

POWERING MATH PERFORMANCE



Two West Virginia middle schools discover that teachers benefit as much from cooperative learning as the students

THE CHALLENGE

Something was not adding up. In West Virginia, two Pocahontas County middle schools –Marlinton and Green Bank – found their math scores were below state standards and student engagement in classes was correspondingly low.

According to district math coach Joanna Burt-Kinderman, five years ago, the schools decided on their own to improve their students' math performance, using cooperative learning as a way to get engagement. "People in Appalachia are storytellers," she says. "There is rich history that is shared through telling stories. It only made sense to incorporate this community strength into math instruction."

Using the research and materials they could find in books and online, the schools created their own cooperative learning model, providing teacher professional development. While they knew where they wanted to go with this approach – getting kids talking and participating in class –they did not yet have the framework, structure or supporting resources to get there.

This is where Success for All's Power Teaching Math program came in. "We were trying to pick apart a theory and create the tools," says Burt-Kinderman. "PTM gave us the toolkit we needed."

THE SOLUTION

The first year implementing PTM in Marlinton and Green Bank middle schools proved a challenge. They discovered that true cooperative learning is far more complex than just having students collaborate in groups. The teachers themselves had to make a shift in their thinking and ways of working, moving

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District Math Coach

away from the "old school" approach, replacing the sage on the stage with a guide at the side. Some school administrators, family and community members struggled to understand and value cooperative learning.

The schools turned the corner when they understood it is not just the kids that need to work cooperatively, but the teachers as well. With the help of an SFA coach and learning materials, the teachers began to collaborate with one another across grade levels and even schools. The SFA model allowed for a scaffolded approach to implementation, leading to integration and understanding rather than dogmatic compliance.

By giving teachers time to question things, explore possibilities and and things through together, the PTM program made the teacher active participants in the learning journey, achieving solid outcomes through a cooperative approach.

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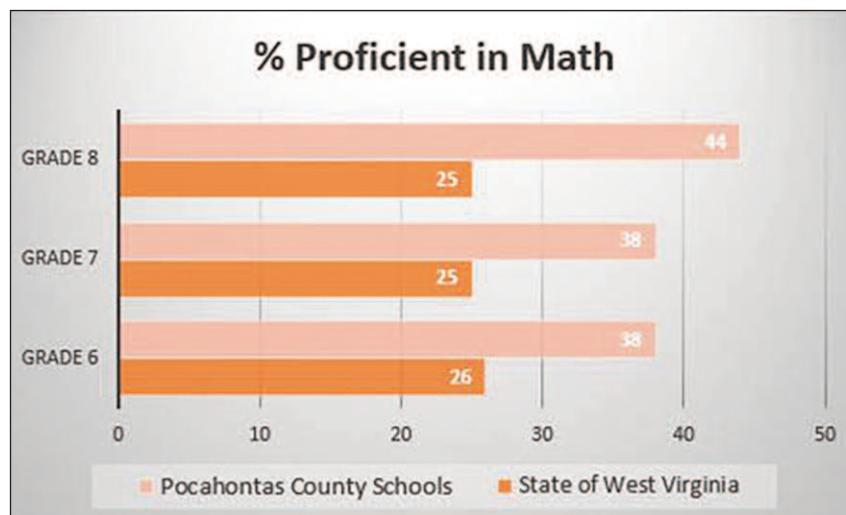
THE RESULTS

PTM proved the perfect framework to build a nurturing, mutually supportive learning environment. With the enthusiastic buy-in of the teachers, the atmosphere in the classes changed completely. Students are now talking and engaged in the process of learning math concepts together. They work well in teams, take risks, challenge one another and are not embarrassed to talk or ask questions.

For their part, teachers have found their own cooperative learning equally engaging and useful. Burt-Kinderman

likes the fact that no one rules the roost – all the teachers bring something special to the table and are committed to working together to create the best learning environment for all.

While hard work may be its own reward, it is nice to have hard results as well. Students from Marlinton and Green Bank now continually outperform other middle schools in the state, often by double digits. These are figures everyone likes.



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