for the Abington School
District, shares the history of the
implementation of *Everyday Mathematics*. "In an effort to expand
the focus of mathematics instruction, *Everyday Mathematics* was first
piloted in a Kindergarten class in 1990.
The following year, all Kindergarten
classes in the district were using the
program, and the teacher who had
piloted the program the first year became
the teacher trainer. This became the
model for continuing the implementation
through Grade 6. Thus, each year, we had

one or two teachers at a grade level piloting the program, and they became the trainers for their grade level when the program was put in place across the district the following year. At the same time, the teachers who were piloting the program or who would pilot in later grades were involved in a great deal of district-provided in-service training. This staff development focused on the NCTM standards and related topics.

"Therefore, throughout the implementation, we were:

- Providing professional and staff development for a volunteer group of teachers representing all of our schools and all grade levels;
- Developing teacher trainers who have continued to be extremely valuable over the years, both to us and to neighboring districts;
- Preparing a cadre of teachers who would eventually become frequent presenters as well as committee chairs at local and state conferences of affiliates of NCTM: and
- Enhancing the mathematics education that we provide to students."

By 1997, every student in Grades K-6 throughout the district was learning with *Everyday Mathematics*.





#### **State Achievement Data**

Since the baseline testing year of 1996, schools in the Abington School District have registered high scores on the Pennsylvania System of School Assessment (PSSA). The main purpose of the test is to assess students' conceptual and procedural knowledge, and students' ability to apply that knowledge to problem situations. Problem-solving situations and real-world contexts that are relevant to students' everyday lives appear throughout the *Everyday Mathematics* curriculum.

Over the years in which the Abington School District has used Everyday **Mathematics**, many changes have occurred in Pennsylvania with respect to standards, assessment, and reporting of assessments. Abington students, however, have consistently scored at high levels on the PSSA, significantly above the state average score. In 2001, the district tied for the rank of ninth among all Pennsylvania school districts on the Grade 5 math portion of the PSSA, and it was the highest scoring district on this measure in Montgomery County. An Abington school, Highland Elementary, tied for third place in the state as the school building with the highest Grade 5 PSSA math score.

"A fair conclusion from the data is that, once the district had fully implemented the program and achieved high scores across all mathematics strands, it has continued to maintain high scores in all areas."

Dr. Ann Bacon, Acting Director of Curriculum

In 2001, the state also created another type of reporting system for the PSSA, based upon Mathematics Performance Levels. Each level has a description and a cut-off score. The goal established by the state is for every student to be at least

proficient. For the first year of this reporting system, the results show that 54% of Abington students are performing at the advanced level, and another 28% are at the proficient level. These results are much greater than state averages.

#### Teachers Win Presidential Awards

"I believe one of the outcomes of implementing the Everyday *Mathematics* curriculum is that it fosters good teaching," states Dr. Bacon. "The gradual implementation and the concomitant development of a cadre of teacher trainers led to establishing a group of teachers who make presentations at professional conferences. Such involvement in professional activities is one of the criteria for a Presidential Award. Abington now has four elementary teachers who are winners of the national Presidential Award for Excellence in Teaching Elementary Mathematics. Another part of the application for this award involves submitting a sample lesson and accompanying assessment. Everyday **Mathematics** is rich in ideas for this part of the application!"

#### **Blue Ribbon Schools**

The solid records of achievement and teaching excellence in the Abington School District have not gone unnoticed. Of the seven elementary buildings in the district, three have received National Blue Ribbon of Excellence awards, and a fourth has been named a Pennsylvania Blue Ribbon School.

#### Mathematics Olympiad for Elementary Schools

With a strong mathematics foundation and additional practice provided by the elementary curriculum specialist, Abington students also demonstrate high achievement in the Mathematics Olympiad for Elementary Schools. The Mathematics Olympiad is an international competition consisting of

five tests given at one-month intervals from November to March.

In the 2000 competition, the Abington School District fielded eighteen teams, and approximately 550 elementary students participated. Eight Abington teams won plaques for team achievement (top 20% of all team scores) and three Abington teams won certificates for team achievement (top 20% of team scores at grade level). Individual student performance was also honored; 376 Abington elementary students received recognition awards.

Of the 90,000 students participating in the elementary competition, 71 achieved perfect scores. Of the 71 perfect scores in this international competition, six were from Abington schools!

### Pennsylvania Statistics Poster Competition

As data and statistics are strong components of the Everyday *Mathematics* program, teachers are encouraged to have their students enter the Pennsylvania Statistics Poster Competition sponsored by the American Statistical Association. Student entries explore topics such as, 'How Long Does a Pencil Last?' Each year for the past five years, Abington has had at least one winner at the state level, and it has had two winners at the national level. Dr. Bacon concludes, "Student success comes from a very important combination of a good mathematics program and a good teacher."

> 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



