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## **Committed to Staff Development in Montgomery County Public Schools**

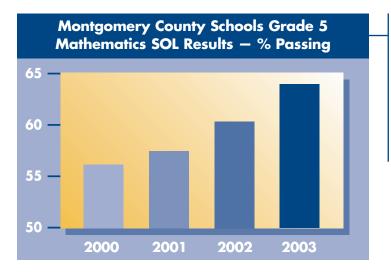
Montgomery County is located in southwest Virginia, approximately 45 miles west of the city of Roanoke. The area is known as the New River Valley, and lies in the picturesque area between the Appalachian Plateau and the Blue Ridge Mountains.

Montgomery County Public Schools serves 9,175 students in one primary school, 11 elementary schools, 4 middle schools, 4 high schools and 2 alternative secondary schools. The district serves 4 distinct communities: Shawsville, Auburn, Christiansburg and Blacksburg. These regions vary in socioeconomic status and range from rural settings to that of a college town. Within the district, 33% of the students qualify for the free and reduced-price lunch program.

Blacksburg is the home of the Virginia Polytechnic Institute and State University, known familiarly as Virginia Tech. Virginia Tech is the largest university in the state, and one of the top 50 research institutions in the nation. Blacksburg is known as the Electronic Village due to the full network capability that connects the town and campus with each other and to the world.

# Montgomery County Schools Grade 3 Mathematics SOL Results — % Passing 80 75 70 65 60 2000 2001 2002 2003

In Montgomery County Public Schools, 76% of Grade 3 students passed the SOL Mathematics Assessment in 2003.



At Grade 5, 63% of the students in Montgomery County Public Schools passed the SOL Mathematics Assessment in 2003.

#### **New Math Curriculum a Priority**

Given the distinct characters of the communities served, Montgomery County Public Schools operates with a site-based decision-making model. One outcome of this decision-making model was its impact on the articulation of the mathematics curriculum. While principals and teachers were doing their best for the students, there was no consistency in mathematics from school to school, and even from grade to grade. Five years ago, there were at least 10 different elementary mathematics curricula in use.

Betti Kreye, Mathematics Supervisor K-12 in the district, knew that one elementary mathematics curriculum was a priority for Montgomery County Public Schools. Kreye touched base with Dr. C. Wayne Patty, who was formerly the Department Chairman of the Mathematics Department at Virginia Tech. Dr. Patty was interested in K-12 mathematics education, and a strong advocate of standards-based mathematics.

Virginia Tech, with the district as a partner, applied for a Local Systemic Change (LSC) Grant from the National Science Foundation (NSF). The LSC grant process strongly urged the use of curriculum materials that had received funding through the National Science Foundation. Elementary teachers in Montgomery County reviewed all of the mathematics curriculum materials that had been approved by the State of Virginia. A committee made up of teachers and parents reached a consensus and selected Everyday Mathematics which had received NSF funding in its development.

Everyday Mathematics was implemented in Grades K-2 in the 2000–2001 school year and in Grades 3–5 in the 2001–2002 school year.

#### **Plans for Staff Development**

Montgomery County Public Schools received the Local Systemic Change grant to begin with the 2000-2001 school year. Staff development was highlighted with the goal of each teacher receiving at least 130 hours of professional staff development over the 5 year period of the grant. Teachers were willing to make this ambitious commitment to professional development, but asked for support and consideration, including college credit. Through Virginia Tech, Dr. Patty was able to arrange for college credit for the teachers who completed the training. Funding from the Local Systemic Change grant allowed teachers to be compensated for the time spent in staff development.

"The commitment to staff development tremendously benefited the implementation of *Everyday Mathematics* in Montgomery County Public Schools."

Betti Kreye, Mathematics Supervisor K-12

The *Everyday Mathematics* training began for Grade K-2 teachers in the summer of 2000. Consultants from Everyday Mathematics led this training. Throughout the school year, teachers met by grade level twice per month in 3 hour sessions. Each session included one hour devoted to instruction in mathematical content, with particular attention to areas that are typically not addressed in elementary math programs such as statistics, probability and algebra. Another hour was spent with teachers working together, sharing ideas and support. The final hour was devoted to planning time.

This same model was followed the next year as teachers in Grades 3–5 implemented the program.

Additional support for teachers has been provided by *Everyday Mathematics* consultants. Early in the implementation, consultants assisted teachers with prep time for *Everyday Mathematics* by preparing classroom materials, such as games and posters. This year, an *Everyday Mathematics* consultant is visiting the schools, approximately twice per month, to model *Everyday Mathematics* lessons, by grade level, plan with teachers, or answer individual teachers' questions and concerns about the implementation of *Everyday Mathematics*.

Teachers in Montgomery County Schools have made the commitment to mathematics staff development. More than 85% of the teachers have logged 100 hours or more over the past 4 years. There are teachers who have completed over 200 hours of staff development. Kreye reports that all staff development sessions are invitational and not mandated. "Teachers in Montgomery County recognize the need for training and are committed to it," adds Kreye.

#### **Results**

In the mid-1990s, the Virginia
Department of Education began
specifying Standards of Learning (SOL).
The SOL Assessments, first administered
in spring 1998, are criterion-referenced
tests that address the specific learning
goals at Grades 3, 5 and 8 as well as endof-course exams given in high school.
During 2001–2002 MCPS elementary
teachers identified Essential Learnings at
each grade level and these helped to focus
and direct discussions during the staff
development sessions.

The results of the Grade 3 and Grade 5 SOL mathematics assessments have steadily improved in Montgomery County Public Schools. With the 2003 administration of the Grade 3 Mathematics SOL Assessment, 76% of the students met the state Standards of Learning. In Grade 5, 63% of Montgomery County students passed the Mathematics SOL Assessment.

For additional information on the **Everyday Mathematics** program, please contact us toll-free at 1-888-772-4543 and visit our Web site at www.WrightGroup.com.

Meeting All Expectations

