

# TERC | Using Data Case Study

Mountain City Elementary School, Mountain City, TN



## Rural Tennessee Elementary School Moves to the Head of the Class With "Using Data"

*Formerly Struggling School Earns "Blue Ribbon" Status, Transforms Achievement Through Innovative Program From TERC.*

With a recent federal designation as a Blue Ribbon School and nearly 100 percent of its students reaching proficiency in every assessed subject, Mountain City Elementary, located in the far reaches of rural northeastern Tennessee, is hardly recognizable as the school it was just a few years ago. Gay Triplett, who was beginning her tenure as the school's principal nine years ago, recalls bracing for a very different designation: a "school in need of improvement." While Mountain City Elementary was narrowly spared the designation, "it was a humbling time," said Triplett. "We had great teachers and we were working hard, but we were teaching the wrong things."

Today, Mountain City Elementary, part of Johnson County Schools, serves 450 students – of whom 67 percent qualify for free or reduced lunch and 13 percent are in special education – and they are exceeding all expectations. Last year, 99 percent of the student body scored proficient in math and social studies, 98 percent were proficient in science and 97 percent scored proficient in reading and language arts. "I believe we earned this blue ribbon," said Triplett.

### ***Implementing the Process***

This transformation began with the implementation of "Using Data," an innovative program designed to fundamentally change teaching and learning through the use of data. Developed by TERC, a leading educational research and development organization, with a grant from the National Science Foundation and evaluated by independent researchers, Using Data has documented gains in student achievement in mathematics, science and other content areas and has been successful in narrowing achievement gaps between economic and racial groups, as well as increasing collaboration, data use and instructional

## Highlights

- Teacher Data Teams established, empowered and supported
- Data use key to decision making and resource allocation
- Attendance and professional development solutions discovered
- Energy focused in the right places helps all students learn
- Whole school community, including students, use data to improve learning opportunities
- Solution is self-sustaining

improvement. The Using Data process takes teachers beyond the "why" and "what" of data-driven decision-making to the important question of "how." Teachers learn how to use data to inform their day-to-day practice and to put every student on the path to success.

David Timbs, Ed.D., who was Johnson County Schools' supervisor of instruction at the time, spearheaded the district's implementation of Using Data in 2003. He worked with Terry Lashley, Ph.D., president of Learning Curve Educational Consulting, a TERC Alliance Member organization, to create a Using Data program that would meet the unique needs of the district. "This is a small, rural district without a lot of resources, and we needed to do something to empower our schools to succeed," said Timbs. They decided to put the Using Data process in place to manage virtually all of the district's student information – both academic and nonacademic.

### ***Supporting Data Teams***

The first step at Mountain City Elementary was assembling a team of teachers from different grade levels and disciplines, along with Triplett – a "data team" of five people to attend two days of intensive training, with a take-away exercise using real data to finish on an in-service day. As the district was short on both money and time, the Using Data process was streamlined. "It was a bold

move to pull teachers out of the classrooms, because we had to allocate funds for substitutes,” said Timbs. The data team followed up with two additional days of training on later dates, and each year for the next two years, the team participated in a “data booster” to keep the momentum going.

### *Data Drives Change*

After the work with Mountain City Elementary began, “their whole school system began to turn around,” said Lashley. “Using Data was a really important foundational piece of the work. We made it relevant for them, and they built their own capacity to take it from there.”

Soon, data began to drive every decision at Mountain City Elementary, Triplett explained. “We started charting everything, going beyond academics – looking at the total school environment,” she said. The music teacher, librarian and physical education teacher joined forces to reinforce concepts taught in the classrooms. Triplett is a strong believer in the value of sharing data with every one of the 58 staff members in the building, including cafeteria and janitorial staff. “This is a team effort – everybody’s on board, and everything focuses on aligning with the standards,” she said.

Triplett remembers that the early conversations about data were met with fear. “Previously, test scores had not been a focus, so this was scary,” she said. “But the more we worked with data, the more comfortable everyone became with it.” Today, data come from six different formative assessments. “And people can’t wait to get their hands on it,” she said.

Creating formative assessment data has been a major emphasis, said Timbs. “Before Using Data, we had been guilty of looking at the shrink-wrapped packages of data from the state and hoping for something different the next year,” he explained. They stepped up their assessment efforts, and the data became an integral part of the schools. Mountain City Elementary’s data team members became “very skilled,” said Timbs, and the information they were gathering was increasingly helpful to teachers. “They went far beyond what anyone expected,” he said.

### *Attendance and Professional Development Targeted*

One issue the district tackled with Using Data was

attendance by both students and teachers. They examined individual student data to determine the point when absences affect achievement, and sought solutions. Winter roads in this mountainous region make travel treacherous, and the data showed that absenteeism averaged 15 to 20 days per year. A change in the calendar to begin school in early August now allows for significantly more learning time before the spring assessments. In addition, the district changed the conversation with parents and teachers about the importance of attendance. Last year, Mountain City’s attendance exceeded 96 percent, which easily surpassed both the school and state goal.

Another important piece of Mountain City’s success has

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*Gay Triplett, Principal of Mountain City Elementary, Mountain City, TN*

been placing teachers in the right positions, said Triplett, and providing them with the professional development opportunities they need to succeed. In the past, teachers stayed put in a grade level, and it didn’t necessarily fit their strengths. “We have top-notch teachers, and most of them are the same teachers we had before, but now they’re in the right places,” she said.

### *Community Involvement*

Sharing data with parents has been a vital piece of Mountain City’s success, too, she said. At parent-teacher conferences, teachers share “goal sheets” for each student, using data to determine goals that will help them meet the standards. In addition, students set their own goals. “It might be that they want to read 20 minutes every night, or to make a B in language arts, or to score 99 percent on the TCAP (Tennessee Comprehensive Assessment Program),” said Triplett. When students arrive each morning, they do

a daily review to determine what they need to do and get right to work.

The district philosophy is “we have no secrets,” said Triplett. “We chart our data, we look for trends and we share best practices.” When a teacher in another elementary school in the district saw success in writing, Triplett asked her to share her techniques with Mountain City Elementary teachers. Visitors from neighboring counties are frequent at Mountain City, and Triplett is happy to share what she knows about data-driven instruction.

With a new set of Tennessee standards in place for next year, administrators and teachers across the state are expecting a more difficult road to success. Triplett believes, that with the processes in place from Using Data, Mountain City Elementary is ready for the challenges ahead.

“Using Data has made all the difference,” said Triplett. “I recently ran into one of our students in a restaurant, who asked me about our scores. Everyone is looking at the data now, and it’s very empowering.”

### *Using Data to Look Ahead*

Last year, Timbs moved to a neighboring district, Sullivan County Schools, as supervisor of accountability and testing, and has been implementing the Using Data process with the 28 schools there. “We have developed a pretty comprehensive system and have taken this beyond what I could have imagined,” he said. “The Using Data process has been the key in helping us decide how to spend our resources, and we’re seeing phenomenal results.”

Lashley notes that the Using Data process has given teachers and administrators at Mountain City Elementary the tools they need to take care of their own data needs – to be self-supporting and self-sustaining. “They’ve made a lot of discoveries about themselves, and they’re using the data to make really good decisions. They are focusing energy in the right places and helping all students learn,” she said.

**For more information about Using Data, visit <http://usingdata.terc.edu/>**

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Founded in 1965, TERC’s mission is to improve math, science and technology teaching and learning. Each year, TERC’s programs and products reached more than 3.5 million students in the United States and abroad. For more information, see [www.terc.edu](http://www.terc.edu).